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# Report for 2021 on the results from the monitoring of veterinary medicinal product residues and other substances in live animals and animal products

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## Abstract

The report summarises the monitoring data collected in 2021 on the presence of residues of veterinary medicinal products and other substances such as environmental contaminants in live animals and animal products in the European Union, Iceland, Norway and United Kingdom (Northern Ireland). A total of 621,205 samples were reported to the European Commission by the 27 EU Member States, Iceland, Norway and United Kingdom (Northern Ireland). They consisted of 351,637 targeted samples and 4,562 suspect samples reported under Council Directive 96/23/EC, and of 2,803 samples collected at import and 262,203 samples collected in the framework of programmes developed under the national legislation. The majority of countries fulfilled the minimum requirements for sampling frequency laid down in Council Directive 96/23/EC and in Commission Decision 97/747/EC. Overall, the percentage of non-compliant samples in 2021 (0.17%) was lower compared to the previous 12 years (0.19%-0.37%). Compared to the results from 2017, 2018, 2019 and 2020, in 2021 the frequency of non-compliant results was decreased for antithyroid agents, while for steroids and resorcylic acid lactones the frequency of non-compliant results was higher than in 2020, but lower compared to the previous years. For prohibited substances, compared to 2020 the frequency on non-compliance in 2021 was higher, although in line with that of 2017 and 2018. Decreases compared to all previous years were noted for other substances and environmental contaminants, chemical elements (including metals) and dyes. A sharp increase compared to all previous years was found for 'other substances'.

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**Key words:** veterinary medicinal products, residue monitoring, Directive 96/23/EC, food safety**Requestor:** European Commission**Question number:** EFSA-Q-2022-00827**Correspondence:** data.collection@efsa.europa.eu



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## Summary

The present report summarises the monitoring data from 2021 on the presence of residues of veterinary medicinal products and certain substances in live animals and animal products in the European Union (EU), Iceland, Norway and United Kingdom (Northern Ireland).

The presence of unauthorised substances, residues of veterinary medicinal products or chemical contaminants in food may pose a risk factor for public health. The EU legislative framework defines maximum limits permitted in food and monitoring programmes for the control of the presence of these substances in the food chain. Regulation (EU) No 37/2010 establishes maximum residue limits for residues of veterinary medicinal products in food-producing animals and animal products. Maximum residue levels for pesticides in or on food and feed of plant and animal origin are laid down in Regulation (EC) No 396/2005. Commission Regulation (EC) 1881/2006 lays down the maximum levels for the presence of certain contaminants in animal products. Council Directive 96/23/EC lays down measures to monitor certain substances and residues thereof, mainly veterinary medicinal products, in live animals and animal products. Additionally, Commission Decision 97/747/EC lays down levels and frequencies of sampling for certain animal products.

In the framework of Article 31 of Regulation EC 178/2002, the European Commission (EC) requested the assistance of the European Food Safety Authority (EFSA) to collect data obtained by the Member States, Iceland, Norway and United Kingdom (Northern Ireland) in accordance with Directive 96/23/EC.

In 2021, 27 out of 27 European Union (EU) Member States, Iceland, Norway and United Kingdom (Northern Ireland), reported in the framework of the residue monitoring the results for 621,205 samples. A total of 351,637 targeted samples and 4,562 suspect samples were reported under Council Directive 96/23/EC. Additionally, 262,203 samples collected in the framework of other programmes developed under the national legislation and 2,803 samples checked at import, were reported. The data analysis presented in this report was focused on the targeted samples reported under Council Directive 96/23/EC. Samples collected through other sampling strategies (suspect, import or 'other') do not follow a designed monitoring plan; therefore, results on those samples were reported separately from the results on targeted samples.

The majority of countries fulfilled the requirements for sampling frequency laid down in Council Directive 96/23/EC and in Commission Decision 97/747/EC. However, it is important to note that the minimum sampling frequency may not have been achieved due to the general measures imposed in the scope of the Covid19 pandemic situation.

Overall, there were 837 or 0.24% of non-compliant samples out of the 351,637 targeted samples in 2021.

For Group A substances, no non-compliant samples were reported for the sub-group A1 on stilbenes and derivatives. For antithyroid agents (A2), there were 0.31% non-compliant samples, all recorded for thiouracil. In the group of steroids (A3), there were 0.16% non-compliant samples, non-compliant samples were found in bovines (0.12%), pigs (0.18%), poultry (0.11%), rabbit meat (1.89%) and sheep and goats (1.46%). In the group of resorcylic acid lactones (A4), 0.05% of the samples were non-compliant; the non-compliant samples were found in bovines (0.06%) and pigs (0.07%). For beta-agonists (A5), there were two non-compliant samples reported, one for clenbuterol and one for sulbatamol found in bovines. Prohibited substances (A6) were found in 0.03% of samples. Substances identified were



chloramphenicol (n = 11), semicarbazide (n = 6), metronidazole (n = 4), AMOZ (5-methylmorpholino-3-amino-2-oxazolidone) (n = 3), furaltadone (n = 1), dimetridazole (n = 1) and AOZ (3-amino-2-oxazolidone) (n = 1).

For Group B1 (antibacterials), 0.14% of the samples analysed under the Directive 96/23/EC monitoring were non-compliant. The highest frequency of non-compliant samples for antibacterials residues was found in honey (0.96%), with sulfamethazin being the most frequently reported (three non-compliance results).

In Group B2 ('other veterinary drugs' residues), 0.13% of the samples analysed were non-compliant, the highest proportion of non-compliant samples was found for non-steroidal anti-inflammatory drugs (NSAIDs) (sub-group B2e) (0.25%). For NSAIDs, the non-compliant samples were reported across the different species as follows; bovines (0.42%), horses (0.75%), milk (0.47%), pigs (0.01%) and poultry (0.18%).

Instances of non-compliance for anthelmintics (B2a) were reported in bovines (0.06%), farmed game (0.40%), milk (0.04%), pigs (0.05%) and sheep and goats (0.23%).

For anticoccidials (B2b), 0.11% of the samples analysed were non-compliant and were reported across the different species as follows: eggs (0.42%), pigs (0.06%), poultry (0.07%), rabbit meat (0.87%) and sheep and goats (0.15%). Since 2009, an important decrease has been observed in the frequency of non-compliant samples for anticoccidials (B2b) in poultry.

No non-compliant samples were reported for pyrethroids (B2c) or sedatives (B2d). Non-compliant samples were reported for 'other pharmacologically active substances' (B2f), in bovines (0.16%), honey (0.37%), pigs (0.03%) and sheep and goats (0.12%).

In the Group B3 ('other substances and environmental contaminants'), the 'chemical elements' (B3c) had the highest overall percentage of non-compliant samples (2.59%) among all residue sub-groups tested (considering both Group A and Group B), with cadmium, copper, lead and total mercury being most frequently identified. High non-compliant results were reported also in the past for B3c, but the non-compliance rate in 2021 was lower compared to the previous control years results. Non-compliant samples were reported for organochlorine compounds (B3a) and organophosphorus compounds (B3b); 0.13% and 0.02%, respectively. For mycotoxins (B3d), non-compliant samples were reported for bovines (0.30%), milk (0.36%) and pigs (0.16%), with those identified being zearalenone and aflatoxin M1. For dyes (B3e), non-compliant samples were reported for aquaculture (0.40%). The substances found were 'sum of crystal violet and leucocrystal violet' and 'sum of malachite green and leucomalachite green'.

For 'other substances' (B3f), non-compliant samples were reported for bovines (1.31%), eggs (0.07%), wild game (12.70%), honey (1.50%) and sheep and goats (1.10%). The substances identified were 'copper compounds', acetamiprid, didcyldimethylammonium chloride and fipronil; all the four residues are considered as plant protection products and/or biocides.

Overall, the percentage of non-compliant samples in 2021 (0.17%, considering any sampling strategy) was lower compared to the previous 12 years (0.19%-0.37%).

The same overall pattern was observed for targeted samples in 2021 (0.24% non-compliant samples) compared to the previous 4 years (0.27%-0.35% non-compliant samples). Compared to the results from 2017, 2018, 2019 and 2020, in 2021 the frequency of non-compliant results was decreased for antithyroid agents (A2), while for steroids (A3) and resorcylic acid lactones



(A4) the frequency of non-compliant results was higher than in 2020, but lower compared to the previous years. For prohibited substances (A6), compared to 2020 the frequency on non-compliance in 2021 was higher, although in line with that of 2017 and 2018. Decreases compared to all previous years were noted for 'other substances' and environmental contaminants (B3), chemical elements (including metals) (B3c) and dyes (B3e). Compared to 2020, for antibacterials (B1), anthelmintics (B2a), pyrethroids (B2c) and sedatives (B2d), the frequency on non-compliance was stable, while for anticoccidials (B2b), non-steroidal anti-inflammatory drugs (NSAIDs) (B2e), 'other pharmacologically active substances' (B2f), organochlorine compounds (B3a), organophosphorus compounds (B3b) and mycotoxins (B3d) the frequency on non-compliance was higher. Finally, a sharp increase compared to all previous years was found for 'other substances' (B3f).



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## 1. Introduction

### 1.1. Background and Terms of Reference as provided by the European Commission

#### 1.1.1. Background

Council Directive 96/23/EC<sup>1</sup> requires the Member States to implement a national residue monitoring plan for specific groups of residues specified in its Annexes I and II, in accordance with the sampling strategy and sampling frequency laid down in Annexes III and IV.

Member States must submit their monitoring data and resulting control measures no later than 31 March of the following year. Since 2018, this data has been collected by EFSA. Member States must also publish the outcome of the implementation of their plans.

The Commission has the obligation to make available to the public an annual report on the outcome of official controls in the Member States.

For 2021, the only United Kingdom data that were reported to EFSA were from Northern Ireland. In accordance with the Agreement on the withdrawal of the United Kingdom from the European Union<sup>2</sup>, and in particular with the Protocol on Ireland/Northern Ireland, the European Union requirements on data sampling are also applicable to and in the United Kingdom with respect to Northern Ireland. Therefore, pursuant to Article 5(4) and Section 24 of Annex 2 of the Protocol on Ireland/Northern Ireland, which is an integral part of the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, for the purpose of this report, references to MS should be read as including Northern Ireland, despite it being part of the United Kingdom. Hence, the European Union requirements on data sampling were also applicable to Northern Ireland and data transmitted by the United Kingdom (Northern Ireland) have been assigned to the MS group. For the collection of data, EFSA aligned with the guidelines of the Commission concerning customs registration<sup>3</sup>, which lay down the following abbreviations and terminology:

- GB, which stands for 'the United Kingdom' and refers to: Great Britain, Northern Ireland, the Channel Islands and the Isle of Man.
- XI, which stands for the United Kingdom (Northern Ireland) and is used when the United Kingdom is identified with respect to Northern Ireland.
- XU, which stands for the United Kingdom (excluding Northern Ireland) and is used when the United Kingdom (excluding Northern Ireland) is identified.

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<sup>1</sup> Council Directive 96/23/EC on measures to monitor certain substances and residues thereof in live animals and animal products and repealing Directives 85/358/EEC and 86/469/EEC and Decisions 89/187/EEC and 91/664/EEC (OJ L 125, 23.5.1996, p. 10). This Directive is no longer in force but the control data summarized in the present report are referring to the sampling year 2021, when this Directive was still applicable.

<sup>2</sup> Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community. OJ L 29, 31.1.2020, p. 7 ("Withdrawal Agreement").

<sup>3</sup> [https://taxation-customs.ec.europa.eu/system/files/2020-11/use\\_of\\_gb\\_and\\_xi\\_codes\\_guidance.pdf](https://taxation-customs.ec.europa.eu/system/files/2020-11/use_of_gb_and_xi_codes_guidance.pdf)





### 1.1.2. Terms of reference as provided by the European Commission

In the framework of Article 31 of Regulation (EC) No 178/2002, the Commission requests EFSA's assistance in the collection of the data obtained by the Member States in accordance with Directive 96/23/EC.

EFSA shall develop a data collection system allowing direct data submission by the Member States. This data collection system shall:

- collect information on all samples analysed in the framework of residue monitoring, and explore the possibility of its extension to all analyses concerning residues of veterinary medicinal products;
- allow the Member States to provide information on follow-up actions directly linked to the respective non-compliant results;
- allow differentiated access to the data for Commission services and Member States.

The data collection system should at least allow the extraction of:

- reports on the implementation of the residue monitoring plan. Each Member State shall be able to extract a report containing only their respective national data. The structure of the report shall be agreed with the Member States and Commission services;
- an annual compilation of the monitoring data of all Member States. EFSA shall annually extract such a compilation containing data submitted by the Member States for the past year. EFSA shall use the current format and level of detail as a basis for future compilations;
- a summary overview of the actions taken by the Member States as follow-up to non-compliant results. The Commission services shall be the only party that can extract such data for all Member States. The Member States shall be able to extract their own respective data. The structure of this overview shall be agreed with the Commission services.

EFSA shall present each annual compilation in the Standing Committee of the Food Chain and Animal Health two months after the last data submission by the Member States and collect comments from the Commission and the Member States. EFSA shall send the final annual compilation taking into account the comments received to the Commission services.

## 1.2 Additional information

The presence of unauthorised substances, residues of veterinary medicinal products or chemical contaminants in food may pose a risk factor for public health. The EU legislative framework defines maximum limits permitted in food and monitoring programmes for the control of the presence of these substances in the food chain.

Council Directive 96/23/EC on measures to monitor certain substances and residues thereof in live animals and animal products requires Member States to adopt and implement a national residue monitoring plan for the groups of residues detailed in its Annex I in accordance with the sampling rules referred to in Annex IV. The Directive lays down sampling levels and frequency for bovines, pigs, sheep and goats, equine animals, poultry and aquaculture, as well as the groups of substances to be monitored for each food commodity. Commission Decision





97/747/EC<sup>4</sup> lays down rules for levels and frequencies of sampling for milk, eggs, honey, rabbit meat and game.

National residue control plans should be targeted to take the following minimum criteria into account: species, gender, age, fattening system, all available background information and all evidence of misuse or abuse of substances. Additionally, suspect samples may also be taken as part of the residue control.

The requirements for the analytical methods to be applied in the testing of official samples and the common criteria for the interpretation of analytical results are laid down in Commission Decision 2002/657/EC<sup>5</sup> of 12 August 2002 implementing Council Directive 96/23/EC.

**Targeted samples** are taken with the aim of detecting illegal treatment or controlling compliance with the maximum levels laid down in the relevant legislation. This means that, the national plans of each reporting country, target the groups of animals (species, gender, age) where the probability of finding residues is the highest. Conversely, the objective of random sampling is to collect significant data to evaluate, for example, consumer exposure to a specific substance.

**Suspect samples** are taken as a consequence of i) non-compliant results on samples taken in accordance with the monitoring plan, ii) possession or presence of prohibited substances at any point during manufacture, storage, distribution or sale through the food and feed production chain, or iii) suspicion or evidence of illegal treatment or non-compliance with the withdrawal period for an authorised medicinal veterinary product.

**Residues** of pharmacologically active substances mean active substances, excipients or degradation products and their metabolites, which remain in food.

**Unauthorised substances** or products mean substances or products prohibited under European Union legislation.

**Illegal treatment** refers to the use of unauthorised substances or products or the use of substances or products authorised under EU legislation for purposes or under conditions other than those laid down in EU legislation or, where appropriate, in the various national legislation.

**Withdrawal period** represents the period necessary between the last administration of the veterinary medicinal product to animals under Body conditions of use and the production of foodstuffs from such animals, in order to ensure that such foodstuffs do not contain residues in quantities in excess of the maximum limits laid down in EU legislation.

**Non-compliant result** since the entry into force of Decision 2002/657/EC, the term for analytical results exceeding the permitted limits (in previous reports termed 'positives') is 'non-

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<sup>4</sup> Commission Decision 97/747/EC fixing the levels and frequencies of sampling provided for by Council Directive 96/23/EC for the monitoring of certain substances and residues thereof in certain animal products. OJ L 303, 6.11.1997, p. 12–15.

<sup>5</sup> Commission Decision 2002/657/EC of 12 August 2002 implementing Council Directive 96/23/EC concerning the performance of analytical methods and the interpretation of results. OJ L 221, 17.8.2002, p. 1-29. To be noted that in 2021 this piece of legislation was repealed by Commission Implementing Regulation (EU) 2021/808.



compliant'. The result of an analysis shall be considered non-compliant if the decision limit of the confirmatory method for the analyte is exceeded.

**Non-compliant sample** is a sample that has been analysed for the presence of one or more substances and failed to comply with the legal provisions for at least one substance. Thus, a sample can be non-compliant for one or more substances.

**Maximum residue limit (MRL)** is the maximum concentration of residue resulting from the use of a veterinary medicinal product which may be accepted by the Community to be legally permitted or recognised as acceptable in or on a food. For veterinary medicinal products, MRLs are established according to the procedures laid down in Regulation (EC) No 470/2009<sup>6</sup> of the European Parliament and of the Council of 6 May 2009. Pharmacologically active substances and their classification regarding maximum residue limits are set out in Commission Regulation (EU) No 37/2010<sup>7</sup> of 22 December 2009. In addition, Commission Directive No 2009/8/EC<sup>8</sup> lays down maximum levels of unavoidable carry-over of coccidiostats or histomonostats in non-target feed and Commission Regulation (EC) No 124/2009<sup>9</sup> lays down maximum levels for the presence of coccidiostats or histomonostats in food resulting from the unavoidable carry-over of these substances in non-target feed.

For pesticides, maximum residue levels (MRLs) are laid down in Regulation (EC) No 396/2005<sup>10</sup>. Some substances (e.g. carbamates, pyrethroids, organophosphorus compounds) are recognised both as veterinary medicinal products and pesticides and therefore they might have different MRLs in the corresponding legislation.

Maximum levels for contaminants are laid down in Commission Regulation (EC) No 1881/2006<sup>11</sup>. For contaminants where no EU maximum levels had been fixed at the time when data included in this report were collected, national tolerance levels were applied.

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<sup>6</sup> Regulation (EC) No 470/2009 of the European Parliament and of the Council of 6 May 2009 laying down Community procedures for the establishment of residue limits of pharmacologically active substances in foodstuffs of animal origin, repealing Council Regulation (EEC) No 2377/90 and amending Directive 2001/82/EC of the European Parliament and of the Council and Regulation (EC) No 726/2004 of the European Parliament and of the Council. OJ L 152, 16.6.2009, p. 11–22.

<sup>7</sup> Commission Regulation (EC) No 37/2010 of 22 December 2009 on pharmacologically active substances and their classification regarding maximum residue limits in foodstuffs of animal origin. OJ L 15, 20.1.2010, p. 1–72.

<sup>8</sup> Commission Directive 2009/8/EC of 10 February 2009 amending Annex I to Directive 2002/32/EC of the European Parliament and of the Council as regards maximum levels of unavoidable carry-over of coccidiostats or histomonostats in non-target feed. OJ L 40, 11.2.2009, p. 19–25.

<sup>9</sup> Commission Regulation (EC) No 124/2009 of 10 February 2009 setting maximum levels for the presence of coccidiostats or histomonostats in food resulting from the unavoidable carry-over of these substances in non-target feed. OJ L 40, 11.2.2009, p. 7–11.

<sup>10</sup> Regulation (EC) 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC. OJ L 70, 16.3.2005, p. 1–16.

<sup>11</sup> Commission Regulation (EC) 1881/2006 setting maximum levels for certain contaminants in foodstuffs. OJ L 364, 20.12.2006, p. 5–24.



**Reference Points for Actions (RPAs)** - according to Commission Regulation (EC) 2019/1871<sup>12</sup>, RPAs correspond to the lowest level which can analytically be achieved by the official control laboratories, designated in accordance with Article 37 of Regulation (EU) 2017/625 of the European Parliament and of the Council<sup>13</sup>. Commission may establish RPAs for residues of pharmacologically active substances in food of animal origin, for which no maximum residue limit has been laid down. RPAs should apply to food of animal origin imported from third countries and to food of animal origin produced in the Union.

### 1.3 Objectives

The present report summarises the monitoring data from 2021 submitted by the EU Member States, Iceland, Norway and United Kingdom (Northern Ireland) to the EFSA. For 2021, the only United Kingdom data that were reported to EFSA were from Northern Ireland. In accordance with the Agreement on the withdrawal of the United Kingdom from the European Union, and in particular with the Protocol on Ireland/Northern Ireland, the European Union requirements on data sampling are also applicable to and in the United Kingdom with respect to Northern Ireland. Data analysis was mainly focused on data submitted under Directive 96/23/EC and aimed to provide an overview on:

- production volume and number of samples collected in each EU Member State, Iceland and Norway. These data were used to check whether the countries had fulfilled the minimum requirements on sampling frequency as stated in Directive 96/23/EC and Commission Decision 97/747/EC.
- number of samples analysed in each animal species or food commodity for substance groups and subgroups as defined in Annex I to Directive 96/23/EC (see Appendix E);
- summary of non-compliant results per animal species or food commodity and substance group;
- identification of main substances contributing to non-compliant results within a group;
- overall distribution of non-compliant samples in the substance groups.

## 2. Data and Methodologies

Data used in this report have been collected from EU Member States, Iceland, Norway and United Kingdom (Northern Ireland), under Directive 96/23/EC. The samples included in the monitoring were taken from the production process of animals and primary products of animal origin (live animals, their excrements, body fluids and tissues, animal products, animal feed and drinking water). Each country assigns the coordination of the national monitoring plan to a central public

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<sup>12</sup> Commission Regulation (EC) 2019/1871 of 7 November 2019 on reference points for action for non-allowed pharmacologically active substances present in food of animal origin and repealing Decision 2005/34/EC.

<sup>13</sup> Regulation (EU) 2017/625 of the European Parliament and of the Council of 15 March 2017 on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products, amending Regulations (EC) No 999/2001, (EC) No 396/2005, (EC) No 1069/2009, (EC) No 1107/2009, (EU) No 1151/2012, (EU) No 652/2014, (EU) 2016/429 and (EU) 2016/2031 of the European Parliament and of the Council, Council Regulations (EC) No 1/2005 and (EC) No 1099/2009 and Council Directives 98/58/EC, 1999/74/EC, 2007/43/EC, 2008/119/EC and 2008/120/EC, and repealing Regulations (EC) No 854/2004 and (EC) No 882/2004 of the European Parliament and of the Council, Council Directives 89/608/EEC, 89/662/EEC, 90/425/EEC, 91/496/EEC, 96/23/EC, 96/93/EC and 97/78/EC and Council Decision 92/438/EEC (Official Controls Regulation) (OJ L 95, 7.4.2017, p. 1).



department or body which is also in charge of the data collection at national level (Directive 96/23/EC Art. 4) and reporting the results to EFSA.

The samples taken in 2021 were reported using Standard Sample Description Version 2.0 format ([EFSA 2013](#)). This standard can be used to report the results of laboratory tests performed on samples of food, feed, animals and plants. Specific requirements for reporting the results of laboratory tests for veterinary medicinal products are described in ([EFSA 2022b](#)) and ([EFSA 2022a](#)). The standard allows results for all marker residues analysed for in a sample of animals or animal products to be reported. The following information is recorded:

**Sampling event:** one or more tissues taken from an animal at a specific location and at a specific point in time (e.g. kidney and muscle samples taken from a single pig carcass at slaughter). The sampling event requires the sampling point and sampling strategy to be recorded. The sampling strategy can be targeted, suspect, import or other. In this report, any reference to 'samples' should be understood as 'sample events'.

**Sample taken:** The sample taken is described using EFSA FoodEx2 classification (e.g. beef liver or chicken eggs) ([EFSA 2015](#)). These samples are then categorised as bovines, pigs, sheep & goats, horses, poultry, rabbit, farmed game, wild game, aquaculture, milk, eggs and honey. Samples of game birds such as quail, partridge and pheasant are classified in the poultry category, unless they are reported as 'wild or gathered or hunted'; in the latter case, the samples have been classified in the wild game category. Due to this approach, which differ from the classification methodology followed by some countries, discrepancies might be noted between the National Plans submitted to the EC and the results included in this report.

The country where the sample was taken, the date of sampling and the country of origin are also recorded.

**Analytical method:** Both screening and confirmatory tests can be reported. CCbeta – i.e. the detection capability - is reported for screening tests and CCalpha the decision limit is reported for confirmatory tests.

**Marker residue:** The results for all residues, both above and below the limits of detection and covered by the scope of a laboratory method, are reported. An analysis hierarchy groups the residues according to the substance groups described in Annex I of Directive 96/23/EC.

**Non-compliant results:** Each result is classified as compliant or non-compliant by the reporting country. Additional information on investigation outcomes in the case of non-compliant results is also recorded, where available. In cases where the control results have been reported for the 'Multicomponent/Sum' residue definition (e.g. for the marker residue 'Sum of enrofloxacin and ciprofloxacin') in addition to the single components' results (e.g. in cases where the results were also reported for enrofloxacin and/or for ciprofloxacin), the non-compliant results at sample event level have been totalled considering only the sum-results to avoid double-counting.

The data was submitted in XML format to the EFSA data collection framework. Automatic data quality checks were performed as described in ([EFSA 2022b](#)). Each reporting country was provided with the opportunity to validate their data submission by examining and confirming the content of an ad-hoc National report, which summarises the data that had been submitted.

**Production volumes:** The number of animals for bovines, pigs, sheep and goats, and horses, and in tonnes for poultry, rabbit, farmed game, wild game, aquaculture, milk, eggs and honey



were obtained from the Directorate General for Health and Food Safety (DG SANTE) based on data submitted by MS. This information was used to verify whether the minimum sampling frequencies had been fulfilled.

The reported data is aggregated counting the number of distinct sampling events (**samples analysed**), the number of sampling events where one or more results are non-compliant (**non-compliant samples**) and the number of non-compliant results (**non-compliant results**) by reporting country, animal category/product, marker residue and substance group. Since more than one result can be non-compliant in a sample the sum of non-compliant results might be higher than the sum of non-compliant samples. The percent non-compliant samples were calculated with non-compliant samples as the nominator and samples analysed as the denominator. Previously, in the data analysis performed up to the control activities carried out in 2016, the number of samples analysed for a specific residue was not always available from countries where there were no non-compliant results. Using the current approach, the percent non-compliant samples may in some cases be higher, as in the previous approach samples which had not been tested for a specific residue may have been included in the denominator. The percentage of non-compliance is estimated for each substance group and within each substance group. Also, binomial 95% confidence intervals with Wilson approximation are produced in order to account for the uncertainty around the point estimates, considering the amount of samples that were tested for each of the substances and animal/product combinations, reflecting potential ranges in which the non-compliance level could be (see Figures 1 to 4). The resulting confidence intervals could be used to highlight the potential upper bounds for non-compliance observed.

The data used in the preparation of this report were extracted from the EFSA database on 20th December 2022 and are reflective of the database during this time period.

The data analysis was performed using Python™ software.

## 3. Results

### 3.1. Overall assessment

The aim of this assessment is to give an overview of the total number of samples analysed for the individual substance groups and to summarise the non-compliant samples for the major substance overall for the EU Member States, Iceland, Norway and United Kingdom (Northern Ireland). Further details on the non-compliant samples found in each animal/product category are presented in Sections 3.2 to 3.13.

In 2021, 621,205 samples were reported by 27 out of 27 EU Member States, Iceland, Norway and United Kingdom (Northern Ireland), for analysis of substances and residues covered by Directive 96/23/EC. Out of this, 351,637 were targeted samples collected in conformity with the specifications of the National Residue Control Plans (NRCPs) for 2021. Additionally, 4,562 suspect samples were reported as follow-up of non-compliant targeted samples or suspicion of illegal treatment or non-compliance with the withdrawal period. Apart from the data submitted in accordance to NRCPs, Member States reported in total 262,203 samples collected in the framework of other programmes developed under the national legislation. A relatively limited number of data were reported for samples checked at import (n = 2,803). This is because the control of samples at import is more linked to the third country monitoring than to the residue monitoring in EU; thus Member States report those results to the EC (using other tools e.g. the



Trade Control and Expert System (TRACES) and the Rapid Alert System for Food and Feed (RASFF)).

Of the total targeted samples, 54.98% were analysed for substances having an anabolic effect and unauthorised substances (group A) and 65.68% for veterinary drugs and contaminants (group B)<sup>14</sup>. Of the 351,637 targeted samples, 837 were non-compliant (0.24%) (1,140 non-compliant results at residue definition level). The percentage of non-compliant samples calculated from the total number of samples analysed for substances in that category was: 0.07% for substances having an anabolic effect and unauthorised substances (A), 0.14% for antibacterials (B1), 0.13% for the 'other veterinary drugs' (B2) and 0.85% for 'other substances and environmental contaminants' (B3). A wider confidence interval-that indicates higher uncertainty on the estimated proportion was observed for group B3 residue results, in particular for chemical elements (including metals) (B3c) and dyes (B3e). (Table 1, Figure 1).

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<sup>14</sup> Some samples were analysed for substances in both groups therefore the sum of percentages is higher than 100.

**Table 1:** Number of targeted samples analysed, non-compliant samples and non-compliant results in all species and product categories

| Substance Group <sup>(a)</sup> | Samples analysed <sup>(b)</sup> | % Samples analysed | Non-compliant samples <sup>(c)</sup> | % Non-compliant samples <sup>(d)</sup> | Non-compliant results <sup>(e)</sup> |
|--------------------------------|---------------------------------|--------------------|--------------------------------------|--|--------------------------------------|
| A                              | 193,338                         | 54.98              | 136                                  | 0.07                                   | 161                                  |
| A1                             | 20,288                          | 5.77               | 0                                    | -                                      | 0                                    |
| A2                             | 10,339                          | 2.94               | 32                                   | 0.31                                   | 32                                   |
| A3                             | 41,227                          | 11.72              | 65                                   | 0.16                                   | 72                                   |
| A4                             | 19,357                          | 5.50               | 10                                   | 0.05                                   | 28                                   |
| A5                             | 35,524                          | 10.10              | 2                                    | 0.01                                   | 2                                    |
| A6                             | 99,208                          | 28.21              | 27                                   | 0.03                                   | 27                                   |
| B                              | 230,944                         | 65.68              | 711                                  | 0.31                                   | 979                                  |
| B1                             | 99,167                          | 28.20              | 139                                  | 0.14                                   | 156                                  |
| B2                             | 113,536                         | 32.29              | 142                                  | 0.13                                   | 158                                  |
| B2a                            | 32,484                          | 9.24               | 17                                   | 0.05                                   | 17                                   |
| B2b                            | 37,896                          | 10.78              | 43                                   | 0.11                                   | 50                                   |
| B2c                            | 10,822                          | 3.08               | 0                                    | -                                      | 0                                    |
| B2d                            | 8,653                           | 2.46               | 0                                    | -                                      | 0                                    |
| B2e                            | 23,213                          | 6.60               | 58                                   | 0.25                                   | 65                                   |
| B2f                            | 28,565                          | 8.12               | 25                                   | 0.09                                   | 26                                   |
| B3                             | 50,550                          | 14.38              | 430                                  | 0.85                                   | 665                                  |
| B3a                            | 21,079                          | 5.99               | 27                                   | 0.13                                   | 236                                  |
| B3b                            | 13,141                          | 3.74               | 2                                    | 0.02                                   | 2                                    |
| B3c                            | 13,239                          | 3.76               | 343                                  | 2.59                                   | 367                                  |
| B3d                            | 8,353                           | 2.38               | 16                                   | 0.19                                   | 16                                   |
| B3e                            | 2,047                           | 0.58               | 7                                    | 0.34                                   | 8                                    |
| B3f                            | 6,836                           | 1.94               | 36                                   | 0.53                                   | 36                                   |
| Total                          | 351,637                         | 100.00             | 837                                  | 0.24                                   | 1,140                                |

(a): as detailed in Appendix E;

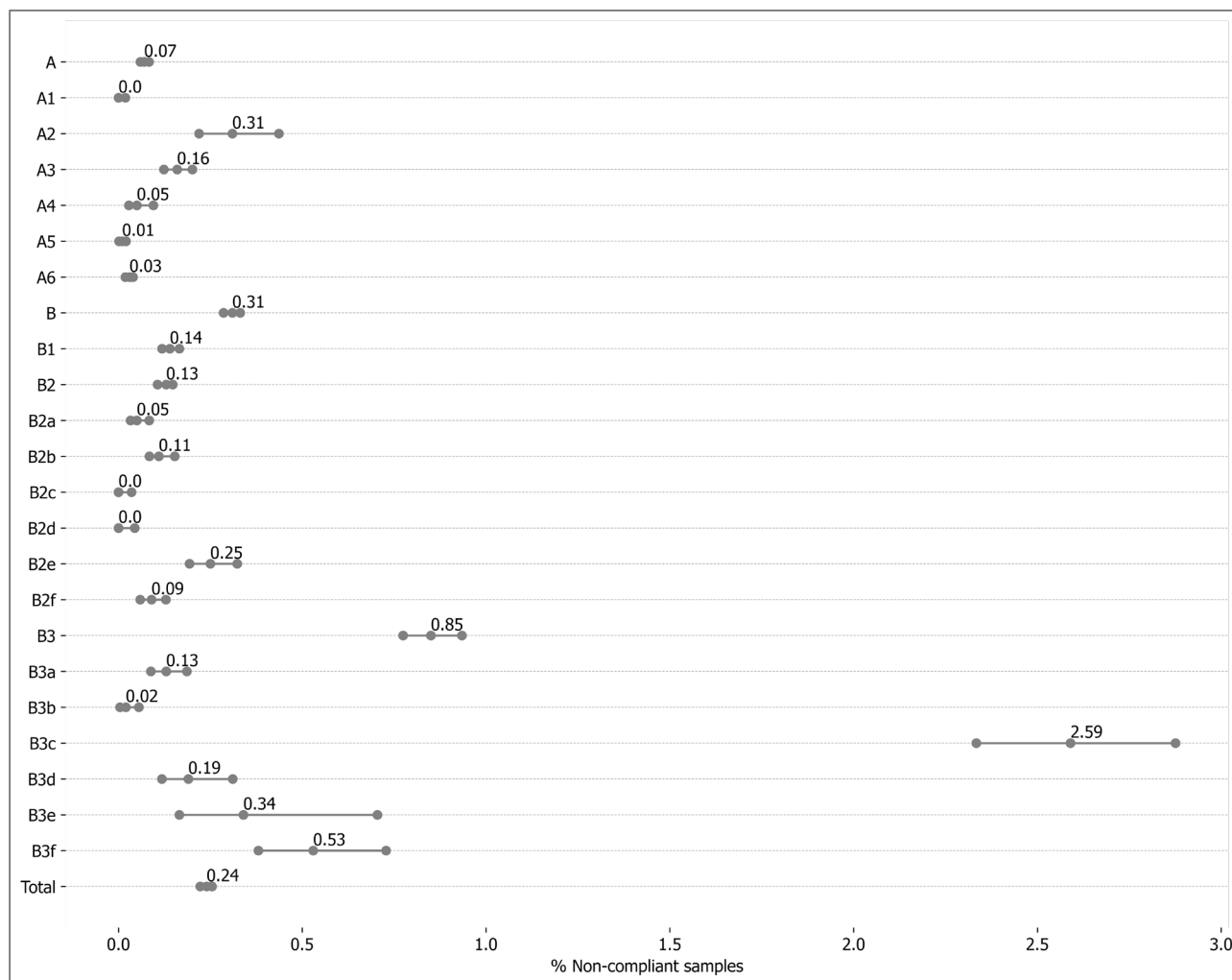
(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group or sub-group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group.





**Figure 1:** Percentage of non-compliant targeted samples (with confidence intervals) in each substance group

### 3.1.1. Hormones

Directive 96/22/EC<sup>15</sup> prohibits the use of hormones in food producing animals except for well-defined therapeutic and zootechnical purposes and under strict veterinary control.

This group includes also synthetic, hormonally active substances such as stilbenes and their derivatives (A1), antithyroid agents (A2), steroids (A3) and resorcylic acid lactones (A4).

Of all the targeted samples analysed for the category 'hormones' in all animal/product categories (66,194 samples) there were 107 non-compliant samples (0.16%) (132 non-compliant results).

The number of targeted samples analysed for stilbenes and derivatives (A1) in all animal/product categories together, was 20,288 and no non-compliant samples were reported for this group.

<sup>15</sup> Council Directive 96/22/EC of 29 April 1996 concerning the prohibition on the use in stock farming of certain substances having a hormonal or thyrostatic action and of  $\beta$ -agonists, and repealing Directives 81/602/EEC, 88/146/EEC and 88/299/EEC. OJ L 125, 23.5.1996, p. 3–9.



Antithyroid agents (A2) were analysed in 10,339 targeted samples of which 32 samples were non-compliant (0.31%) (32 non-compliant results). All non-compliant samples in the group A2 were for thiouracil and were found in bovines (n = 30; 0.56%), and sheep/goats (n = 2; 1.02%). In 2020 all the A2 non-conform results (0.31%) were also reported for the same residue, but the non-compliance rate observed was higher than in 2021 (0.34%).

For steroids (A3), of the 41,227 samples analysed in all animal species and product categories, 65 samples were non-compliant (0.16%) (72 non-compliant results). The non-compliant samples were found in bovines (n = 28; 0.12%), pigs (n = 20; 0.18%), poultry (n = 6; 0.11%), rabbit meat (n = 1; 1.89%) and sheep and goats (n = 10; 1.46%). Some Member States have indicated that residue findings on steroid hormones may not be attributable to illegal treatment, as the source was most likely the endogenous production, as reported in previous studies (Clouet et al. [1997](#), P. Samuels et al. [1998](#)).

For resorcylic acid lactones (A4), of 19,357 samples analysed in all animal species and product categories, 10 were found non-compliant (0.05%) (28 non-compliant results). The non-compliant samples were found for bovines (n = 6; 0.06%) and pigs (n = 4; 0.07%).

### 3.1.2. Beta-agonists

Directive 96/22/EC prohibits the use of beta-agonists (A5) in food producing animals except for well-defined therapeutic purposes and under strict veterinary control. In 2021, 35,524 targeted samples were analysed for beta-agonists, with two non-compliant samples one for sulbatamol and one for clenbuterol in bovines.

### 3.1.3. Prohibited substances

This group (A6) includes substances listed in Commission Regulation (EU) No 37/2010 under prohibited substances for which MRLs cannot be established. These substances are not allowed to be administered to food-producing animals. Examples of substances belonging to this group are chloramphenicol, nitrofurans and nitroimidazoles.

In the framework of the 2021 residue monitoring, 99,208 targeted samples were analysed for prohibited substances and 27 samples (0.03%) were non-compliant (27 non-compliant results). Altogether, there were 11 non-compliant results for chloramphenicol, six for semicarbazide, four for metronidazole, three for AMOZ (5-methylmorpholino-3-amino-2-oxazolidone), one for AOZ (3-amino-2-oxazolidone), one for furaltadone and one for dimetridazole (Table 2).

The distribution of the non-compliant results, by individual substance and country, are presented in Appendix A.

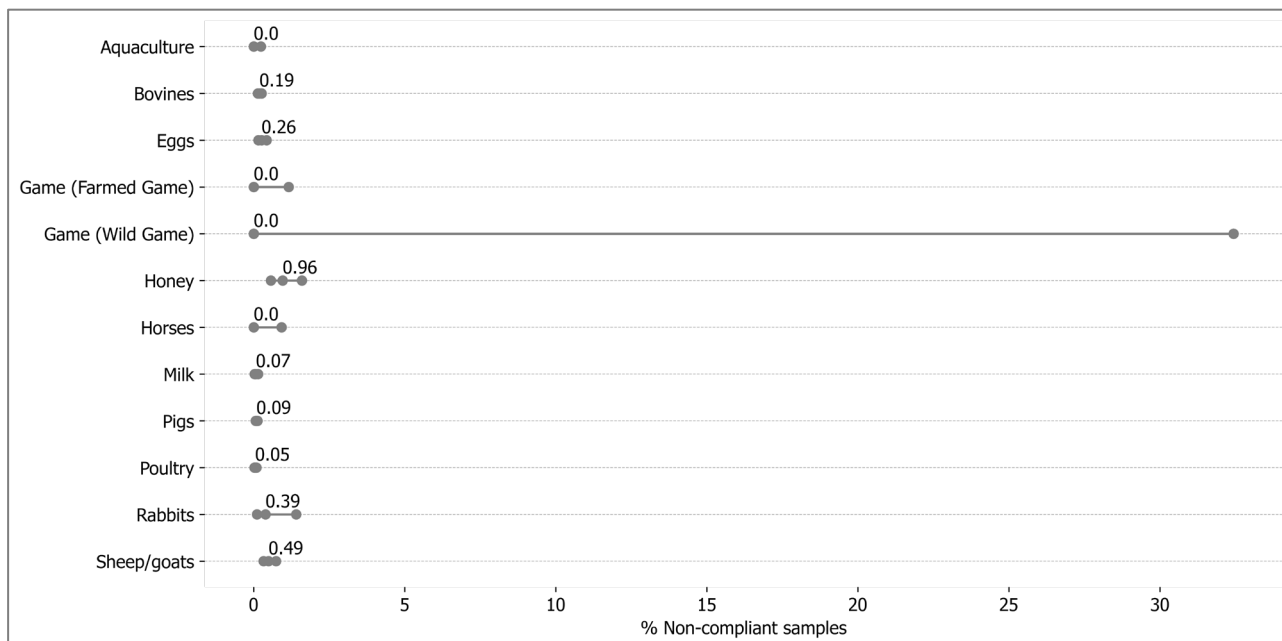
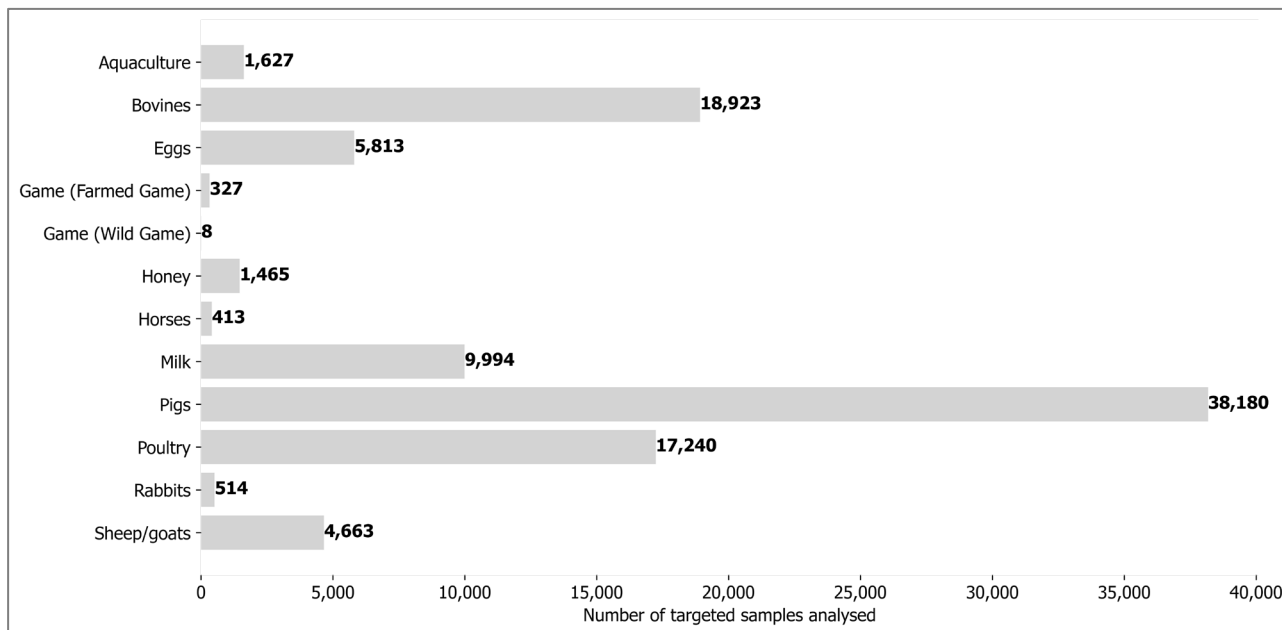
**Table 2:** Overview on the non-compliant results for prohibited substances (A6)

| <b>Residue Definition</b>                       | <b>Species/Product</b> | <b>Country reporting non-compliant results at residue definition level</b> | <b>Number of non-compliant results</b> |
|---|------------------------|--|--|
| AMOZ (5-methylmorpholino-3-amino-2-oxazolidone) | Poultry                | Netherlands  | 3                                      |
| AOZ (3-amino-2-oxazolidone)                     | Honey                  | Ireland  | 1                                      |
| Chloramphenicol                                 | Bovines                | Germany  | 1                                      |
| Chloramphenicol                                 | Horses                 | Netherlands  | 1                                      |
| Chloramphenicol                                 | Milk                   | Malta  | 3                                      |
| Chloramphenicol                                 | Pigs                   | Austria  | 1                                      |
| Chloramphenicol                                 | Pigs                   | Italy  | 2                                      |
| Chloramphenicol                                 | Poultry                | Netherlands  | 1                                      |
| Chloramphenicol                                 | Poultry                | Poland   | 2                                      |
| Dimetridazole                                   | Poultry                | Slovakia   | 1                                      |
| Furaltadone                                     | Poultry                | Portugal   | 1                                      |
| Metronidazole                                   | Eggs                   | France   | 4                                      |
| SEM (semicarbazide)                             | Bovines                | Czechia  | 1                                      |
| SEM (semicarbazide)                             | Bovines                | Ireland  | 2                                      |
| SEM (semicarbazide)                             | Bovines                | Poland   | 1                                      |
| SEM (semicarbazide)                             | Milk                   | Croatia  | 1                                      |
| SEM (semicarbazide)                             | Sheep/goats            | Netherlands  | 1                                      |

#### 3.1.4. Antibacterials

The group of antibacterials (B1) includes antibiotics (e.g. beta-lactams, tetracyclines, macrolides, aminoglycosides) but also sulphonamides and quinolones. The total number of analyses carried out in 2021 for antimicrobials in targeted samples was 99,167 of which 139 (0.14%) were non-compliant (156 non-compliant results) (Table 1). The highest frequency of non-compliant samples for antibacterials was observed in honey (0.96%) (Figure 2).

More details on the number of samples analysed and the non-compliant samples found in each category are given in Sections 3.2 to 3.13 and in Appendix A.



**Figure 2:** Number of targeted samples analysed and percentage of non-compliant samples (with confidence intervals) for antibacterials (B1) in animal/product categories

### 3.1.5. Other veterinary drugs

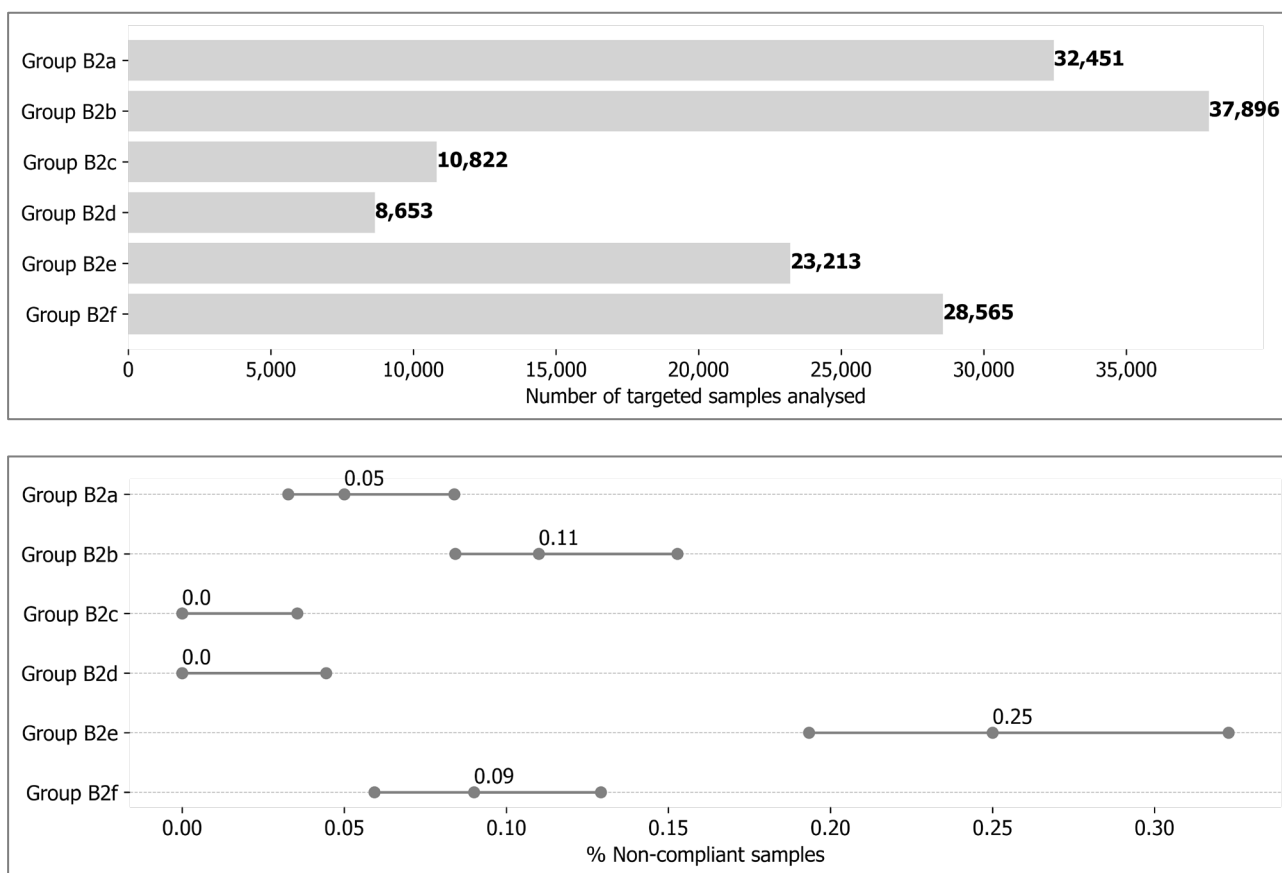
The group 'other veterinary drugs' (B2) includes a variety of veterinary medicinal products classified according to their pharmacological action in:

- anthelmintics (B2a);
- anticoccidials (B2b);
- carbamates and pyrethroids (B2c);
- sedatives (B2d);



- non-steroidal anti-inflammatory drugs (NSAIDs) (B2e), and
- other pharmacologically active substances (B2f).

In the 2021 monitoring, 113,536 targeted samples were analysed for substances in the group B2 and 142 samples (0.13%) were non-compliant. The total number of targeted samples analysed for each subgroup in the group B2 and the percentage of non-compliant samples is presented in Figure 3. It is important to note that the frequency of analyses for substances in the B2 subgroups follows a different pattern in each species, depending on their animal specific therapeutic application. An overview of the number of samples analysed and the percentage of non-compliant samples for the B2 subgroups in the specific animal/product category is presented in Table 3.



**Figure 3:** Number of targeted samples analysed within the group 'other veterinary drugs' (B2) and the percentage of non-compliant samples (with confidence intervals)



**Table 3:** Number of targeted samples analysed for B2 subgroups in different animal categories and the frequency of non-compliant samples (percentage from the total number of samples analysed in each animal category)

| Product groups     | B2a % NC | B2a Samples | B2b % NC | B2b Samples | B2c % NC | B2c Samples | B2d % NC | B2d Samples | B2e % NC | B2e Samples | B2f % NC | B2f Samples |
|--------------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|----------|-------------|
| Aquaculture        | -        | 737         | -        | 239         | -        | 409         | -        | 40          | -        | 7           | -        | 396         |
| Bovines            | 0.06     | 4,920       | -        | 4,108       | -        | 1,818       | -        | 1,655       | 0.42     | 5,472       | 0.16     | 11,277      |
| Eggs               | -        | 2,049       | 0.42     | 5,707       | -        | 1,058       | -        | 48          | -        | 99          | -        | 1,160       |
| Game (Farmed Game) | 0.40     | 249         | -        | 127         | -        | 79          | -        | 27          | -        | 49          | -        | 62          |
| Game (Wild Game)   | -        | 98          | -        | 21          | -        | 40          | -        | 0           | -        | 4           | -        | 3           |
| Honey              | -        | 393         | -        | 112         | -        | 968         | -        | 0           | -        | 15          | 0.37     | 802         |
| Horses             | -        | 193         | -        | 108         | -        | 119         | -        | 164         | 0.75     | 401         | -        | 239         |
| Milk               | 0.04     | 6,685       | -        | 2,519       | -        | 726         | -        | 82          | 0.47     | 5,698       | -        | 1,284       |
| Pigs               | 0.05     | 10,585      | 0.06     | 11,322      | -        | 2,603       | -        | 6,241       | 0.01     | 8,668       | 0.03     | 9,432       |
| Poultry            | -        | 4,248       | 0.07     | 12,736      | -        | 2,396       | -        | 87          | 0.18     | 2,260       | -        | 3,015       |
| Rabbits            | -        | 135         | 0.87     | 230         | -        | 86          | -        | 2           | -        | 62          | -        | 57          |
| Sheep/goats        | 0.23     | 2,159       | 0.15     | 667         | -        | 520         | -        | 307         | -        | 478         | 0.12     | 838         |

%NC: Percentage of non-compliant samples;

'-': indicates that all samples were compliant.

Regarding the number of samples analysed in each B2 subgroup, the highest proportion of non-compliant samples (0.25%), with the highest uncertainty, was found for non-steroidal anti-inflammatory drugs (B2e), non-compliant samples were reported in bovines (0.42%), horses (0.75%), milk (0.47%), pigs (0.01%) and poultry (0.18%).

For anthelmintics (B2a), non-compliant samples were reported in bovines (0.06%), farmed game (0.40%), milk (0.04%), pigs (0.05%) and sheep and goats (0.23%).

Non-compliant samples for anticoccidials (B2b) were reported in eggs (0.42%), pigs (0.06%), poultry (0.07%), rabbit meat (0.87%) and sheep and goats (0.15%).

No non-compliant samples were reported for pyrethroids (B2c) and sedatives (B2d).

For 'other pharmacologically active substances' (B2f), non-compliant samples were observed for bovines (0.16%), honey (0.37%), pigs (0.03%) and sheep and goats (0.12%): 26 non-compliant results were reported by six countries and the substances identified were dexamethasone, 'Amitraz (amitraz including the metabolites containing the 2,4 -dimethylaniline moiety expressed as amitraz)', prednisone and prednisolone (Table 4). It is important to note that studies suggest that prednisolone could be produced endogenously by animals, especially by those found in a state of stress (Pompa et al. [2011](#), Fidani et al. [2012](#)).

**Table 4:** Overview on other pharmacologically active substances non-compliant results (B2f)

| <b>Residue Definition</b>   | <b>Species/Product</b> | <b>Country reporting non-compliant results at residue definition level</b> | <b>Number of non-compliant results</b> |
|---|------------------------|--|--|
| Amitraz (amitraz including the metabolites containing the 2,4 -dimethylaniline moiety expressed as amitraz) | Honey                  | Cyprus   | 3                                      |
| Dexamethasone   | Bovines                | France   | 4                                      |
| Dexamethasone   | Bovines                | Germany  | 9                                      |
| Dexamethasone   | Bovines                | Italy  | 2                                      |
| Dexamethasone   | Bovines                | Poland   | 2                                      |
| Dexamethasone   | Bovines                | Spain  | 2                                      |
| Dexamethasone   | Pigs                   | Germany  | 1                                      |
| Prednisolone  | Sheep/goats            | Spain  | 1                                      |
| Prednisone  | Pigs                   | Germany  | 2                                      |

### 3.1.6. Other substances and environmental contaminants

The group 'other substances and environmental contaminants' (B3) includes the following subcategories:

- organochlorine compounds including PCBs (B3a);
- organophosphorus compounds (B3b);
- chemical elements (B3c);
- mycotoxins (B3d);
- dyes (B3e), and
- others (B3f).

In the 2021, 50,550 samples were analysed for substances in group B3 of which 430 samples were non-compliant (0.85%) (665 non-compliant results), that is almost half compared to the percentage from the previous year. The total number of targeted samples analysed for each subgroup in group B3, and the percentage of non-compliant samples is presented in Figure 4. Similar to group B2, the frequency of analyses for certain B3 subgroups is highly variable with the targeted animal/product category. While chemical contaminants (B3c) are analysed in all animal/product categories, dyes (B3e) are analysed only in aquaculture products. An overview of the number of samples analysed and the percentage of non-compliant samples for the B3 subgroups in the specific animal group and animal product category is presented in Table 5.

The highest percentage of non-compliant samples was found for almost all species in the subgroup B3c 'chemical elements' (2.59%). Similar to previous years, cadmium, copper, lead





and total mercury being most frequently identified as responsible for non-compliance. Copper compounds are also the most frequently quantified pesticides in food products (EFSA 2022c).

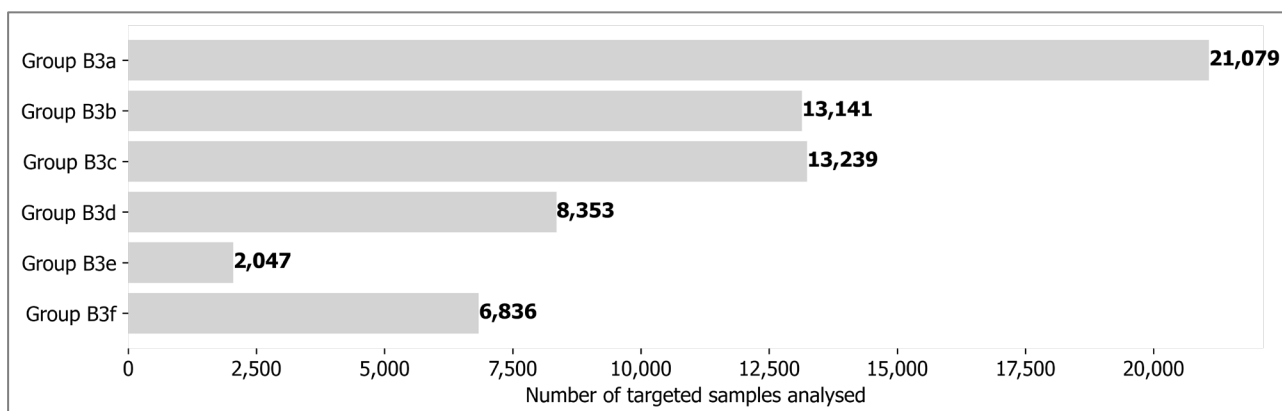
Instances of non-compliance for organochlorine compounds (B3a) and organophosphorus compounds (B3b) were 0.13% and 0.02%, respectively. The occurrence of organochlorine compounds in products of animal origin arises mainly from these persistent residues in the environment (e.g. in soil) that are e.g. taken-up by vegetables crops fed to animals; thus, the overall reduction in the non-compliant rate observed for these contaminants over the last monitoring years may be ascribed to their environmental degradation and because these substances are no longer in use. To be noted that environmental organochlorinated contaminants due past uses as pesticides (e.g. DDT) constituted the main findings in animal products also in the context of pesticide monitoring activities carried out in Europe in 2019 and previous years in the frame of the pesticide residues Regulation (EC) 396/2005 (EFSA 2022c). Organophosphorus compounds are also used as plant protection products and their residues in animals/products of animal origin may arise from plant-based feed.

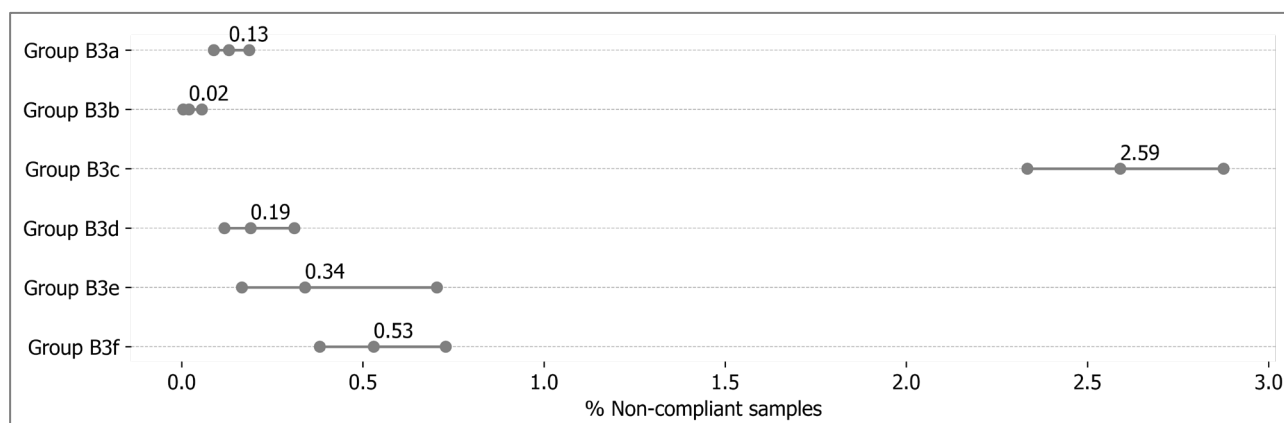
There were non-compliant samples reported in subgroup B3d mycotoxins (n = 16; 0.19%), for bovines (0.30%), milk (0.36%) and pigs (0.16%). Those identified being zearalenone and aflatoxin M1.

Dyes (B3e) were reported in aquaculture (7 non-compliant samples; 0.34%). Substances found were sum of crystal violet and leucocrystal violet and sum of malachite green and leucomalachite green. The percentage of non-compliant samples was almost half compared to the previous year.

There were non-compliant samples reported in subgroup B3f 'others' (n = 36; 0.53%), bovines (1.31%), eggs (0.07%), wild game (12.70%), honey (1.50%) and sheep and goats (1.10%). Those identified being copper compounds, acetamiprid, didecyldimethylammonium chloride and fipronil.

The highest uncertainty of the estimated proportions of non-compliant samples were observed for dyes (B3e) and chemical elements (B3c).





**Figure 4:** Number of samples analysed within the group ‘other substances and environmental contaminants’ (B3) and the percentage of non-compliant samples (with confidence intervals)

**Table 5:** Number of targeted samples analysed for B3 subgroups in different animal and product categories and the frequency of non-compliant samples (percentage from the total number of samples analysed in each animal/product category)

| Group              | B3a<br>% NC | B3a<br>Sample<br>s | B3b<br>% NC | B3b<br>Sample<br>s | B3c<br>% NC | B3c<br>Sample<br>s | B3d<br>% NC | B3d<br>Sample<br>s | B3e<br>% NC | B3e<br>Sample<br>s | B3f<br>% NC | B3f<br>Samples |
|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|--------------------|-------------|----------------|
| Aquaculture        | 0.11        | 905                | 0.30        | 332                | 0.35        | 574                | -           | 346                | 0.40        | 1,772              | -           | 585            |
| Bovines            | 0.02        | 4,505              | -           | 2,148              | 4.09        | 2,492              | 0.30        | 1,971              | -           | 32                 | 1.31        | 840            |
| Eggs               | 0.17        | 1,725              | -           | 1,454              | -           | 111                | -           | 4                  | -           | 0                  | 0.07        | 1,501          |
| Game (Farmed Game) | 3.39        | 177                | -           | 63                 | 4.58        | 371                | -           | 21                 | -           | 0                  | -           | 66             |
| Game (Wild Game)   | 5.50        | 200                | -           | 28                 | 4.17        | 2,039              | -           | 0                  | -           | 0                  | 12.70       | 63             |
| Honey              | -           | 942                | -           | 871                | 3.30        | 485                | -           | 5                  | -           | 26                 | 1.50        | 865            |
| Horses             | -           | 170                | -           | 93                 | 4.17        | 360                | -           | 79                 | -           | 0                  | -           | 51             |
| Milk               | -           | 1,522              | -           | 2,212              | -           | 647                | 0.36        | 1,690              | -           | 0                  | -           | 359            |
| Pigs               | 0.05        | 5,858              | -           | 3,269              | 1.47        | 3,948              | 0.16        | 2,544              | -           | 110                | -           | 982            |
| Poultry            | -           | 3,843              | 0.05        | 1,944              | 0.89        | 1,565              | -           | 1,464              | -           | 76                 | -           | 1,226          |
| Rabbits            | -           | 107                | -           | 58                 | -           | 70                 | -           | 15                 | -           | 4                  | -           | 26             |
| Sheep/goats        | 0.18        | 1,125              | -           | 669                | 5.89        | 577                | -           | 214                | -           | 27                 | 1.10        | 272            |

%NC: Percentage of non-compliant samples.

More details on the number of samples analysed and non-compliant samples in each category are given in the Sections 3.2 to 3.13 and in Appendix A.

### 3.1.7. Multi-year comparison

As this is the fifth year that the monitoring data were reported to EFSA using the SSD (Version 2.0) format (see Section on Data and Methodologies), comparisons have been performed only between the results from 2017, 2018, 2019, 2020 and 2021. Detailed comparisons with those

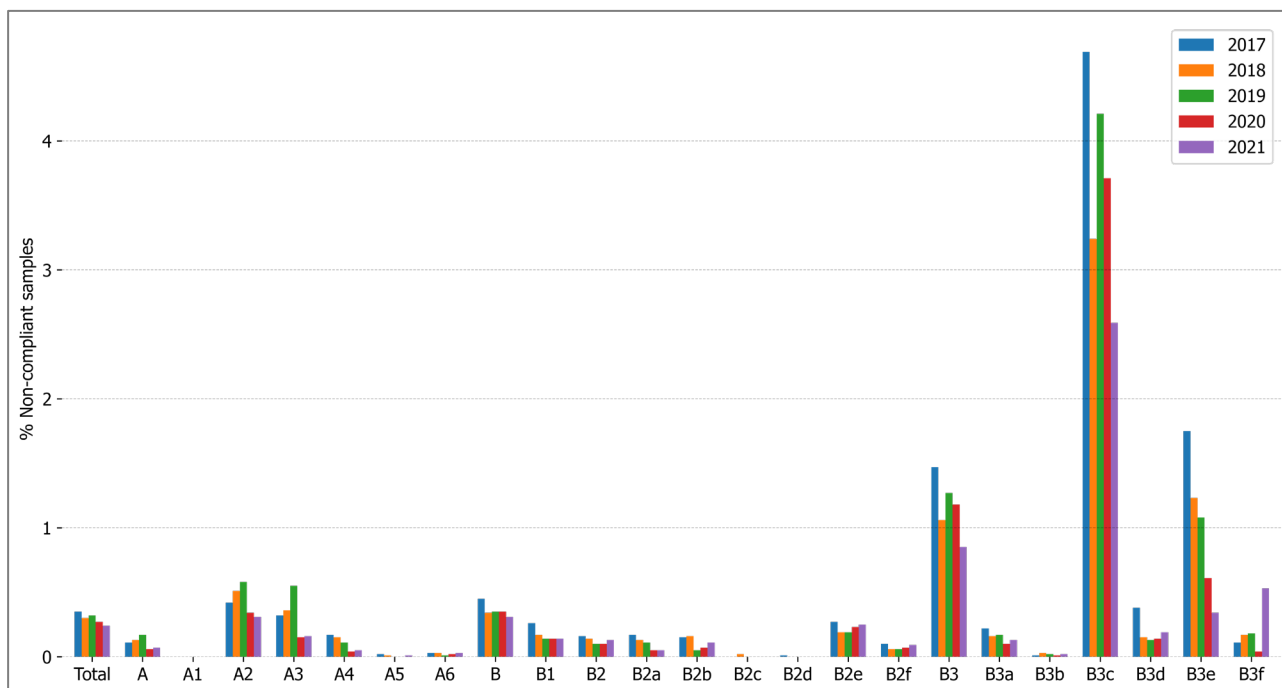


from earlier years have not been performed due to differences in the reporting and calculation methods. It is important to note that this analysis is based on data that were partially aggregated. In addition, the number of samples analysed for each substance and animal/product category was not necessarily the same over the 5-year period. Furthermore, this is the third year that the results data from Iceland and Norway have been included in the annual report. Moreover, for 2021, the only United Kingdom data that were reported to EFSA were from Northern Ireland. In accordance with the Agreement on the withdrawal of the United Kingdom from the European Union, and in particular with the Protocol on Ireland/Northern Ireland, the European Union requirements on data sampling are also applicable to and in the United Kingdom with respect to Northern Ireland. Therefore, this analysis should be regarded as having a certain degree of uncertainty when it comes to results comparability over the time.

The purpose of this exercise was to check whether major variations of the proportion of non-compliant samples occurred at substance group level overall. When such variations are noted, a more in-depth analysis of the monitoring plans per species, country and pattern of substances analysed has to be carried out in order to identify the trigger for the differences observed and in consequence to take corrective measures.

Overall, the percentage of non-compliant samples in 2021 (0.17%) was comparable to the previous 12 years (0.19%-0.37%). A slightly increase was observed for the number of reported samples, 621,205 in 2021 compared to 620,758 in 2020.

For targeted samples in 2021 the percentage of non-compliant (0.24%) was also lower compared to the previous 4 years (0.27%-0.35%). Compared to the results from 2017, 2018, 2019 and 2020, in 2021 the frequency of non-compliant results was decreased for antithyroid agents (A2), while for steroids (A3) and resorcylic acid lactones (A4) the frequency of non-compliant results was higher than in 2020, but lower compared to the previous years. For prohibited substances (A6), compared to 2020 the frequency on non-compliance in 2021 was higher, although in line with that of 2017 and 2018. For, compared to 2017 and 2019, the frequency on non-compliance in 2021 was lower, although higher compared to 2018. Decreases compared to all previous years were noted for other substances and environmental contaminants (B3), chemical elements (including metals) (B3c) and dyes (B3e). Compared to 2020, for antibacterials (B1), anthelmintics (B2a), pyrethroids (B2c) and sedatives (B2d), the frequency on non-compliance was stable, while for anticoccidials (B2b), non-steroidal anti-inflammatory drugs (NSAIDs) (B2e), 'other pharmacologically active substances' (B2f), organochlorine compounds (B3a), organophosphorus compounds (B3b) and mycotoxins (B3d) was higher. Finally a sharp increase compared to all previous years was found for 'other substances' (B3f). For the other substance groups, there were no notable variations (see Figure 5).



**Figure 5:** Percentage of non-compliant samples reported in relation to the total number of targeted samples analysed for the respective group in 2017 - 2021 (substance groups are detailed in Appendix E)

| Year | Total | A    | A1 | A2   | A3   | A4   | A5   | A6   | B    | B1   | B2   | B2a  | B2b  | B2c  | B2d  | B2e  | B2f  | B3   | B3a  | B3b  | B3c  | B3d  | B3e  | B3f  |
|------|-------|------|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2017 | 0.35  | 0.11 | 0  | 0.42 | 0.32 | 0.17 | 0.02 | 0.03 | 0.45 | 0.26 | 0.16 | 0.17 | 0.15 | 0.00 | 0.01 | 0.27 | 0.10 | 1.47 | 0.22 | 0.01 | 4.69 | 0.38 | 1.75 | 0.11 |
| 2018 | 0.30  | 0.13 | 0  | 0.51 | 0.36 | 0.15 | 0.01 | 0.03 | 0.34 | 0.17 | 0.14 | 0.13 | 0.16 | 0.02 | 0.00 | 0.19 | 0.06 | 1.06 | 0.16 | 0.03 | 3.24 | 0.15 | 1.23 | 0.17 |
| 2019 | 0.32  | 0.17 | 0  | 0.58 | 0.55 | 0.11 | 0.00 | 0.01 | 0.35 | 0.14 | 0.10 | 0.11 | 0.05 | 0.00 | 0.19 | 0.06 | 1.27 | 0.17 | 0.02 | 4.21 | 0.13 | 1.08 | 0.18 |      |
| 2020 | 0.27  | 0.06 | 0  | 0.34 | 0.15 | 0.04 | 0.00 | 0.02 | 0.35 | 0.14 | 0.10 | 0.05 | 0.07 | 0.00 | 0.23 | 0.07 | 1.18 | 0.10 | 0.01 | 3.71 | 0.14 | 0.61 | 0.04 |      |
| 2021 | 0.24  | 0.07 | 0  | 0.31 | 0.16 | 0.05 | 0.01 | 0.03 | 0.31 | 0.14 | 0.13 | 0.05 | 0.11 | 0.00 | 0.00 | 0.25 | 0.09 | 0.85 | 0.13 | 0.02 | 2.59 | 0.19 | 0.34 | 0.53 |

### 3.2. Bovines

Council Directive 96/23/EC requires that the minimum number of bovine animals to be controlled each year for all kinds of residues and substances is 0.4% of the bovine animals slaughtered the previous year. Overall, the minimum requirements for the number of samples were fulfilled in 2021 (Table 6). France, Germany, Greece, Hungary, Netherlands, Poland and Portugal did not achieve the minimum sampling frequency for bovines, even if some of them were really close to it (Table 7).


**Table 6:** Production of bovines and number of targeted samples over 2007–2021

| Year                                    | Production (animals) | Targeted samples | % Animals tested <sup>(a)</sup> | Minimum 96/23/EC |
|---|----------------------|------------------|---------------------------------|------------------|
| 2007 (EU 27)                            | 27,087,367           | 129,201          | 0.47                            |                  |
| 2008 (EU 27)                            | 26,898,702           | 122,648          | 0.48                            |                  |
| 2009 (EU 27)                            | 26,677,946           | 127,897          | 0.48                            |                  |
| 2010 (EU 27)                            | 26,267,917           | 128,130          | 0.48                            |                  |
| 2011 (EU 27)                            | 26,566,593           | 126,540          | 0.48                            |                  |
| 2012 (EU 27)                            | 25,759,645           | 130,554          | 0.49                            |                  |
| 2013 (EU 28)                            | 25,481,237           | 126,307          | 0.49                            |                  |
| 2014 (EU 28)                            | 25,315,582           | 125,552          | 0.49                            |                  |
| 2015 (EU 28)                            | 25,463,018           | 127,187          | 0.50                            | 0.4              |
| 2016 (MS 27) <sup>(b)</sup>             | 21,414,980           | 109,881          | 0.53                            |                  |
| 2016 (EU 28)                            | 26,099,292           |                  |                                 |                  |
| 2017 (EU 28)                            | 26,394,612           | 102,647          | 0.39                            |                  |
| 2018 (EU 28)                            | 26,688,499           | 100,784          | 0.38                            |                  |
| 2018 (EU 27, IS, NO) <sup>(c)</sup>     | 26,814,009           |                  |                                 |                  |
| 2019 (EU 27, IS, NO) <sup>(c)</sup>     | 26,913,406           | 106,651          | 0.40                            |                  |
| 2020 (EU 27, IS, NO) <sup>(d)</sup>     | 24,118,545           | 94,421           | 0.39                            |                  |
| 2021 (EU 27, IS, NO, XI) <sup>(e)</sup> | 24,084,091           | 97,702           | 0.41                            |                  |

(a): in relation to the production of the previous year;

(b): data from France were not available for inclusion in the 2016 results report;

(c): data from Malta were not available for inclusion in the 2019 results report; IS: Iceland; NO: Norway; MS=Member States

(d): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(e): data from the United Kingdom (Northern Ireland) are taken into account for 2021. In accordance with the agreement on the withdrawal of the United Kingdom from the EU, and in particular with the Protocol on Ireland/Northern Ireland, the EU requirements on data sampling are also applicable to Northern Ireland. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

**Table 7:** Production volume and number of targeted samples collected in bovines

| Country  | Production data (animals) <sup>(a)</sup> | Number of samples | % Animal tested |
|--|--|-------------------|-----------------|
| Austria  | 646,664                                  | 3,738             | 0.58            |
| Belgium  | 840,653                                  | 4,623             | 0.55            |
| Bulgaria   | 33,370                                   | 143               | 0.43            |
| Croatia  | 184,675                                  | 790               | 0.43            |
| Cyprus   | 17,250                                   | 136               | 0.79            |
| Czechia  | 253,251                                  | 1,249             | 0.49            |
| Denmark  | 465,926                                  | 1,895             | 0.41            |
| Estonia  | 34,215                                   | 170               | 0.50            |
| Finland  | 267,796                                  | 1,193             | 0.45            |
| France   | 4,517,465                                | 15,603            | 0.35            |
| Germany  | 3,295,387                                | 13,014            | 0.39            |
| Greece   | 137,914                                  | 404               | 0.29            |
| Hungary  | 110,832                                  | 238               | 0.21            |
| Iceland  | 21,470                                   | 89                | 0.41            |
| Ireland  | 1,845,945                                | 7,716             | 0.42            |
| Italy  | 2,713,687                                | 11,485            | 0.42            |
| Latvia   | 67,258                                   | 273               | 0.41            |
| Lithuania  | 158,295                                  | 651               | 0.41            |
| Luxembourg                                       | 27,734                                   | 110               | 0.40            |
| Malta  | 4,100                                    | 162               | 3.95            |
| Netherlands                                      | 2,065,685                                | 7,302             | 0.35            |
| Norway   | 306,075                                  | 2,193             | 0.72            |
| Poland   | 1,952,045                                | 6,687             | 0.34            |
| Portugal   | 396,243                                  | 1,182             | 0.30            |
| Romania  | 182,145                                  | 950               | 0.52            |
| Slovakia   | 20,222                                   | 320               | 1.58            |
| Slovenia   | 118,245                                  | 517               | 0.44            |
| Spain  | 2,510,774                                | 10,248            | 0.41            |
| Sweden   | 432,770                                  | 1,714             | 0.40            |
| United Kingdom (Northern Ireland) <sup>(b)</sup> | 456,000                                  | 2,907             | 0.64            |
| <b>Total</b>                                     | <b>24,084,091</b>                        | <b>97,702</b>     | <b>0.41</b>     |

(a): The production data, taken from the 2021 Residue Control Plan, may pertain to the years 2019, 2020 or 2021;

(b): United Kingdom (Northern Ireland) collected more samples and performed more analyses in 2021 than those reported, however due to various constraints, not all data have been reported to EFSA.

The distribution of samples analysed, non-compliant samples and non-compliant results in bovines are presented in Table 8. Of the 97,702 samples analysed in this category, 264 (0.27%) were non-compliant (351 non-compliant results). The non-compliant samples were reported by 22 countries.


**Table 8:** Number of samples analysed, non-compliant samples and non-compliant results in bovines

| Substance Group <sup>(a)</sup> | Samples analysed <sup>(b)</sup> | % Samples analysed | Non-compliant samples <sup>(c)</sup> | % Non-compliant samples <sup>(d)</sup> | Non-compliant results <sup>(e)</sup> |
|--------------------------------|---------------------------------|--------------------|--------------------------------------|--|--------------------------------------|
| A                              | 65,356                          | 66.89              | 71                                   | 0.11                                   | 88                                   |
| A1                             | 10,114                          | 10.35              | 0                                    | -                                      | 0                                    |
| A2                             | 5,353                           | 5.48               | 30                                   | 0.56                                   | 30                                   |
| A3                             | 22,807                          | 23.34              | 28                                   | 0.12                                   | 30                                   |
| A4                             | 9,910                           | 10.14              | 6                                    | 0.06                                   | 21                                   |
| A5                             | 18,296                          | 18.73              | 2                                    | 0.01                                   | 2                                    |
| A6                             | 19,194                          | 19.65              | 5                                    | 0.03                                   | 5                                    |
| B                              | 49,978                          | 51.15              | 199                                  | 0.40                                   | 263                                  |
| B1                             | 18,923                          | 19.37              | 36                                   | 0.19                                   | 37                                   |
| B2                             | 25,537                          | 26.14              | 43                                   | 0.17                                   | 49                                   |
| B2a                            | 4,920                           | 5.04               | 3                                    | 0.06                                   | 3                                    |
| B2b                            | 4,108                           | 4.20               | 0                                    | -                                      | 0                                    |
| B2c                            | 1,818                           | 1.86               | 0                                    | -                                      | 0                                    |
| B2d                            | 1,655                           | 1.69               | 0                                    | -                                      | 0                                    |
| B2e                            | 5,472                           | 5.60               | 23                                   | 0.42                                   | 27                                   |
| B2f                            | 11,277                          | 11.54              | 18                                   | 0.16                                   | 19                                   |
| B3                             | 9,969                           | 10.20              | 120                                  | 1.20                                   | 177                                  |
| B3a                            | 4,505                           | 4.61               | 1                                    | 0.02                                   | 50                                   |
| B3b                            | 2,148                           | 2.20               | 0                                    | -                                      | 0                                    |
| B3c                            | 2,492                           | 2.55               | 102                                  | 4.09                                   | 110                                  |
| B3d                            | 1,971                           | 2.02               | 6                                    | 0.30                                   | 6                                    |
| B3e <sup>(f)</sup>             |                                 |                    |                                      |  |                                      |
| B3f                            | 840                             | 0.86               | 11                                   | 1.31                                   | 11                                   |
| <b>Total</b>                   | <b>97,702</b>                   | <b>100.00</b>      | <b>264</b>                           | <b>0.27</b>                            | <b>351</b>                           |

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

There were no non-compliant samples reported in group A1, B2b-d and B3b.

In the group A2, four countries reported a total of 30 non-compliant samples (30 non-compliant results), all for thiouracil.





In the group A3, a total of 28 non-compliant samples (30 non-compliant results) were reported by five countries. Among the substances identified, the highest number of non-compliant results were noted for testosterone-17-Beta (n=9).

In group A4, there were six non-compliant samples and 21 non-compliant results, reported for beta and alpha zearalanol, zearalanol, zearalanone and zearalenol alpha and beta, by two countries.

In the group A5, a total of two non-compliant samples (two non-compliant results) were reported by two countries, one for clenbuterol and one for salbutamol.

In the group A6, a total of five non-compliant samples (five non-compliant results) were reported by four countries. The substances identified were semicarbazide (n = 4) and chloramphenicol (n = 1).

For antibacterials (B1), eight countries reported a total of 36 non-compliant samples (37 non-compliant results).

In Group B2, there were three non-compliant samples (three non-compliant results) for anthelmintics (B2a), 23 non-compliant samples (27 non-compliant results) were reported by seven countries for non-steroidal anti-inflammatory drugs (NSAIDs) (B2e). Meloxicam was the most frequently reported substance in B2e (n = 14 non-compliant results). For 'other pharmacologically active substances' (B2f), there were 18 non-compliant samples (19 non-compliant results).

In the group B3, there were 102 non-compliant samples and 110 results for chemical elements (including heavy metals) (B3c), one sample and 50 results for organochlorine compounds, including PCBs (B3a), six samples and six results for mycotoxins (B3d) and 11 samples and 11 results for 'other substances' (B3f).

A detailed presentation on the specific substances identified and the number of non-compliant results reported by each country is given in Appendix A.



### 3.3. Pigs

Council Directive 96/23/EC requires that the minimum number of pigs that have to be controlled each year for all kinds of residues and substances is 0.05% of the pigs slaughtered the previous year. Overall, the minimum requirements for the number of samples to be taken were fulfilled in 2021 (Table 9). Belgium, France, Greece, Hungary, Poland and Portugal did not achieve the minimum sampling frequency for pigs (Table 10).

**Table 9:** Production of pigs and number of targeted samples over 2007–2021

| Year                                    | Production (animals) | Targeted samples | % Animals tested <sup>(a)</sup> | Minimum 96/23/EC |
|---|----------------------|------------------|---------------------------------|------------------|
| 2007 (EU 27)                            | 241,501,638          | 144,378          | 0.06                            |                  |
| 2008 (EU 27)                            | 244,965,996          | 137,281          | 0.06                            |                  |
| 2009 (EU 27)                            | 242,260,526          | 138,137          | 0.06                            |                  |
| 2010 (EU 27)                            | 245,149,546          | 136,792          | 0.06                            |                  |
| 2011 (EU 27)                            | 249,082,904          | 133,255          | 0.05                            |                  |
| 2012 (EU 27)                            | 246,691,569          | 135,745          | 0.05                            |                  |
| 2013 (EU 28)                            | 243,680,241          | 131,565          | 0.05                            |                  |
| 2014 (EU 28)                            | 244,508,972          | 135,129          | 0.06                            |                  |
| 2015 (EU 28)                            | 251,197,203          | 130,012          | 0.05                            | 0.05             |
| 2016 (MS 27) <sup>(b)</sup>             | 229,090,419          | 121,953          | 0.05                            |                  |
| 2016 (EU 28)                            | 252,921,158          |                  |                                 |                  |
| 2017 (EU 28)                            | 252,107,558          | 125,810          | 0.05                            |                  |
| 2018 (EU 28)                            | 260,530,951          | 120,434          | 0.05                            |                  |
| 2018 (EU 27, IS, NO) <sup>(c)</sup>     | 257,079,739          |                  |                                 |                  |
| 2019 (EU 27, IS, NO) <sup>(c)</sup>     | 256,267,449          | 120,944          | 0.05                            |                  |
| 2020 (EU 27, IS, NO) <sup>(d)</sup>     | 245,193,720          | 115,818          | 0.05                            |                  |
| 2021 (EU 27, IS, NO, XI) <sup>(e)</sup> | 246,322,598          | 122,058          | 0.05                            |                  |

(a): in relation to the production of the previous year;

(b): data from France were not available for inclusion in the 2016 results report;

(c): data from Malta were not available for inclusion in the 2019 results report; IS: Iceland; NO: Norway;

(d): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(e): data from the United Kingdom (Northern Ireland) are taken into account for 2021. In accordance with the agreement on the withdrawal of the United Kingdom from the EU, and in particular with the Protocol on Ireland/Northern Ireland, the EU requirements on data sampling are also applicable to Northern Ireland. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

**Table 10:** Production volume and number of targeted samples collected in pigs

| Country  | Production data (animals) <sup>(a)</sup> | Number of samples | % Animal tested |
|----------|--|-------------------|-----------------|
| Austria  | 5,056,515                                | 3,197             | 0.06            |
| Belgium  | 10,749,451                               | 4,824             | 0.04            |
| Bulgaria | 997,370                                  | 564               | 0.06            |



| Country  | Production data (animals) <sup>(a)</sup> | Number of samples | % Animal tested |
|--|--|-------------------|-----------------|
| Croatia  | 1,054,379                                | 623               | 0.06            |
| Cyprus   | 576,712                                  | 340               | 0.06            |
| Czechia  | 2,264,629                                | 1,634             | 0.07            |
| Denmark  | 18,100,000                               | 9,085             | 0.05            |
| Estonia  | 558,717                                  | 509               | 0.09            |
| Finland  | 1,822,609                                | 1,423             | 0.08            |
| France   | 23,401,513                               | 10,228            | 0.04            |
| Germany  | 54,048,312                               | 27,356            | 0.05            |
| Greece   | 1,200,770                                | 463               | 0.04            |
| Hungary  | 4,554,462                                | 1,252             | 0.03            |
| Iceland  | 79,917                                   | 44                | 0.06            |
| Ireland  | 3,464,459                                | 1,985             | 0.06            |
| Italy  | 11,416,346                               | 5,953             | 0.05            |
| Latvia   | 429,201                                  | 204               | 0.05            |
| Lithuania  | 933,802                                  | 479               | 0.05            |
| Luxembourg                                       | 142,218                                  | 67                | 0.05            |
| Malta  | 51,578                                   | 175               | 0.34            |
| Netherlands                                      | 15,686,570                               | 8,174             | 0.05            |
| Norway   | 1,625,295                                | 1,578             | 0.10            |
| Poland   | 20,974,692                               | 8,663             | 0.04            |
| Portugal   | 5,415,006                                | 2,259             | 0.04            |
| Romania  | 3,831,895                                | 2,399             | 0.06            |
| Slovakia   | 676,785                                  | 393               | 0.06            |
| Slovenia   | 245,921                                  | 162               | 0.07            |
| Spain  | 52,982,314                               | 25,687            | 0.05            |
| Sweden   | 2,573,160                                | 1,308             | 0.05            |
| United Kingdom (Northern Ireland) <sup>(b)</sup> | 1,408,000                                | 1,030             | 0.07            |
| <b>Total</b>                                     | <b>246,322,598</b>                       | <b>122,058</b>    | <b>0.05</b>     |

(a): The production data, taken from the 2021 Residue Control Plan, may pertain to the years 2019, 2020 or 2021;

(b): United Kingdom (Northern Ireland) collected more samples and performed more analyses in 2021 than those reported, however due to various constraints, not all data have been reported to EFSA.

The distribution of samples analysed, non-compliant samples and non-compliant results in pigs are presented in Table 11. Of the 122,058 samples analysed in this category, 138 (0.11%) were non-compliant (312 non-compliant results). The non-compliant samples were reported by 16 countries.


**Table 11:** Number of samples analysed, non-compliant samples and non-compliant results in pigs

| Substance Group <sup>(a)</sup> | Samples analysed <sup>(b)</sup> | % Samples analysed | Non-compliant samples <sup>(c)</sup> | % Non-compliant samples <sup>(d)</sup> | Non-compliant results <sup>(e)</sup> |
|--------------------------------|---------------------------------|--------------------|--------------------------------------|--|--------------------------------------|
| A                              | 67,280                          | 55.12              | 27                                   | 0.04                                   | 35                                   |
| A1                             | 6,119                           | 5.01               | 0                                    | -                                      | 0                                    |
| A2                             | 3,531                           | 2.89               | 0                                    | -                                      | 0                                    |
| A3                             | 10,971                          | 8.99               | 20                                   | 0.18                                   | 25                                   |
| A4                             | 5,421                           | 4.44               | 4                                    | 0.07                                   | 7                                    |
| A5                             | 10,498                          | 8.60               | 0                                    | -                                      | 0                                    |
| A6                             | 38,478                          | 31.52              | 3                                    | 0.01                                   | 3                                    |
| B                              | 83,979                          | 68.80              | 115                                  | 0.14                                   | 277                                  |
| B1                             | 38,180                          | 31.28              | 34                                   | 0.09                                   | 40                                   |
| B2                             | 41,130                          | 33.70              | 16                                   | 0.04                                   | 18                                   |
| B2a                            | 10,585                          | 8.67               | 5                                    | 0.05                                   | 5                                    |
| B2b                            | 11,322                          | 9.28               | 7                                    | 0.06                                   | 9                                    |
| B2c                            | 2,603                           | 2.13               | 0                                    | -                                      | 0                                    |
| B2d                            | 6,241                           | 5.11               | 0                                    | -                                      | 0                                    |
| B2e                            | 8,668                           | 7.10               | 1                                    | 0.01                                   | 1                                    |
| B2f                            | 9,432                           | 7.73               | 3                                    | 0.03                                   | 3                                    |
| B3                             | 13,355                          | 10.94              | 65                                   | 0.49                                   | 219                                  |
| B3a                            | 5,858                           | 4.80               | 3                                    | 0.05                                   | 152                                  |
| B3b                            | 3,269                           | 2.68               | 0                                    | -                                      | 0                                    |
| B3c                            | 3,948                           | 3.23               | 58                                   | 1.47                                   | 63                                   |
| B3d                            | 2,544                           | 2.08               | 4                                    | 0.16                                   | 4                                    |
| B3e <sup>(f)</sup>             |                                 |                    |                                      |  |                                      |
| B3f                            | 982                             | 0.80               | 0                                    | -                                      | 0                                    |
| <b>Total</b>                   | <b>122,058</b>                  | <b>100.00</b>      | <b>138</b>                           | <b>0.11</b>                            | <b>312</b>                           |

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

There were no non-compliant samples reported in group A1, A2, A5, B2c, B2d, B3b and B3f.

In the group A3, 20 non-compliant samples and 25 non-compliant results were reported for steroids (A3) for boldenone, nandrolone, normethandrolone, progesterone and progesterone-17-alpha-hydroxy, by six countries. In the group A4, 4 non-compliant samples and 7 results



were reported for zearalanone, zearalenol alpha and beta by three countries. In Group A6, two countries reported 3 non-compliant samples and 3 non-compliant results all for chloramphenicol.

For antibacterials (B1), 13 countries reported a total of 34 non-compliant samples (40 non-compliant results).

In Group B2, there were 5 non-compliant samples (5 non-compliant results) for anthelmintics (B2a), 7 non-compliant sample (9 non-compliant residue) for anticoccidials (B2b), one non-compliant sample and residue was reported for non-steroidal anti-inflammatory drugs (NSAIDs) (B2e) and 3 non-compliant samples (3 non-compliant results) were reported for 'other pharmacologically active substances' (B2f).

In the group B3, there were 58 non-compliant samples (63 non-compliant results) for chemical elements (B3c), reported by five countries. In addition, four non-compliant results (four samples) were reported by three countries for B3d for zearalenone, while three and 152 non-compliant samples and results were reported for organochlorine compounds, including PCBs (B3a).

The specific substances identified and the number of non-compliant results reported by each country, are presented in Appendix A.



### 3.4. Sheep and goats

Council Directive 96/23/EC requires that the minimum number of sheep and goats that have to be controlled each year for all kinds of results and substances is 0.05% of the sheep and goats slaughtered the previous year. The minimum requirements for the number of samples were fulfilled in 2021, overall (Table 12). Hungary, Italy, Latvia and Portugal did not achieve the minimum sampling frequency for sheep and goats (Table 13).

**Table 12:** Production of sheep and goats and number of targeted samples over 2007–2021

| Year                                    | Production (animals) | Targeted samples | % Animals tested <sup>(a)</sup> | Minimum 96/23/EC |
|---|----------------------|------------------|---------------------------------|------------------|
| 2007 (EU 27)                            | 40,935,665           | 26,599           | 0.06                            |                  |
| 2008 (EU 27)                            | 41,435,268           | 24,320           | 0.06                            |                  |
| 2009 (EU 27)                            | 39,584,954           | 26,265           | 0.06                            |                  |
| 2010 (EU 27)                            | 36,121,283           | 23,894           | 0.06                            |                  |
| 2011 (EU 27)                            | 37,217,484           | 23,112           | 0.06                            |                  |
| 2012 (EU 27)                            | 36,558,080           | 23,441           | 0.06                            |                  |
| 2013 (EU 28)                            | 35,831,474           | 22,761           | 0.06                            |                  |
| 2014 (EU 28)                            | 36,188,624           | 26,218           | 0.07                            |                  |
| 2015 (EU 28)                            | 31,554,480           | 21,420           | 0.06                            | 0.05             |
| 2016 (MS 27) <sup>(b)</sup>             | 26,783,426           | 16,846           | 0.06                            |                  |
| 2016 (EU 28)                            | 31,274,756           |                  |                                 |                  |
| 2017 (EU 28)                            | 31,160,255           | 16,348           | 0.05                            |                  |
| 2018 (EU 28)                            | 32,094,485           | 15,927           | 0.05                            |                  |
| 2018 (EU 27, IS, NO) <sup>(c)</sup>     | 34,092,932           |                  |                                 |                  |
| 2019 (EU 27, IS, NO) <sup>(c)</sup>     | 34,546,310           | 18,257           | 0.05                            |                  |
| 2020 (EU 27, IS, NO) <sup>(d)</sup>     | 19,947,609           | 10,465           | 0.05                            |                  |
| 2021 (EU 27, IS, NO, XI) <sup>(e)</sup> | 20,216,377           | 12,285           | 0.06                            |                  |

(a): in relation to the production of the previous year;

(b): data from France were not available for inclusion in the 2016 results report;

(c): data from Malta were not available for inclusion in the 2019 results report; IS: Iceland; NO: Norway;

(d): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(e): data from the United Kingdom (Northern Ireland) are taken into account for 2021. In accordance with the agreement on the withdrawal of the United Kingdom from the EU, and in particular with the Protocol on Ireland/Northern Ireland, the EU requirements on data sampling are also applicable to Northern Ireland. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).


**Table 13:** Production volume and number of targeted samples collected in sheep and goats

| Country  | Production data (animals) <sup>(a)</sup> | Number of samples | % Animal tested |
|--|--|-------------------|-----------------|
| Austria  | 193,017                                  | 369               | 0.19            |
| Belgium  | 138,239                                  | 155               | 0.11            |
| Bulgaria   | 201,059                                  | 91                | 0.05            |
| Croatia  | 88,070                                   | 81                | 0.09            |
| Cyprus   | 288,086                                  | 164               | 0.06            |
| Czechia  | 15,168                                   | 66                | 0.44            |
| Denmark  | 73,941                                   | 43                | 0.06            |
| Estonia  | 9,560                                    | 22                | 0.23            |
| Finland  | 63,164                                   | 48                | 0.08            |
| France   | 4,293,319                                | 1,986             | 0.05            |
| Germany  | 1,205,407                                | 608               | 0.05            |
| Greece   | 455,219                                  | 289               | 0.06            |
| Hungary  | 57,802                                   | 25                | 0.04            |
| Iceland  | 535,049                                  | 274               | 0.05            |
| Ireland  | 3,156,790                                | 1,775             | 0.06            |
| Italy  | 1,204,551                                | 450               | 0.04            |
| Latvia   | 33,834                                   | 12                | 0.04            |
| Lithuania  | 12,168                                   | 16                | 0.13            |
| Luxembourg                                       | 2,584                                    | 11                | 0.43            |
| Malta  | 7,706                                    | 100               | 1.30            |
| Netherlands                                      | 742,305                                  | 416               | 0.06            |
| Norway   | 1,236,466                                | 1,563             | 0.13            |
| Poland   | 69,823                                   | 96                | 0.14            |
| Portugal   | 820,600                                  | 360               | 0.04            |
| Romania  | 580,465                                  | 350               | 0.06            |
| Slovakia   | 70,831                                   | 123               | 0.17            |
| Slovenia   | 10,649                                   | 45                | 0.42            |
| Spain  | 3,497,555                                | 1,805             | 0.05            |
| Sweden   | 251,950                                  | 148               | 0.06            |
| United Kingdom (Northern Ireland) <sup>(b)</sup> | 901,000                                  | 794               | 0.09            |
| <b>Total</b>                                     | <b>20,216,377</b>                        | <b>12,285</b>     | <b>0.06</b>     |

(a): The production data, taken from the 2021 Residue Control Plan, may pertain to the years 2019, 2020 or 2021;

(b): United Kingdom (Northern Ireland) collected more samples and performed more analyses in 2021 than those reported, however due to various constraints, not all data have been reported to EFSA.

The distribution of samples analysed, non-compliant samples and non-compliant results in sheep and goats is presented in Table 14. Of the 12,285 samples analysed in this category, 82 (0.67%) were non-compliant (86 non-compliant results). The non-compliant samples were reported by 13 countries.




**Table 14:** Number of samples analysed, non-compliant samples and non-compliant results in sheep and goats

| Substance Group <sup>(a)</sup> | Samples analysed <sup>(b)</sup> | % Samples analysed | Non-compliant samples <sup>(c)</sup> | % Non-compliant samples <sup>(d)</sup> | Non-compliant results <sup>(e)</sup> |
|--------------------------------|---------------------------------|--------------------|--------------------------------------|--|--------------------------------------|
| A                              | 3,544                           | 28.85              | 13                                   | 0.37                                   | 13                                   |
| A1                             | 335                             | 2.73               | 0                                    | -                                      | 0                                    |
| A2                             | 197                             | 1.60               | 2                                    | 1.02                                   | 2                                    |
| A3                             | 685                             | 5.58               | 10                                   | 1.46                                   | 10                                   |
| A4                             | 351                             | 2.86               | 0                                    | -                                      | 0                                    |
| A5                             | 507                             | 4.13               | 0                                    | -                                      | 0                                    |
| A6                             | 1,946                           | 15.84              | 1                                    | 0.05                                   | 1                                    |
| B                              | 10,347                          | 84.22              | 69                                   | 0.67                                   | 73                                   |
| B1                             | 4,663                           | 37.96              | 23                                   | 0.49                                   | 24                                   |
| B2                             | 4,219                           | 34.34              | 7                                    | 0.17                                   | 7                                    |
| B2a                            | 2,159                           | 17.57              | 5                                    | 0.23                                   | 5                                    |
| B2b                            | 667                             | 5.43               | 1                                    | 0.15                                   | 1                                    |
| B2c                            | 520                             | 4.23               | 0                                    | -                                      | 0                                    |
| B2d                            | 307                             | 2.50               | 0                                    | -                                      | 0                                    |
| B2e                            | 478                             | 3.89               | 0                                    | -                                      | 0                                    |
| B2f                            | 838                             | 6.82               | 1                                    | 0.12                                   | 1                                    |
| B3                             | 2,223                           | 18.10              | 39                                   | 1.75                                   | 42                                   |
| B3a                            | 1,125                           | 9.16               | 2                                    | 0.18                                   | 3                                    |
| B3b                            | 669                             | 5.45               | 0                                    | -                                      | 0                                    |
| B3c                            | 577                             | 4.70               | 34                                   | 5.89                                   | 36                                   |
| B3d                            | 214                             | 1.74               | 0                                    | -                                      | 0                                    |
| B3e <sup>(f)</sup>             |                                 |                    |                                      |  |                                      |
| B3f                            | 272                             | 2.21               | 3                                    | 1.10                                   | 3                                    |
| <b>Total</b>                   | <b>12,285</b>                   | <b>100.00</b>      | <b>82</b>                            | <b>0.67</b>                            | <b>86</b>                            |

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

There were no non-compliant samples reported in group A1, A4, A5, B2c-e, B3b, and B3d.

In group A, two non-compliant samples and results were reported against antithyroid agents (A2) for thiouracil, by one country. For steroids (A3), 10 non-compliant samples and 10 non-compliant results were reported (boldenone/boldenone-alpha (n = 1), epinandrolone (n =8)),



by two countries. In Group A6, one country reported one non-compliant sample and result for semicarbazide.

For antibacterials (B1), seven countries reported a total of 23 non-compliant samples and 24 non-compliant results in total. The substance with the highest number of non-compliant results was 'sum of oxytetracycline and its 4-epimer' (n = 6).

In the group B2, five non-compliant samples and five results were reported for anthelmintics (B2a), by one country, for anticoccidials (B2b) one non-compliant sample and result was reported by one country.

In the group B3, 34 non-compliant samples and 36 non-compliant results were reported, for heavy metals (B3c). For organochlorine compounds, including PCBs (B3a), there were two non-compliant samples and three non-compliant results and for 'other substances' (B3f) were reported three non-compliant samples and three non-compliant results.

A detailed presentation on the specific substances identified and the number of non-compliant results reported by each country is given in Appendix A.



### 3.5. Horses

For horses, Council Directive 96/23/EC requires that the number of samples is to be determined by each country in relation to the identified problem. The number of targeted samples taken overall in 2021, was lower than last year, while the percentage of animal tested was higher (Table 15). The percentage of targeted samples taken in each country for the reported horse production is presented in Table 16.

**Table 15:** Production of horses and number of targeted samples over 2007–2021

| Year                                    | Production (animals) | Targeted samples | % Animals tested <sup>(a)</sup> | Minimum 96/23/EC |
|---|----------------------|------------------|---------------------------------|------------------|
| 2007 (EU 27)                            | 312,969              | 3,115            | 1.16                            |                  |
| 2008 (EU 27)                            | 386,302              | 2,545            | 0.81                            |                  |
| 2009 (EU 27)                            | 264,538              | 3,000            | 0.78                            |                  |
| 2010 (EU 27)                            | 258,362              | 3,094            | 1.17                            |                  |
| 2011 (EU 27)                            | 249,403              | 3,309            | 1.28                            |                  |
| 2012 (EU 27)                            | 272,286              | 3,850            | 1.54                            |                  |
| 2013 (EU 28)                            | 284,035              | 4,453            | 1.63                            |                  |
| 2014 (EU 28)                            | 215,629              | 4,112            | 1.45                            |                  |
| 2015 (EU 28)                            | 190,540              | 3,749            | 1.74                            | Not specified    |
| 2016 (MS 27) <sup>(b)</sup>             | 177,309              | 3,320            | 1.90                            |                  |
| 2016 (EU 28)                            | 191,678              |                  |                                 |                  |
| 2017 (EU 28)                            | 186,330              | 3,232            | 1.69                            |                  |
| 2018 (EU 28)                            | 174,721              | 3,137            | 1.68                            |                  |
| 2018 (EU 27, IS, NO) <sup>(c)</sup>     | 182,545              |                  |                                 |                  |
| 2019 (EU 27, IS, NO) <sup>(c)</sup>     | 189,134              | 3,248            | 1.78                            |                  |
| 2020 (EU 27, IS, NO) <sup>(d)</sup>     | 186,504              | 2,640            | 1.42                            |                  |
| 2021 (EU 27, IS, NO, XI) <sup>(e)</sup> | 167,951              | 2,490            | 1.48                            |                  |

(a): in relation to the production of the previous year;

(b): data from France were not available for inclusion in the 2016 results report;

(c): data from Malta were not available for inclusion in the 2019 results report; IS: Iceland; NO: Norway;

(d): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(e): data from the United Kingdom (Northern Ireland) are taken into account for 2021. In accordance with the agreement on the withdrawal of the United Kingdom from the EU, and in particular with the Protocol on Ireland/Northern Ireland, the EU requirements on data sampling are also applicable to Northern Ireland. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).


**Table 16:** Production volume and number of targeted samples collected in horses

| Country  | Production data (animals) <sup>(a)</sup> | Number of samples | % Animal tested |
|--|--|-------------------|-----------------|
| Austria  | 426                                      | 55                | 12.91           |
| Belgium  | 5,584                                    | 359               | 6.43            |
| Bulgaria   | 344                                      | 36                | 10.47           |
| Croatia  | 269                                      | 10                | 3.72            |
| Cyprus   | 0  |                   |                 |
| Czechia  | 89                                       | 29                | 32.58           |
| Denmark  | 869                                      | 59                | 6.79            |
| Estonia  | 10                                       | 1                 | 10              |
| Finland  | 1,105                                    | 35                | 3.17            |
| France   | 7,481                                    | 346               | 4.63            |
| Germany  | 4,369                                    | 83                | 1.9             |
| Greece   | 0  |                   |                 |
| Hungary  | 246                                      | 22                | 8.94            |
| Iceland  | 9,212                                    | 40                | 0.43            |
| Ireland  | 2,737                                    | 142               | 5.19            |
| Italy  | 37,313                                   | 312               | 0.84            |
| Latvia   | 73                                       | 9                 | 12.33           |
| Lithuania  | 652                                      | 15                | 2.3             |
| Luxembourg                                       | 0  |                   |                 |
| Malta  | 0  | 1                 |                 |
| Netherlands                                      | 1,959                                    | 51                | 2.6             |
| Norway   | 108                                      | 73                | 67.59           |
| Poland   | 21,638                                   | 277               | 1.28            |
| Portugal   | 574                                      | 10                | 1.74            |
| Romania  | 32,797                                   | 259               | 0.79            |
| Slovakia   | 0  |                   |                 |
| Slovenia   | 1,078                                    | 43                | 3.99            |
| Spain  | 37,178                                   | 102               | 0.27            |
| Sweden   | 1,840                                    | 121               | 6.58            |
| United Kingdom (Northern Ireland) <sup>(b)</sup> | 0  |                   |                 |
| <b>Total</b>                                     | <b>167,951</b>                           | <b>2,490</b>      | <b>1.48</b>     |

(a): The production data, taken from the 2021 Residue Control Plan, may pertain to the years 2019, 2020 or 2021;

(b): United Kingdom (Northern Ireland) collected more samples and performed more analyses in 2021 than those reported, however due to various constraints, not all data have been reported to EFSA.

The distribution of samples analysed, non-compliant samples and non-compliant results in horses is presented in Table 17. Of the 2,490 samples analysed in this category, 19 samples (0.76%) were non-compliant (27 non-compliant results). The non-compliant samples were reported by eight countries.


**Table 17:** Number of samples analysed, non-compliant samples and non-compliant results in horses

| Substance Group <sup>(a)</sup> | Samples analysed <sup>(b)</sup> | % Samples analysed | Non-compliant samples <sup>(c)</sup> | % Non-compliant samples <sup>(d)</sup> | Non-compliant results <sup>(e)</sup> |
|--------------------------------|---------------------------------|--------------------|--------------------------------------|--|--------------------------------------|
| A                              | 852                             | 34.22              | 1                                    | 0.12                                   | 1                                    |
| A1                             | 103                             | 4.14               | 0                                    | -                                      | 0                                    |
| A2                             | 53                              | 2.13               | 0                                    | -                                      | 0                                    |
| A3                             | 187                             | 7.51               | 0                                    | -                                      | 0                                    |
| A4                             | 131                             | 5.26               | 0                                    | -                                      | 0                                    |
| A5                             | 191                             | 7.67               | 0                                    | -                                      | 0                                    |
| A6                             | 359                             | 14.42              | 1                                    | 0.28                                   | 1                                    |
| B                              | 2,027                           | 81.41              | 18                                   | 0.89                                   | 26                                   |
| B1                             | 413                             | 16.59              | 0                                    | -                                      | 0                                    |
| B2                             | 1,100                           | 44.18              | 3                                    | 0.27                                   | 5                                    |
| B2a                            | 193                             | 7.75               | 0                                    | -                                      | 0                                    |
| B2b                            | 108                             | 4.34               | 0                                    | -                                      | 0                                    |
| B2c                            | 119                             | 4.78               | 0                                    | -                                      | 0                                    |
| B2d                            | 164                             | 6.59               | 0                                    | -                                      | 0                                    |
| B2e                            | 401                             | 16.10              | 3                                    | 0.75                                   | 5                                    |
| B2f                            | 239                             | 9.60               | 0                                    | -                                      | 0                                    |
| B3                             | 647                             | 25.98              | 15                                   | 2.32                                   | 21                                   |
| B3a                            | 170                             | 6.83               | 0                                    | -                                      | 0                                    |
| B3b                            | 93                              | 3.73               | 0                                    | -                                      | 0                                    |
| B3c                            | 360                             | 14.46              | 15                                   | 4.17                                   | 21                                   |
| B3d                            | 79                              | 3.17               | 0                                    | -                                      | 0                                    |
| B3e <sup>(f)</sup>             |                                 |                    |                                      |  |                                      |
| B3f                            | 51                              | 2.05               | 0                                    | -                                      | 0                                    |
| <b>Total</b>                   | <b>2,490</b>                    | <b>100.00</b>      | <b>19</b>                            | <b>0.76</b>                            | <b>27</b>                            |

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

In group A, there was one non-compliant sample and result for chloramphenicol (A6).

In the group B2, three non-compliant samples and five non-compliant results were reported for NSAIDs (B2e) by three countries.



In the group B3, 15 non-compliant samples and 21 non-compliant results were reported for the chemical elements (including metals) (B3c) by five countries.

A detailed presentation on the specific substances identified and the number of non-compliant results reported by each country is given in Appendix A.



### 3.6. Poultry

According to Directive 96/23/EC, the minimum number of samples for each category of poultry must be one per 200 t of annual production, with a minimum of 100 samples for each group of substances where annual production in the category concerned is over 5,000 t. Overall, the minimum requirement of one sample analysed per 200 t production was not achieved in 2021, but it was very close to the target minimum sampling frequency (Table 18).

The percentage of targeted samples taken in each country for the reported production of poultry is given in Table 19. Belgium, Bulgaria, Finland, France, Greece, Hungary, Lithuania, Spain and Sweden did not achieve this requirement.

**Table 18:** Production of poultry and number of targeted samples over 2007–2021

| Year                                    | Production (t) | Targeted samples | % Samples tested/ 200 t <sup>(a)</sup> | Minimum 96/23/EC |
|---|----------------|------------------|--|------------------|
| 2007 (EU 27)                            | 10,912,500     | 62,101           | 1.15                                   |                  |
| 2008 (EU 27)                            | 12,421,566     | 60,406           | 1.11                                   |                  |
| 2009 (EU 27)                            | 11,383,434     | 61,989           | 1.00                                   |                  |
| 2010 (EU 27)                            | 11,804,262     | 61,259           | 1.08                                   |                  |
| 2011 (EU 27)                            | 12,417,108     | 65,942           | 1.12                                   |                  |
| 2012 (EU 27)                            | 12,845,333     | 68,770           | 1.11                                   |                  |
| 2013 (EU 28)                            | 12,930,555     | 71,186           | 1.11                                   |                  |
| 2014 (EU 28)                            | 12,909,837     | 72,486           | 1.12                                   |                  |
| 2015 (EU 28)                            | 13,394,013     | 71,223           | 1.10                                   | 1/200 t          |
| 2016 (MS 27) <sup>(b)</sup>             | 12,239,495     | 64,501           | 1.10                                   |                  |
| 2016 (EU 28)                            | 13,906,572     |                  |  |                  |
| 2017 (EU 28)                            | 14,320,889     | 67,630           | 0.97                                   |                  |
| 2018 (EU 28)                            | 14,683,847     | 69,096           | 0.96                                   |                  |
| 2018 (EU 27, IS, NO) <sup>(c)</sup>     | 14,789,918     |                  |  |                  |
| 2019 (EU 27, IS, NO) <sup>(c)</sup>     | 15,186,857     | 73,088           | 0.99                                   |                  |
| 2020 (EU 27, IS, NO) <sup>(d)</sup>     | 13,266,022     | 61,848           | 0.93                                   |                  |
| 2021 (EU 27, IS, NO, XI) <sup>(e)</sup> | 13,641,992     | 67,118           | 0.98                                   |                  |

(a): in relation to the production of the previous year;

(b): data from France were not available for inclusion in the 2016 results report;

(c): data from Malta were not available for inclusion in the 2019 results report; IS: Iceland; NO: Norway;

(d): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(e): data from the United Kingdom (Northern Ireland) are taken into account for 2021. In accordance with the agreement on the withdrawal of the United Kingdom from the EU, and in particular with the Protocol on Ireland/Northern Ireland, the EU requirements on data sampling are also applicable to Northern Ireland. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

**Table 19:** Production volume and number of targeted samples collected in poultry

| Country  | Production data (t) <sup>(a)</sup> | Number of samples | Samples tested/200 t |
|--|------------------------------------|-------------------|----------------------|
| Austria  | 143,916                            | 924               | 1.28                 |
| Belgium  | 385,796                            | 1,626             | 0.84                 |
| Bulgaria   | 104,515                            | 494               | 0.95                 |
| Croatia  | 56,809                             | 363               | 1.28                 |
| Cyprus   | 21,839                             | 265               | 2.43                 |
| Czechia  | 164,186                            | 947               | 1.15                 |
| Denmark  | 160,575                            | 808               | 1.01                 |
| Estonia  | 20,180                             | 200               | 1.98                 |
| Finland  | 134,000                            | 627               | 0.94                 |
| France   | 1,658,697                          | 8,072             | 0.97                 |
| Germany  | 1,584,618                          | 9,060             | 1.14                 |
| Greece   | 216,252                            | 651               | 0.60                 |
| Hungary  | 634,530                            | 2,216             | 0.70                 |
| Iceland  | 9,082                              | 238               | 5.24                 |
| Ireland  | 201,038                            | 1,326             | 1.32                 |
| Italy  | 1,324,000                          | 6,622             | 1.00                 |
| Latvia   | 36,000                             | 185               | 1.03                 |
| Lithuania <sup>(b)</sup>                         | 84,943                             | 406               | 0.96                 |
| Luxembourg                                       | 360                                | 3                 | 1.67                 |
| Malta  | 4,150                              | 188               | 9.06                 |
| Netherlands                                      | 1,046,447                          | 5,282             | 1.01                 |
| Norway   | 117,296                            | 1,000             | 1.71                 |
| Poland   | 2,410,221                          | 9,874             | 0.82                 |
| Portugal   | 346,220                            | 1,738             | 1.00                 |
| Romania  | 518,435                            | 3,336             | 1.29                 |
| Slovakia   | 104,162                            | 635               | 1.22                 |
| Slovenia   | 63,235                             | 340               | 1.08                 |
| Spain  | 1,705,190                          | 7,434             | 0.87                 |
| Sweden   | 170,650                            | 810               | 0.95                 |
| United Kingdom (Northern Ireland) <sup>(c)</sup> | 214,650                            | 1,448             | 1.35                 |
| <b>Total</b>                                     | <b>13,641,992</b>                  | <b>67,118</b>     | <b>0.98</b>          |

(a): The production data, taken from the 2021 Residue Control Plan, may pertain to the years 2019, 2020 or 2021;

(b): Lithuania collected more samples and performed more analyses for poultry than those reported to EFSA, however, due to coding issues, those additional samples are not included in this report;

(c): United Kingdom (Northern Ireland) collected more samples and performed more analyses in 2021 than those reported, however due to various constraints, not all data have been reported to EFSA.

The distribution of samples analysed, non-compliant samples and non-compliant results in poultry are presented in Table 20. Of the 67,118 samples analysed in this category, 50 (0.07%)





were non-compliant (54 non-compliant results). The non-compliant samples were reported by 13 countries.

**Table 20:** Number of samples analysed, non-compliant samples and non-compliant results in poultry

| Substance Group <sup>(a)</sup> | Samples analysed <sup>(b)</sup> | % Samples analysed | Non-compliant samples <sup>(c)</sup> | % Non-compliant samples <sup>(d)</sup> | Non-compliant results <sup>(e)</sup> |
|--------------------------------|---------------------------------|--------------------|--------------------------------------|--|--------------------------------------|
| A                              | 38,991                          | 58.09              | 14                                   | 0.04                                   | 14                                   |
| A1                             | 3,184                           | 4.74               | 0                                    | -                                      | 0                                    |
| A2                             | 1,159                           | 1.73               | 0                                    | -                                      | 0                                    |
| A3                             | 5,697                           | 8.49               | 6                                    | 0.11                                   | 6                                    |
| A4                             | 3,164                           | 4.71               | 0                                    | -                                      | 0                                    |
| A5                             | 5,337                           | 7.95               | 0                                    | -                                      | 0                                    |
| A6                             | 23,585                          | 35.14              | 8                                    | 0.03                                   | 8                                    |
| B                              | 40,842                          | 60.85              | 36                                   | 0.09                                   | 40                                   |
| B1                             | 17,240                          | 25.69              | 8                                    | 0.05                                   | 8                                    |
| B2                             | 20,325                          | 30.28              | 13                                   | 0.06                                   | 17                                   |
| B2a                            | 4,248                           | 6.33               | 0                                    | -                                      | 0                                    |
| B2b                            | 12,736                          | 18.98              | 9                                    | 0.07                                   | 12                                   |
| B2c                            | 2,396                           | 3.57               | 0                                    | -                                      | 0                                    |
| B2d                            | 87                              | 0.13               | 0                                    | -                                      | 0                                    |
| B2e                            | 2,260                           | 3.37               | 4                                    | 0.18                                   | 5                                    |
| B2f                            | 3,015                           | 4.49               | 0                                    | -                                      | 0                                    |
| B3                             | 7,693                           | 11.46              | 15                                   | 0.19                                   | 15                                   |
| B3a                            | 3,843                           | 5.73               | 0                                    | -                                      | 0                                    |
| B3b                            | 1,944                           | 2.90               | 1                                    | 0.05                                   | 1                                    |
| B3c                            | 1,565                           | 2.33               | 14                                   | 0.89                                   | 14                                   |
| B3d                            | 1,464                           | 2.18               | 0                                    | -                                      | 0                                    |
| B3e <sup>(f)</sup>             |                                 |                    |                                      |  |                                      |
| B3f                            | 1,226                           | 1.83               | 0                                    | -                                      | 0                                    |
| <b>Total</b>                   | <b>67,118</b>                   | <b>100.00</b>      | <b>50</b>                            | <b>0.07</b>                            | <b>54</b>                            |

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

In group A, there were six non-compliant samples and results for steroids (A3) and eight non-compliant samples and results, for group A6 eight non-compliant samples and eight non-



compliant results (AMOZ (5-methylmorpholino-3-amino-2-oxazolidone), chloramphenicol, dimetridazole and furaltadone) were reported by four countries.

For antibacterials (B1), six countries reported a total of 8 non-compliant samples and results

In the group B2, nine non-compliant samples and 12 non-compliant results were reported for anticoccidials (B2b), and four non-compliant samples and five non-compliant results were reported for NSAIDs (B2e).

In the group B3, one non-compliant sample and residue was reported for organophosphorus compounds (B3b); and 14 non-compliant samples and results were reported under chemical elements (B3c) (copper, cadmium and lead). The percentage of non-compliant samples in 2021 for group B3c (0.89) was much higher compared to the previous year 2020 (0.18).

The specific substances identified and the number of non-compliant results reported by each country are presented in Appendix A.



### 3.7. Aquaculture

Directive 96/23/EC specifies that the minimum number of samples to be collected each year must be at least one per 100 tonnes of annual production. Overall, the minimum requirements for the number of samples to be taken were not fulfilled in 2021, being the percentage of sample tested lower than 50% of the overall target minimum sampling frequency (Table 21). The production volume and the number of samples analysed in each country, are given in Table 22. Bulgaria, Finland, France, Greece, Hungary, Ireland, Norway, Spain and Sweden did not analyse at least one sample/100 tonnes (t) of production. While Denmark and Italy were really close to reach the minimum sampling frequency.

**Table 21:** Production of aquaculture and number of targeted samples over 2007–2021

| Year                                    | Production (t) | Targeted samples | % Samples tested/<br>100 t <sup>(a)</sup> | Minimum<br>96/23/EC |
|---|----------------|------------------|---|---------------------|
| 2007 (EU 27)                            | 602,555        | 9,257            | 1.50                                      |                     |
| 2008 (EU 27)                            | 644,875        | 8,751            | 1.40                                      |                     |
| 2009 (EU 27)                            | 627,109        | 8,606            | 1.30                                      |                     |
| 2010 (EU 27)                            | 622,032        | 8,668            | 1.40                                      |                     |
| 2011 (EU 27)                            | 655,772        | 8,241            | 1.30                                      |                     |
| 2012 (EU 27)                            | 631,117        | 8,264            | 1.30                                      |                     |
| 2013 (EU 28)                            | 614,191        | 7,971            | 1.30                                      |                     |
| 2014 (EU 28)                            | 608,658        | 7,236            | 1.20                                      |                     |
| 2015 (EU 28)                            | 633,541        | 7,246            | 1.20                                      | 1/100 t             |
| 2016 (MS 27) <sup>(b)</sup>             | 603,868        | 6,735            | 1.10                                      |                     |
| 2016 (EU 28)                            | 645,068        |                  |   |                     |
| 2017 (EU 28)                            | 668,766        | 6,500            | 1.00                                      |                     |
| 2018 (EU 28)                            | 692,821        | 6,482            | 0.97                                      |                     |
| 2018 (EU 27, IS) <sup>(c)</sup>         | 709,535        |                  |   |                     |
| 2019 (EU 27, IS) <sup>(c)</sup>         | 713,932        | 6,759            | 0.95                                      |                     |
| 2020 (EU 27, IS, NO) <sup>(d)</sup>     | 1,868,224      | 8,177            | 0.44                                      |                     |
| 2021 (EU 27, IS, NO, XI) <sup>(e)</sup> | 2,011,995      | 8,394            | 0.42                                      |                     |

(a): in relation to the production of the previous year;

(b): data from France were not available for inclusion in the 2016 results report;

(c): data from Malta were not available for inclusion in the 2019 results report; IS: Iceland; NO: Norway;

(d): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(e): data from the United Kingdom (Northern Ireland) are taken into account for 2021. In accordance with the agreement on the withdrawal of the United Kingdom from the EU, and in particular with the Protocol on Ireland/Northern Ireland, the EU requirements on data sampling are also applicable to Northern Ireland. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).


**Table 22:** Production volume and number of targeted samples collected in aquaculture

| Country  | Production data (t) <sup>(a)</sup> | Number of samples | Samples tested/100 t |
|--|------------------------------------|-------------------|----------------------|
| Austria  | 4,250                              | 207               | 4.87                 |
| Belgium  | 2,000                              | 102               | 5.10                 |
| Bulgaria   | 8,650                              | 79                | 0.91                 |
| Croatia  | 16,506                             | 182               | 1.10                 |
| Cyprus   | 7,314                              | 90                | 1.23                 |
| Czechia  | 20,986                             | 261               | 1.24                 |
| Denmark  | 36,448                             | 356               | 0.98                 |
| Estonia  | 1,062                              | 23                | 2.17                 |
| Finland  | 15,296                             | 136               | 0.89                 |
| France   | 45,137                             | 377               | 0.84                 |
| Germany  | 18,662                             | 303               | 1.62                 |
| Greece   | 104,055                            | 577               | 0.55                 |
| Hungary  | 20,643                             | 94                | 0.46                 |
| Iceland  | 40,595                             | 412               | 1.01                 |
| Ireland  | 11,941                             | 108               | 0.90                 |
| Italy  | 57,200                             | 567               | 0.99                 |
| Latvia   | 602                                | 7                 | 1.16                 |
| Lithuania  | 3,771                              | 51                | 1.35                 |
| Luxembourg                                       | 0                                  |                   |                      |
| Malta  | 1,853                              | 21                | 1.13                 |
| Netherlands                                      | 5,582                              | 60                | 1.07                 |
| Norway   | 1,443,439                          | 2,827             | 0.20                 |
| Poland   | 40,250                             | 417               | 1.04                 |
| Portugal   | 13,992                             | 142               | 1.01                 |
| Romania  | 6,776                              | 121               | 1.79                 |
| Slovakia   | 2,325                              | 148               | 6.37                 |
| Slovenia   | 2,138                              | 31                | 1.45                 |
| Spain  | 69,810                             | 606               | 0.87                 |
| Sweden   | 9,602                              | 75                | 0.78                 |
| United Kingdom (Northern Ireland) <sup>(b)</sup> | 1,110                              | 14                | 1.26                 |
| <b>Total</b>                                     | <b>2,011,995</b>                   | <b>8,394</b>      | <b>0.42</b>          |

(a): The production data, taken from the 2021 Residue Control Plan, may pertain to the years 2019, 2020 or 2021;

(b): United Kingdom (Northern Ireland) collected more samples and performed more analyses in 2021 than those reported, however due to various constraints, not all data have been reported to EFSA.

The distribution of samples analysed, non-compliant samples and non-compliant results in aquaculture are presented in Table 23. Of the 8,394 samples analysed for aquaculture, 10 samples (0.12%) and 12 results were non-compliant. The non-compliant samples were reported by three countries.

**Table 23:** Number of samples analysed, non-compliant samples and non-compliant results in aquaculture

| Substance Group <sup>(a)</sup> | Samples analysed <sup>(b)</sup> | % Samples analysed | Non-compliant samples <sup>(c)</sup> | % Non-compliant samples | Non-compliant results <sup>(d)</sup> |
|--------------------------------|---------------------------------|--------------------|--------------------------------------|-------------------------|--------------------------------------|
| A                              | 2,941                           | 35.04              | 0                                    | -                       | 0                                    |
| A1                             | 368                             | 4.38               | 0                                    | -                       | 0                                    |
| A2                             | 2                               | 0.02               | 0                                    | -                       | 0                                    |
| A3                             | 727                             | 8.66               | 0                                    | -                       | 0                                    |
| A4                             | 313                             | 3.73               | 0                                    | -                       | 0                                    |
| A5                             | 137                             | 1.63               | 0                                    | -                       | 0                                    |
| A6                             | 2,060                           | 24.54              | 0                                    | -                       | 0                                    |
| B                              | 6,295                           | 74.99              | 10                                   | 0.16                    | 12                                   |
| B1                             | 1,627                           | 19.38              | 0                                    | -                       | 0                                    |
| B2                             | 1,515                           | 18.05              | 0                                    | -                       | 0                                    |
| B2a                            | 737                             | 8.78               | 0                                    | -                       | 0                                    |
| B2b                            | 239                             | 2.85               | 0                                    | -                       | 0                                    |
| B2c                            | 409                             | 4.87               | 0                                    | -                       | 0                                    |
| B2d                            | 40                              | 0.48               | 0                                    | -                       | 0                                    |
| B2e                            | 7                               | 0.08               | 0                                    | -                       | 0                                    |
| B2f                            | 396                             | 4.72               | 0                                    | -                       | 0                                    |
| B3                             | 3,802                           | 45.29              | 10                                   | 0.26                    | 12                                   |
| B3a                            | 905                             | 10.78              | 1                                    | 0.11                    | 1                                    |
| B3b                            | 332                             | 3.96               | 1                                    | 0.30                    | 1                                    |
| B3c                            | 574                             | 6.84               | 2                                    | 0.35                    | 2                                    |
| B3d                            | 346                             | 4.12               | 0                                    | -                       | 0                                    |
| B3e                            | 1,772                           | 21.11              | 7                                    | 0.40                    | 8                                    |
| B3f                            | 585                             | 6.97               | 0                                    | -                       | 0                                    |
| <b>Total</b>                   | <b>8,394</b>                    | <b>100.00</b>      | <b>10</b>                            | <b>0.12</b>             | <b>12</b>                            |

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

For group A, B1 and B2, no non-compliant samples and results were reported.

In the group B3, seven non-compliant samples and 8 non-compliant results, were reported for dyes (B3e) ('sum of crystal violet and leucocrystal violet' and 'sum of malachite green and leucomalachite green'), by two countries. One non-compliant sample and residue was reported for organochlorine compounds (B3a) and organophosphorus compounds (B3b), and two non-compliant samples and results were reported under chemical elements (B3c).



The specific substances identified and the number of non-compliant results reported by each country are presented in Appendix A.

### 3.8. Milk

Commission Decision 97/747/EC lays down that the annual number of samples taken should be one per 15,000 tonnes of annual milk production, with a minimum of 300 samples. Overall, the minimum requirements for the number of samples to be taken, were fulfilled in 2021 (Table 24) and by the majority of countries. France did not achieve the minimum sampling frequency, while Hungary and Portugal did not reach the minimum number of 300 samples.

The production volume and the number of samples analysed in each country are given in Table 25.

**Table 24:** Production of milk and number of targeted samples over 2007–2021

| Year                                    | Production (t) | Targeted samples | % Samples tested/<br>15,000 t <sup>(a)</sup> | Minimum<br>96/23/EC |
|---|----------------|------------------|--|---------------------|
| 2007 (EU 27)                            | 142,461,705    | 51,571           | 5.30   |                     |
| 2008 (EU 27)                            | 145,006,173    | 53,333           | 5.60   |                     |
| 2009 (EU 27)                            | 141,669,974    | 54,063           | 5.60   |                     |
| 2010 (EU 27)                            | 144,705,166    | 30,372           | 3.20   |                     |
| 2011 (EU 27)                            | 143,022,677    | 29,592           | 3.10   |                     |
| 2012 (EU 27)                            | 149,086,701    | 30,748           | 3.20   |                     |
| 2013 (EU 28)                            | 146,446,811    | 29,788           | 3.00   |                     |
| 2014 (EU 28)                            | 147,794,431    | 29,533           | 3.00   |                     |
| 2015 (EU 28)                            | 150,637,679    | 26,705           | 2.70   | 1/15,000 t          |
| 2016 (MS 27) <sup>(b)</sup>             | 121,134,877    | 23,934           | 2.90   |                     |
| 2016 (EU 28)                            | 145,701,788    |                  |  |                     |
| 2017 (EU 28)                            | 154,860,990    | 19,451           | 2.00   |                     |
| 2018 (EU 28)                            | 156,201,391    | 19,059           | 1.80   |                     |
| 2018 (EU 27, IS, NO) <sup>(c)</sup>     | 157,828,758    |                  |  |                     |
| 2019 (EU 27, IS, NO) <sup>(c)</sup>     | 162,530,463    | 19,107           | 1.80   |                     |
| 2020 (EU 27, IS, NO) <sup>(d)</sup>     | 147,037,054    | 18,869           | 1.92   |                     |
| 2021 (EU 27, IS, NO, XI) <sup>(e)</sup> | 150,026,157    | 20,407           | 2.04   |                     |

(a): in relation to the production of the previous year;

(b): data from France were not available for inclusion in the 2016 results report;

(c): data from Malta were not available for inclusion in the 2019 results report; IS: Iceland; NO: Norway;

(d): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(e): data from the United Kingdom (Northern Ireland) are taken into account for 2021. In accordance with the agreement on the withdrawal of the United Kingdom from the EU, and in particular with the Protocol on Ireland/Northern Ireland, the EU requirements on data sampling are also applicable to Northern Ireland. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

**Table 25:** Production volume and number of targeted samples collected in milk

| Country  | Production data (t) <sup>(a)</sup> | Number of samples | Samples tested/15,000 t |
|--|------------------------------------|-------------------|-------------------------|
| Austria  | 3,411,348                          | 341               | 1.50                    |
| Belgium  | 4,190,000                          | 467               | 1.67                    |
| Bulgaria   | 678,253                            | 350               | 7.74                    |
| Croatia  | 581,800                            | 362               | 9.33                    |
| Cyprus   | 238,761                            | 491               | 30.85                   |
| Czechia  | 3,180,466                          | 330               | 1.56                    |
| Denmark  | 5,463,818                          | 366               | 1.00                    |
| Estonia  | 821,467                            | 418               | 7.63                    |
| Finland  | 2,293,330                          | 311               | 2.03                    |
| France   | 24,625,396                         | 1,471             | 0.90                    |
| Germany  | 31,978,956                         | 2,125             | 1.00                    |
| Greece   | 1,990,244                          | 598               | 4.51                    |
| Hungary  | 1,238,455                          | 270               | 3.27                    |
| Iceland  | 155,716                            | 305               | 29.38                   |
| Ireland  | 8,117,468                          | 1,337             | 2.47                    |
| Italy  | 12,092,861                         | 1,086             | 1.35                    |
| Latvia   | 98,100                             | 583               | 89.14                   |
| Lithuania  | 1,551,145                          | 300               | 2.90                    |
| Luxembourg                                       | 434,000                            | 320               | 11.06                   |
| Malta  | 45,013                             | 368               | 122.63                  |
| Netherlands                                      | 14,182,865                         | 1,349             | 1.43                    |
| Norway   | 1,482,455                          | 649               | 6.57                    |
| Poland   | 14,399,902                         | 2,126             | 2.21                    |
| Portugal   | 2,072,153                          | 159               | 1.15                    |
| Romania  | 981,338                            | 517               | 7.90                    |
| Slovakia   | 821,640                            | 501               | 9.15                    |
| Slovenia   | 484,506                            | 355               | 10.99                   |
| Spain  | 7,234,936                          | 815               | 1.69                    |
| Sweden   | 2,704,390                          | 331               | 1.84                    |
| United Kingdom (Northern Ireland) <sup>(b)</sup> | 2,475,375                          | 1,406             | 8.52                    |
| <b>Total</b>                                     | <b>150,026,157</b>                 | <b>20,407</b>     | <b>2.04</b>             |

(a): The production data, taken from the 2021 Residue Control Plan, may pertain to the years 2019, 2020 or 2021;

(b): United Kingdom (Northern Ireland) collected more samples and performed more analyses in 2021 than those reported, however due to various constraints, not all data have been reported to EFSA.

The distribution of samples analysed, non-compliant samples and non-compliant results in milk are presented in Table 26. Of the 20,407 milk samples analysed, 47 (0.23%) were non-compliant (47 non-compliant results). The non-compliant samples were reported by 15 countries.


**Table 26:** Number of samples analysed, non-compliant samples and non-compliant results in milk

| Substance Group <sup>(a)</sup> | Samples analysed <sup>(b)</sup> | % Samples analysed | Non-compliant samples <sup>(c)</sup> | % Non-compliant samples <sup>(d)</sup> | Non-compliant results <sup>(e)</sup> |
|--------------------------------|---------------------------------|--------------------|--------------------------------------|--|--------------------------------------|
| A                              | 7,244                           | 35.50              | 4                                    | 0.06                                   | 4                                    |
| A1                             | 0                               | 0.00               | 0                                    | -                                      | 0                                    |
| A2                             | 15                              | 0.07               | 0                                    | -                                      | 0                                    |
| A3                             | 52                              | 0.25               | 0                                    | -                                      | 0                                    |
| A4                             | 0                               | 0.00               | 0                                    | -                                      | 0                                    |
| A5                             | 154                             | 0.75               | 0                                    | -                                      | 0                                    |
| A6                             | 7,050                           | 34.55              | 4                                    | 0.06                                   | 4                                    |
| B                              | 18,464                          | 90.48              | 43                                   | 0.23                                   | 43                                   |
| B1                             | 9,994                           | 48.97              | 7                                    | 0.07                                   | 7                                    |
| B2                             | 10,227                          | 50.12              | 30                                   | 0.29                                   | 30                                   |
| B2a                            | 6,690                           | 32.78              | 3                                    | 0.04                                   | 3                                    |
| B2b                            | 2,519                           | 12.34              | 0                                    | -                                      | 0                                    |
| B2c                            | 726                             | 3.56               | 0                                    | -                                      | 0                                    |
| B2d                            | 82                              | 0.40               | 0                                    | -                                      | 0                                    |
| B2e                            | 5,698                           | 27.92              | 27                                   | 0.47                                   | 27                                   |
| B2f                            | 1,284                           | 6.29               | 0                                    | -                                      | 0                                    |
| B3                             | 5,313                           | 26.04              | 6                                    | 0.11                                   | 6                                    |
| B3a                            | 1,522                           | 7.46               | 0                                    | -                                      | 0                                    |
| B3b                            | 2,212                           | 10.84              | 0                                    | -                                      | 0                                    |
| B3c                            | 647                             | 3.17               | 0                                    | -                                      | 0                                    |
| B3d                            | 1,690                           | 8.28               | 6                                    | 0.36                                   | 6                                    |
| B3e <sup>(f)</sup>             |                                 |                    |                                      |  |                                      |
| B3f                            | 359                             | 1.76               | 0                                    | -                                      | 0                                    |
| <b>Total</b>                   | <b>20,407</b>                   | <b>100.00</b>      | <b>47</b>                            | <b>0.23</b>                            | <b>47</b>                            |

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

In group A, there were four non-compliant samples and four non-compliant results reported in group A6 (chloramphenicol and semicarbazide), by two countries.

For antibacterials (B1), five countries reported a total of seven non-compliant samples and results.





In the group B2, there were three non-compliant samples and results for anthelmintics (B2a) and 27 non-compliant samples and results for NSAIDs (B2e), reported by two and 11 countries, respectively.

In the group B3, there were six non-compliant samples and results for mycotoxins (B3d), relating to aflatoxin M1, reported by two countries.

More information on the specific substances identified and the number of non-compliant results reported by each country is given in Appendix A.



### 3.9. Eggs

The number of samples to be taken each year must be at least equal to one per 1,000 tonnes of annual egg production, with a minimum of 200 samples. Overall, the minimum requirements for the number of samples to be taken were fulfilled in 2021 (Table 27). Spain did not analyse at least one sample/1,000 tonnes (t) of production. Cyprus, Finland, Greece, Hungary, Lithuania, Luxembourg and Sweden did not reach the minimum number of 200 samples, while Bulgaria was really close to it. The production volume and the number of samples analysed in each country are given in Table 28.

**Table 27:** Production of eggs and number of targeted samples over 2007–2021

| Year                                    | Production (t) | Targeted samples | % Samples tested/<br>1,000 t <sup>(a)</sup> | Minimum<br>96/23/EC |
|---|----------------|------------------|---|---------------------|
| 2007 (EU 27)                            | 6,114,369      | 13,685           | 2.30  |                     |
| 2008 (EU 27)                            | 6,021,476      | 10,859           | 1.80  |                     |
| 2009 (EU 27)                            | 6,137,732      | 13,031           | 2.20  |                     |
| 2010 (EU 27)                            | 6,101,039      | 12,715           | 2.10  |                     |
| 2011 (EU 27)                            | 6,136,691      | 12,248           | 2.00  |                     |
| 2012 (EU 27)                            | 6,070,174      | 12,596           | 2.10  |                     |
| 2013 (EU 28)                            | 6,070,334      | 13,323           | 2.20  |                     |
| 2014 (EU 28)                            | 6,271,679      | 13,391           | 2.20  |                     |
| 2015 (EU 28)                            | 6,255,410      | 13,158           | 2.10  | 1/1,000 t           |
| 2016 (MS 27) <sup>(b)</sup>             | 5,424,380      | 12,700           | 2.40  |                     |
| 2016 (EU 28)                            | 6,312,403      |                  |   |                     |
| 2017 (EU 28)                            | 6,416,551      | 9,944            | 1.60  |                     |
| 2018 (EU 28)                            | 6,609,833      | 10,924           | 1.70  |                     |
| 2018 (EU 27, IS, NO) <sup>(c)</sup>     | 6,680,277      |                  |   |                     |
| 2019 (EU 27, IS, NO) <sup>(c)</sup>     | 6,733,188      | 11,444           | 1.71  |                     |
| 2020 (EU 27, IS, NO) <sup>(d)</sup>     | 6,018,192      | 11,215           | 1.86  |                     |
| 2021 (EU 27, IS, NO, XI) <sup>(e)</sup> | 6,068,071      | 12,675           | 2.09  |                     |

(a): in relation to the production of the previous year;

(b): data from France were not available for inclusion in the 2016 results report;

(c): data from Malta were not available for inclusion in the 2019 results report; IS: Iceland; NO: Norway;

(d): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(e): data from the United Kingdom (Northern Ireland) are taken into account for 2021. In accordance with the agreement on the withdrawal of the United Kingdom from the EU, and in particular with the Protocol on Ireland/Northern Ireland, the EU requirements on data sampling are also applicable to Northern Ireland. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

**Table 28:** Production volume and number of targeted samples collected in eggs

| Country  | Production data (t) <sup>(a)</sup> | Number of samples | Samples tested/1,000 t |
|--|------------------------------------|-------------------|------------------------|
| Austria  | 122,000                            | 221               | 1.81                   |
| Belgium  | 153,200                            | 350               | 2.28                   |
| Bulgaria   | 49,890                             | 199               | 3.99                   |
| Croatia  | 33,125                             | 201               | 6.07                   |
| Cyprus   | 9,915                              | 184               | 18.56                  |
| Czechia  | 92,471                             | 252               | 2.73                   |
| Denmark  | 73,981                             | 202               | 2.73                   |
| Estonia  | 9,728                              | 200               | 20.56                  |
| Finland  | 75,800                             | 189               | 2.49                   |
| France   | 829,170                            | 1,761             | 2.12                   |
| Germany  | 864,200                            | 917               | 1.06                   |
| Greece   | 114,269                            | 147               | 1.29                   |
| Hungary  | 74,792                             | 103               | 1.38                   |
| Iceland  | 6,014                              | 309               | 51.38                  |
| Ireland  | 52,103                             | 299               | 5.74                   |
| Italy  | 772,000                            | 802               | 1.04                   |
| Latvia   | 47,600                             | 208               | 4.37                   |
| Lithuania <sup>(b)</sup>                         | 47,201                             | 194               | 4.11                   |
| Luxembourg                                       | 2,000                              | 120               | 60.00                  |
| Malta  | 5,641                              | 200               | 35.45                  |
| Netherlands                                      | 614,121                            | 619               | 1.01                   |
| Norway   | 73,430                             | 375               | 5.11                   |
| Poland   | 529,287                            | 890               | 1.68                   |
| Portugal   | 141,599                            | 354               | 2.50                   |
| Romania  | 132,839                            | 608               | 4.58                   |
| Slovakia   | 44,386                             | 218               | 4.91                   |
| Slovenia   | 25,714                             | 224               | 8.71                   |
| Spain  | 832,685                            | 804               | 0.97                   |
| Sweden   | 129,290                            | 165               | 1.28                   |
| United Kingdom (Northern Ireland) <sup>(c)</sup> | 109,620                            | 1,360             | 12.41                  |
| <b>Total</b>                                     | <b>6,068,071</b>                   | <b>12,675</b>     | <b>2.09</b>            |

(a): The production data, taken from the 2021 Residue Control Plan, may pertain to the years 2019, 2020 or 2021;

(b): Lithuania collected more samples and performed more analyses for eggs than those reported to EFSA, however, due to coding issues, those additional samples are not included in this report;

(c): United Kingdom (Northern Ireland) collected more samples and performed more analyses in 2021 than those reported, however due to various constraints, not all data have been reported to EFSA.



The distribution of samples analysed, non-compliant samples and non-compliant results in eggs is presented in Table 29. Of the 12,675 egg samples analysed, 47 (0.37%) were non-compliant (55 non-compliant results). The non-compliant samples were reported by 13 countries.

**Table 29:** Number of samples analysed, non-compliant samples and non-compliant results in eggs

| Substance Group <sup>(a)</sup> | Samples analysed <sup>(b)</sup> | % Samples analysed | Non-compliant samples <sup>(c)</sup> | % Non-compliant samples <sup>(d)</sup> | Non-compliant results <sup>(e)</sup> |
|--------------------------------|---------------------------------|--------------------|--------------------------------------|--|--------------------------------------|
| A                              | 5,135                           | 40.51              | 4                                    | 0.08                                   | 4                                    |
| A1                             | 0                               | 0.00               | 0                                    | -                                      | 0                                    |
| A2                             | 0                               | 0.00               | 0                                    | -                                      | 0                                    |
| A3                             | 0                               | 0.00               | 0                                    | -                                      | 0                                    |
| A4                             | 0                               | 0.00               | 0                                    | -                                      | 0                                    |
| A5                             | 72                              | 0.57               | 0                                    | -                                      | 0                                    |
| A6                             | 5,063                           | 39.94              | 4                                    | 0.08                                   | 4                                    |
| B                              | 11,327                          | 89.36              | 43                                   | 0.38                                   | 51                                   |
| B1                             | 5,813                           | 45.86              | 15                                   | 0.26                                   | 17                                   |
| B2                             | 7,090                           | 55.94              | 24                                   | 0.34                                   | 26                                   |
| B2a                            | 2,063                           | 16.28              | 0                                    | -                                      | 0                                    |
| B2b                            | 5,707                           | 45.03              | 24                                   | 0.42                                   | 26                                   |
| B2c                            | 1,058                           | 8.35               | 0                                    | -                                      | 0                                    |
| B2d                            | 48                              | 0.38               | 0                                    | -                                      | 0                                    |
| B2e                            | 99                              | 0.78               | 0                                    | -                                      | 0                                    |
| B2f                            | 1,160                           | 9.15               | 0                                    | -                                      | 0                                    |
| B3                             | 3,035                           | 23.94              | 4                                    | 0.13                                   | 8                                    |
| B3a                            | 1,725                           | 13.61              | 3                                    | 0.17                                   | 7                                    |
| B3b                            | 1,454                           | 11.47              | 0                                    | -                                      | 0                                    |
| B3c                            | 111                             | 0.88               | 0                                    | -                                      | 0                                    |
| B3d                            | 4                               | 0.03               | 0                                    | -                                      | 0                                    |
| B3e <sup>(f)</sup>             |                                 |                    |                                      |  |                                      |
| B3f                            | 1,501                           | 11.84              | 1                                    | 0.07                                   | 1                                    |
| <b>Total</b>                   | <b>12,675</b>                   | <b>100.00</b>      | <b>47</b>                            | <b>0.37</b>                            | <b>55</b>                            |

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.



Directive 96/23/EC, Annex II requires the monitoring in group A, of the results of prohibited substances (A6) only. There were four non-compliant samples and results for A6 in 2021 by one country (metronidazole).

For antibacterials (B1), 15 non-compliant samples (17 non-compliant results) were reported by three countries.

In the group B2, 24 non-compliant samples (26 non-compliant results) were reported for anticoccidials (B2b), by nine countries.

In the group B3, three non-compliant samples and seven non-compliant results, were reported for organochlorine compounds, including PCBs (B3a), by two countries, and one non-compliant sample and result was reported for 'other substances' (B3f).

More details on the specific substances identified and the number of non-compliant results reported by each country are given in Appendix A.



### 3.10. Rabbit meat

The number of samples to be taken each year must be at least 10 per 300 tonnes of annual production (dead weight) for the first 3,000 tonnes, plus one sample for each additional 300 tonnes. The rate between the total targeted samples reported and the minimum number of samples that should be collected for the reported production, as specified in Commission Decision 97/747/EC, was calculated.

**Table 30:** Production of rabbit meat and number of targeted samples over 2007–2021

| Year                                    | Production (t) | Targeted samples |
|---|----------------|------------------|
| 2007 (EU 27)                            | 189,932        | 4,480            |
| 2008 (EU 27)                            | 187,389        | 3,625            |
| 2009 (EU 27)                            | 199,655        | 3,691            |
| 2010 (EU 27)                            | 172,353        | 3,885            |
| 2011 (EU 27)                            | 176,315        | 3,737            |
| 2012 (EU 27)                            | 173,626        | 3,471            |
| 2013 (EU 28)                            | 164,664        | 2,796            |
| 2014 (EU 28)                            | 156,204        | 2,762            |
| 2015 (EU 28)                            | 162,216        | 2,509            |
| 2016 (MS 27) <sup>(a)</sup>             | 117,239        | 1,772            |
| 2016 (EU 28)                            | 159,527        |                  |
| 2017 (EU 28)                            | 148,112        | 1,717            |
| 2018 (EU 28)                            | 143,917        | 1,654            |
| 2018 (EU 27, IS, NO) <sup>(b)</sup>     | 143,844        |                  |
| 2019 (EU 27, IS, NO) <sup>(b)</sup>     | 134,904        | 1,552            |
| 2020 (EU 27, IS, NO) <sup>(c)</sup>     | 135,416        | 1,495            |
| 2021 (EU 27, IS, NO, XI) <sup>(d)</sup> | 128,354        | 1,464            |

(a): data from France were not available for inclusion in the 2016 results report;

(b): the 2019 results data from Malta were not available for inclusion in this report; IS: Iceland; NO: Norway

(c): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(d): data from the United Kingdom (Northern Ireland) are taken into account for 2021. In accordance with the agreement on the withdrawal of the United Kingdom from the EU, and in particular with the Protocol on Ireland/Northern Ireland, the EU requirements on data sampling are also applicable to Northern Ireland. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

To calculate the total number of samples that should be collected, two different equations were applied depending on the production volume, as follows:

- a) For countries with production above 3,000 t:

$$\text{Total samples required} = \{(10/300 \times 3,000) + [(Production \text{ reported in tonnes} - 3,000) \times (1/300)]\}$$



b) For countries with production below 3,000 t:

Total samples required = Production reported in t × (10/300)

Countries with a rate 'samples tested/required' equal to 1.0 or above completely fulfilled the requirements for sampling frequency. Countries with a value below 1.0 did not.

Production volume and number of targeted samples for each country are presented in Table 31. France, Hungary, Poland and Portugal did not achieve the minimum sampling frequency requirement in 2021.

**Table 31:** Production volume and number of targeted samples collected in rabbit meat

| Country  | Production data (t) <sup>(a)</sup> | Number of samples | Samples tested/required |
|--|------------------------------------|-------------------|-------------------------|
| Austria  | 0                                  |                   |                         |
| Belgium  | 3,787                              | 123               | 1.2                     |
| Bulgaria   | 8                                  | 7                 | 26.25                   |
| Croatia  | 1                                  | 5                 | 150                     |
| Cyprus   | 101                                | 46                | 13.66                   |
| Czechia  | 955                                | 49                | 1.54                    |
| Denmark  | 5                                  | 8                 | 48                      |
| Estonia  | 2                                  | 1                 | 15                      |
| Finland  | 0                                  |                   |                         |
| France   | 32,131                             | 173               | 0.88                    |
| Germany  | 335                                | 25                | 2.24                    |
| Greece   | 1,100                              | 65                | 1.77                    |
| Hungary  | 6,233                              | 101               | 0.91                    |
| Iceland  | 0                                  |                   |                         |
| Ireland  | 0                                  |                   |                         |
| Italy  | 26,647                             | 203               | 1.14                    |
| Latvia   | 66                                 | 9                 | 4.09                    |
| Lithuania  | 97                                 | 10                | 3.09                    |
| Luxembourg                                       | 8                                  | 8                 | 30                      |
| Malta  | 80                                 | 54                | 20.25                   |
| Netherlands                                      | 0                                  |                   |                         |
| Norway   | 0                                  |                   |                         |
| Poland   | 6,107                              | 105               | 0.95                    |
| Portugal   | 5,524                              | 75                | 0.67                    |
| Romania  | 4                                  | 18                | 135                     |
| Slovakia   | 14                                 | 78                | 167.14                  |
| Slovenia   | 3                                  | 22                | 220                     |
| Spain  | 45,143                             | 279               | 1.16                    |
| Sweden   | 3                                  |                   |                         |
| United Kingdom (Northern Ireland) <sup>(b)</sup> | 0                                  |                   |                         |
| <b>Total</b>                                     | <b>128,351</b>                     | <b>1,464</b>      |                         |

(a): The production data, taken from the 2021 Residue Control Plan, may pertain to the years 2019, 2020 or 2021;

(b): United Kingdom (Northern Ireland) collected more samples and performed more analyses in 2021 than those reported, however due to various constraints, not all data have been reported to EFSA.

The distribution of samples analysed, non-compliant samples and non-compliant results in rabbit meat are presented in Table 32. Of the 1,464 samples analysed for rabbits, five (0.34%) were non-compliant (five non-compliant results). The non-compliant samples were reported by four countries.




**Table 32:** Number of samples analysed, non-compliant samples and non-compliant results in rabbit meat

| Substance Group <sup>(a)</sup> | Samples analysed <sup>(b)</sup> | % Samples analysed | Non-compliant samples <sup>(c)</sup> | % Non-compliant samples <sup>(d)</sup> | Non-compliant results <sup>(e)</sup> |
|--------------------------------|---------------------------------|--------------------|--------------------------------------|--|--------------------------------------|
| A                              | 562                             | 38.39              | 1                                    | 0.18                                   | 1                                    |
| A1                             | 33                              | 2.25               | 0                                    | -                                      | 0                                    |
| A2                             | 16                              | 1.09               | 0                                    | -                                      | 0                                    |
| A3                             | 53                              | 3.62               | 1                                    | 1.89                                   | 1                                    |
| A4                             | 31                              | 2.12               | 0                                    | -                                      | 0                                    |
| A5                             | 58                              | 3.96               | 0                                    | -                                      | 0                                    |
| A6                             | 406                             | 27.73              | 0                                    | -                                      | 0                                    |
| B                              | 1,108                           | 75.68              | 4                                    | 0.36                                   | 4                                    |
| B1                             | 514                             | 35.11              | 2                                    | 0.39                                   | 2                                    |
| B2                             | 500                             | 34.15              | 2                                    | 0.40                                   | 2                                    |
| B2a                            | 135                             | 9.22               | 0                                    | -                                      | 0                                    |
| B2b                            | 230                             | 15.71              | 2                                    | 0.87                                   | 2                                    |
| B2c                            | 86                              | 5.87               | 0                                    | -                                      | 0                                    |
| B2d                            | 2                               | 0.14               | 0                                    | -                                      | 0                                    |
| B2e                            | 62                              | 4.23               | 0                                    | -                                      | 0                                    |
| B2f                            | 57                              | 3.89               | 0                                    | -                                      | 0                                    |
| B3                             | 193                             | 13.18              | 0                                    | -                                      | 0                                    |
| B3a                            | 107                             | 7.31               | 0                                    | -                                      | 0                                    |
| B3b                            | 58                              | 3.96               | 0                                    | -                                      | 0                                    |
| B3c                            | 70                              | 4.78               | 0                                    | -                                      | 0                                    |
| B3d                            | 15                              | 1.02               | 0                                    | -                                      | 0                                    |
| B3e <sup>(f)</sup>             |                                 |                    |                                      |  |                                      |
| B3f                            | 26                              | 1.78               | 0                                    | -                                      | 0                                    |
| <b>Total</b>                   | <b>1,464</b>                    | <b>100.00</b>      | <b>5</b>                             | <b>0.34</b>                            | <b>5</b>                             |

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

In group A, there was one non-compliant sample and result for group A3 (testosterone-17-beta).

In group B, there were two non-compliant samples and results reported for antibacterials (B1) (amoxicillin, tulathromycin) by two countries, and two non-compliant samples and results for anticoccidials (B2b) by two countries. There were no non-compliant samples reported for group B3.



More details on the specific substances identified and the number of non-compliant results reported by each country are given in Appendix A.

### 3.11. Farmed game

European Commission Decision 97/747/EC requires that the number of samples to be taken each year to be at least 100. The minimum number of samples was set as a provisional rule to be reviewed in light of the information provided by the reporting countries on their production figures. For farmed game, a total of 1,456 targeted samples were collected in 2021 (Tables 33 and 34).

**Table 33:** Production of farmed game and number of targeted samples over 2007–2021

| Year                                    | Production (t) | Targeted samples |
|---|----------------|------------------|
| 2007 (EU 27)                            | 40,895         | 2,286            |
| 2008 (EU 27)                            | 18,485         | 1,959            |
| 2009 (EU 27)                            | 84,482         | 1,975            |
| 2010 (EU 27)                            | 25,449         | 2,157            |
| 2011 (EU 27)                            | 24,991         | 2,575            |
| 2012 (EU 27)                            | 25,348         | 2,334            |
| 2013 (EU 28)                            | 26,356         | 2,072            |
| 2014 (EU 28)                            | 24,379         | 1,918            |
| 2015 (EU 28)                            | 22,044         | 1,785            |
| 2016 (MS 27) <sup>(a)</sup>             | 12,976         | 1,607            |
| 2016 (EU 28)                            | 46,623         |                  |
| 2017 (EU 28)                            | 229,431        | 1,635            |
| 2018 (EU 28)                            | 12,293         | 1,594            |
| 2018 (EU 27, IS, NO) <sup>(b)</sup>     | 14,370         |                  |
| 2019 (EU 27, IS, NO) <sup>(b)</sup>     | 17,984         | 1,175            |
| 2020 (EU 27, IS, NO) <sup>(c)</sup>     | 15,521         | 1,283            |
| 2021 (EU 27, IS, NO, XI) <sup>(d)</sup> | 14,544         | 1,456            |

(a): data from France were not available for inclusion in the 2016 results report;

(b): the 2019 results data from Malta were not available for inclusion in this report; IS: Iceland; NO: Norway

(c): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(d): data from the United Kingdom (Northern Ireland) are taken into account for 2021. In accordance with the agreement on the withdrawal of the United Kingdom from the EU, and in particular with the Protocol on Ireland/Northern Ireland, the EU requirements on data sampling are also applicable to Northern Ireland. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

**Table 34:** Production volume and number of targeted samples collected in farmed game

| <b>Country</b>                                   | <b>Production data (t)<sup>(a)</sup></b> | <b>Number of samples</b> |
|--|--|--------------------------|
| Austria  | 197                                      | 113                      |
| Belgium  | 57                                       | 201                      |
| Bulgaria   | 5  |                          |
| Croatia  | 10                                       | 25                       |
| Cyprus   | 3  |                          |
| Czechia  | 142                                      | 98                       |
| Denmark  | 19                                       | 11                       |
| Estonia  | 0  |                          |
| Finland  | 3,000                                    | 83                       |
| France   | 179                                      | 72                       |
| Germany  | 1,960                                    | 138                      |
| Greece   | 48                                       | 16                       |
| Hungary  | 977                                      | 106                      |
| Iceland  | 0  | 10                       |
| Ireland  | 5  | 5                        |
| Italy  | 2,228                                    | 7                        |
| Latvia   | 23                                       | 9                        |
| Lithuania  | 6  | 20                       |
| Luxembourg                                       | 0  |                          |
| Malta  | 0  |                          |
| Netherlands                                      | 109                                      | 13                       |
| Norway   | 2,074                                    | 253                      |
| Poland   | 17                                       | 18                       |
| Portugal   | 0  |                          |
| Romania  | 36                                       | 69                       |
| Slovakia   | 0  | 95                       |
| Slovenia   | 2  | 11                       |
| Spain  | 0  |                          |
| Sweden   | 1,252                                    | 83                       |
| United Kingdom (Northern Ireland) <sup>(b)</sup> | 0  |                          |
| <b>Total</b>                                     | <b>12,341</b>                            | <b>1,456</b>             |

(a): The production data, taken from the 2021 Residue Control Plan, may pertain to the years 2019, 2020 or 2021;

(b): United Kingdom (Northern Ireland) collected more samples and performed more analyses in 2021 than those reported, however due to various constraints, not all data have been reported to EFSA.

The distribution of samples analysed, non-compliant samples and non-compliant results in farmed game are presented in Table 35. Of the 1,456 samples analysed for farmed game, 24 (1.65%) were non-compliant (24 non-compliant results). The non-compliant samples were reported by five countries.

**Table 35:** Number of samples analysed, non-compliant samples and non-compliant results in farmed game

| Substance Group <sup>(a)</sup> | Samples analysed <sup>(b)</sup> | % Samples analysed | Non-compliant samples <sup>(c)</sup> | % Non-compliant samples <sup>(d)</sup> | Non-compliant results <sup>(e)</sup> |
|--------------------------------|---------------------------------|--------------------|--------------------------------------|--|--------------------------------------|
| A                              | 389                             | 26.72              | 0                                    | -                                      | 0                                    |
| A1                             | 31                              | 2.13               | 0                                    | -                                      | 0                                    |
| A2                             | 10                              | 0.69               | 0                                    | -                                      | 0                                    |
| A3                             | 45                              | 3.09               | 0                                    | -                                      | 0                                    |
| A4                             | 35                              | 2.40               | 0                                    | -                                      | 0                                    |
| A5                             | 61                              | 4.19               | 0                                    | -                                      | 0                                    |
| A6                             | 243                             | 16.69              | 0                                    | -                                      | 0                                    |
| B                              | 1,278                           | 87.77              | 24                                   | 1.88                                   | 24                                   |
| B1                             | 327                             | 22.46              | 0                                    | -                                      | 0                                    |
| B2                             | 516                             | 35.44              | 1                                    | 0.19                                   | 1                                    |
| B2a                            | 249                             | 17.10              | 1                                    | 0.40                                   | 1                                    |
| B2b                            | 127                             | 8.72               | 0                                    | -                                      | 0                                    |
| B2c                            | 79                              | 5.43               | 0                                    | -                                      | 0                                    |
| B2d                            | 27                              | 1.85               | 0                                    | -                                      | 0                                    |
| B2e                            | 49                              | 3.37               | 0                                    | -                                      | 0                                    |
| B2f                            | 62                              | 4.26               | 0                                    | -                                      | 0                                    |
| B3                             | 558                             | 38.32              | 23                                   | 4.12                                   | 23                                   |
| B3a                            | 177                             | 12.16              | 6                                    | 3.39                                   | 6                                    |
| B3b                            | 63                              | 4.33               | 0                                    | -                                      | 0                                    |
| B3c                            | 371                             | 25.48              | 17                                   | 4.58                                   | 17                                   |
| B3d                            | 21                              | 1.44               | 0                                    | -                                      | 0                                    |
| B3e <sup>(f)</sup>             |                                 |                    |                                      |  |                                      |
| B3f                            | 66                              | 4.53               | 0                                    | -                                      | 0                                    |
| <b>Total</b>                   | <b>1,456</b>                    | <b>100.00</b>      | <b>24</b>                            | <b>1.65</b>                            | <b>24</b>                            |

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

No non-compliant samples were reported in groups A and B1.

In the group B2, one non-compliant sample and result was reported for anthelmintics (B2a).

In the group B3, 17 non-compliant samples and 17 non-compliant results were reported for chemical elements (B3c) (cadmium, copper and lead), by four countries, and six non-compliant



samples and 6 non-compliant results were reported for organochlorine compounds, including PCBs (B3a) by two countries.

More details on the specific substances identified and the number of non-compliant results reported by each country are given in Appendix A.

### 3.12. Wild game

European Commission Decision 97/747/EC requires that the number of samples to be taken each year to be at least 100 samples. Samples must be taken to analyse results of chemical elements. For wild game, a total of 2,322 targeted samples were collected in 2021 (Tables 36 and 37).

**Table 36:** Production of wild game and number of targeted samples over 2007–2021

| Year                                    | Production (t) | Targeted samples |
|---|----------------|------------------|
| 2007 (EU 27)                            | 270,704        | 2,360            |
| 2008 (EU 27)                            | 316,541        | 2,443            |
| 2009 (EU 27)                            | 252,328        | 2,488            |
| 2010 (EU 27)                            | 147,097        | 2,395            |
| 2011 (EU 27)                            | 263,860        | 2,674            |
| 2012 (EU 27)                            | 209,607        | 2,600            |
| 2013 (EU 28)                            | 204,013        | 2,694            |
| 2014 (EU 28)                            | 180,307        | 2,601            |
| 2015 (EU 28)                            | 201,794        | 2,480            |
| 2016 (MS 27) <sup>(a)</sup>             | 172,090        | 2,468            |
| 2016 (EU 28)                            | 3,394,896      |                  |
| 2017 (EU 28)                            | 469,359        | 1,760            |
| 2018 (EU 28)                            | 390,891        | 1,781            |
| 2018 (EU 27, IS, NO) <sup>(b)</sup>     | 397,393        |                  |
| 2019 (EU 27, IS, NO) <sup>(b)</sup>     | 6,407,975      | 2,443            |
| 2020 (EU 27, IS, NO) <sup>(c)</sup>     | 6,407,528      | 2,257            |
| 2021 (EU 27, IS, NO, XI) <sup>(d)</sup> | 389,836        | 2,322            |

(a): data from France were not available for inclusion in the 2016 results report;

(b): the 2019 results data from Malta were not available for inclusion in this report; IS: Iceland; NO: Norway

(c): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(d): data from the United Kingdom (Northern Ireland) are taken into account for 2021. In accordance with the agreement on the withdrawal of the United Kingdom from the EU, and in particular with the Protocol on Ireland/Northern Ireland, the EU requirements on data sampling are also applicable to Northern Ireland. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

**Table 37:** Production volume and number of targeted samples collected in wild game

| <b>Country</b>                                   | <b>Production data (t)<sup>(a)</sup></b> | <b>Number of samples</b> |
|--|--|--------------------------|
| Austria  | 10,054                                   | 178                      |
| Belgium  | 2,465                                    | 148                      |
| Bulgaria   | 83                                       | 111                      |
| Croatia  | 10                                       | 18                       |
| Cyprus   | 0  | 35                       |
| Czechia  | 23,286                                   | 144                      |
| Denmark  | 494                                      | 9                        |
| Estonia  | 772                                      | 100                      |
| Finland  | 100                                      |                          |
| France   | 116,286                                  | 81                       |
| Germany  | 115,249                                  | 94                       |
| Greece   | 2  | 21                       |
| Hungary  | 8,647                                    | 5                        |
| Iceland  | 0  |                          |
| Ireland  | 496                                      | 57                       |
| Italy  | 7,000                                    | 101                      |
| Latvia   | 202                                      | 106                      |
| Lithuania  | 155                                      | 2                        |
| Luxembourg                                       | 450                                      | 100                      |
| Malta  | 0  |                          |
| Netherlands                                      | 736                                      | 82                       |
| Norway   | 6,178                                    | 149                      |
| Poland   | 31,994                                   | 254                      |
| Portugal   | 133                                      | 61                       |
| Romania  | 104                                      | 78                       |
| Slovakia   | 10,078                                   | 115                      |
| Slovenia   | 1,721                                    | 101                      |
| Spain  | 51,396                                   | 78                       |
| Sweden   | 1,745                                    | 94                       |
| United Kingdom (Northern Ireland) <sup>(b)</sup> | 0  |                          |
| <b>Total</b>                                     | <b>389,736</b>                           | <b>2,322</b>             |

(a): The production data, taken from the 2021 Residue Control Plan, may pertain to the years 2019, 2020 or 2021;

(b): United Kingdom (Northern Ireland) collected more samples and performed more analyses in 2021 than those reported, however due to various constraints, not all data have been reported to EFSA.

In 2021, 18 countries reported less than 100 samples of wild game.

The distribution of samples analysed, non-compliant samples and non-compliant results in wild game are presented in Table 38. Of the 2,322 samples analysed for wild game, 104 (4.48%)



were non-compliant (113 non-compliant results). The non-compliant samples were reported by 15 countries.

**Table 38:** Number of samples analysed, non-compliant samples and non-compliant results in wild game

| Substance Group <sup>(a)</sup> | Samples analysed <sup>(b)</sup> | % Samples analysed | Non-compliant samples <sup>(c)</sup> | % Non-compliant samples <sup>(d)</sup> | Non-compliant results <sup>(e)</sup> |
|--------------------------------|---------------------------------|--------------------|--------------------------------------|--|--------------------------------------|
| A                              | 32                              | 1.38               | 0                                    | -                                      | 0                                    |
| A1                             | 1                               | 0.04               | 0                                    | -                                      | 0                                    |
| A2                             | 3                               | 0.13               | 0                                    | -                                      | 0                                    |
| A3                             | 3                               | 0.13               | 0                                    | -                                      | 0                                    |
| A4                             | 1                               | 0.04               | 0                                    | -                                      | 0                                    |
| A5                             | 3                               | 0.13               | 0                                    | -                                      | 0                                    |
| A6                             | 22                              | 0.95               | 0                                    | -                                      | 0                                    |
| B                              | 2,308                           | 99.40              | 104                                  | 4.51                                   | 113                                  |
| B1                             | 8                               | 0.34               | 0                                    | -                                      | 0                                    |
| B2                             | 162                             | 6.98               | 0                                    | -                                      | 0                                    |
| B2a                            | 98                              | 4.22               | 0                                    | -                                      | 0                                    |
| B2b                            | 21                              | 0.90               | 0                                    | -                                      | 0                                    |
| B2c                            | 40                              | 1.72               | 0                                    | -                                      | 0                                    |
| B2d                            | 0                               | 0.00               | 0                                    | -                                      | 0                                    |
| B2e                            | 4                               | 0.17               | 0                                    | -                                      | 0                                    |
| B2f                            | 3                               | 0.13               | 0                                    | -                                      | 0                                    |
| B3                             | 2,178                           | 93.80              | 104                                  | 4.78                                   | 113                                  |
| B3a                            | 200                             | 8.61               | 11                                   | 5.50                                   | 17                                   |
| B3b                            | 28                              | 1.21               | 0                                    | -                                      | 0                                    |
| B3c                            | 2,039                           | 87.81              | 85                                   | 4.17                                   | 88                                   |
| B3d                            | 0                               | 0.00               | 0                                    | -                                      | 0                                    |
| B3e <sup>(f)</sup>             |                                 |                    |                                      |  |                                      |
| B3f                            | 63                              | 2.71               | 8                                    | 12.70                                  | 8                                    |
| <b>Total</b>                   | <b>2,322</b>                    | <b>100.00</b>      | <b>104</b>                           | <b>4.48</b>                            | <b>113</b>                           |

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

The vast majority of the non-compliant samples (n = 85) and results (n = 88) were reported for metals (B3c) (44 results for cadmium; 40 results for lead; three results for total mercury and one for lead) reported by 14 countries, 11 non-compliant samples and 17 non-compliant results



were recorded for organochlorine compounds (B3a) by three countries and eight non-compliant samples and results were reported for 'other substances' (B3f) by one country.





### 3.13. Honey

The number of samples to be taken must be at least 10 per 300 tonnes of annual production for the first 3,000 tonnes, plus one sample for each additional 300 tonnes. In order to check the fulfilment of this requirement the same equations were applied as described in Section 3.10.

Where the rate between the total targeted samples reported and the number of samples to be collected for the reported production is equal to 1.0 or higher, the requirements for sampling frequency were completely fulfilled. Countries with a value below 1.0 did not.

In 2021, 3,266 targeted samples were collected for honey (Table 39). Production volume and number of targeted samples broken down by country are presented in Table 40. Belgium, Bulgaria, Finland, France, Hungary, Latvia, Lithuania, Portugal, Spain and Sweden did not achieve the minimum sampling frequency requirement in 2021.

**Table 39:** Production of honey and number of targeted samples over 2007–2021

| Year                                    | Production (t) | Targeted samples |
|---|----------------|------------------|
| 2007 (EU 27)                            | 188,945        | 5,850            |
| 2008 (EU 27)                            | 158,694        | 5,257            |
| 2009 (EU 27)                            | 162,213        | 4,826            |
| 2010 (EU 27)                            | 191,501        | 4,720            |
| 2011 (EU 27)                            | 215,141        | 4,684            |
| 2012 (EU 27)                            | 215,101        | 4,820            |
| 2013 (EU 28)                            | 205,466        | 4,612            |
| 2014 (EU 28)                            | 200,808        | 4,294            |
| 2015 (EU 28)                            | 193,347        | 4,203            |
| 2016 (MS 27) <sup>(a)</sup>             | 222,048        | 3,545            |
| 2016 (EU 28)                            | 236,720        |                  |
| 2017 (EU 28)                            | 216,244        | 3,619            |
| 2018 (EU 28)                            | 229,009        | 3,645            |
| 2018 (EU 27, IS, NO) <sup>(b)</sup>     | 230,194        |                  |
| 2019 (EU 27, IS, NO) <sup>(b)</sup>     | 273,240        | 3,926            |
| 2020 (EU 27, IS, NO) <sup>(c)</sup>     | 266,211        | 3,301            |
| 2021 (EU 27, IS, NO, XI) <sup>(d)</sup> | 225,463        | 3,266            |

(a): data from France were not available for inclusion in the 2016 results report;

(b): the 2019 results data from Malta were not available for inclusion in this report; IS: Iceland; NO: Norway

(c): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(d): data from the United Kingdom (Northern Ireland) are taken into account for 2021. In accordance with the agreement on the withdrawal of the United Kingdom from the EU, and in particular with the Protocol on Ireland/Northern Ireland, the EU requirements on data sampling are also applicable to Northern Ireland. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).


**Table 40:** Production volume and number of targeted samples collected in honey

| Country  | Production data (t) <sup>(a)</sup> | Number of samples | Samples tested/required |
|--|------------------------------------|-------------------|-------------------------|
| Austria  | 3,600                              | 185               | 1.81                    |
| Belgium  | 2,500                              | 5                 | 0.06                    |
| Bulgaria   | 4,590                              | 55                | 0.52                    |
| Croatia  | 3,400                              | 117               | 1.15                    |
| Cyprus   | 660                                | 61                | 2.77                    |
| Czechia  | 5,000                              | 139               | 1.30                    |
| Denmark  | 2,850                              | 99                | 1.04                    |
| Estonia  | 1,288                              | 43                | 1.00                    |
| Finland  | 2,590                              | 80                | 0.93                    |
| France   | 21,640                             | 76                | 0.47                    |
| Germany  | 24,080                             | 178               | 1.05                    |
| Greece   | 22,288                             | 191               | 1.16                    |
| Hungary  | 25,350                             | 131               | 0.75                    |
| Iceland  | 0                                  |                   |                         |
| Ireland  | 108                                | 51                | 14.17                   |
| Italy  | 15,000                             | 162               | 1.16                    |
| Latvia   | 2,152                              | 59                | 0.82                    |
| Lithuania <sup>(b)</sup>                         | 5,284                              | 53                | 0.49                    |
| Luxembourg                                       | 150                                | 30                | 6                       |
| Malta  | 15                                 | 9                 | 18                      |
| Netherlands                                      | 1,730                              | 60                | 1.04                    |
| Norway   | 1,550                              | 126               | 2.44                    |
| Poland   | 18,117                             | 482               | 3.21                    |
| Portugal   | 10,104                             | 82                | 0.66                    |
| Romania  | 12,618                             | 202               | 1.53                    |
| Slovakia   | 4,012                              | 242               | 2.34                    |
| Slovenia   | 653                                | 59                | 2.71                    |
| Spain  | 31,161                             | 188               | 0.97                    |
| Sweden   | 2,949                              | 95                | 0.97                    |
| United Kingdom (Northern Ireland) <sup>(c)</sup> | 24                                 | 6                 | 7.5                     |
| <b>Total</b>                                     | <b>225,463</b>                     | <b>3,266</b>      |                         |

(a): The production data, taken from the 2021 Residue Control Plan, may pertain to the years 2019, 2020 or 2021;

(b): Lithuania collected more samples and performed more analyses for honey than those reported to EFSA, however, due to coding issues, those additional samples are not included in this report;

(c): United Kingdom (Northern Ireland) collected more samples and performed more analyses in 2021 than those reported, however due to various constraints, not all data have been reported to EFSA.

The distribution of samples analysed, non-compliant samples and non-compliant results in honey are presented in Table 41. Of the 3,266 samples analysed for honey, 47 (1.44%) were non-



compliant (54 non-compliant results). The non-compliant samples were reported by 14 countries.

**Table 41:** Number of samples analysed, non-compliant samples and non-compliant results in honey

| Substance Group <sup>(a)</sup> | Samples analysed <sup>(b)</sup> | % Samples analysed | Non-compliant samples <sup>(c)</sup> | % Non-compliant samples <sup>(d)</sup> | Non-compliant results <sup>(e)</sup> |
|--------------------------------|---------------------------------|--------------------|--------------------------------------|--|--------------------------------------|
| A                              | 1,012                           | 30.99              | 1                                    | 0.10                                   | 1                                    |
| A1                             | 0                               | 0.00               | 0                                    | -                                      | 0                                    |
| A2                             | 0                               | 0.00               | 0                                    | -                                      | 0                                    |
| A3                             | 0                               | 0.00               | 0                                    | -                                      | 0                                    |
| A4                             | 0                               | 0.00               | 0                                    | -                                      | 0                                    |
| A5                             | 210                             | 6.43               | 0                                    | -                                      | 0                                    |
| A6                             | 802                             | 24.56              | 1                                    | 0.12                                   | 1                                    |
| B                              | 2,991                           | 91.58              | 46                                   | 1.54                                   | 53                                   |
| B1                             | 1,465                           | 44.86              | 14                                   | 0.96                                   | 21                                   |
| B2                             | 1,215                           | 37.20              | 3                                    | 0.25                                   | 3                                    |
| B2a                            | 407                             | 12.46              | 0                                    | -                                      | 0                                    |
| B2b                            | 112                             | 3.43               | 0                                    | -                                      | 0                                    |
| B2c                            | 968                             | 29.64              | 0                                    | -                                      | 0                                    |
| B2d                            | 0                               | 0.00               | 0                                    | -                                      | 0                                    |
| B2e                            | 15                              | 0.46               | 0                                    | -                                      | 0                                    |
| B2f                            | 802                             | 24.56              | 3                                    | 0.37                                   | 3                                    |
| B3                             | 1,584                           | 48.50              | 29                                   | 1.83                                   | 29                                   |
| B3a                            | 942                             | 28.84              | 0                                    | -                                      | 0                                    |
| B3b                            | 871                             | 26.67              | 0                                    | -                                      | 0                                    |
| B3c                            | 485                             | 14.85              | 16                                   | 3.30                                   | 16                                   |
| B3d                            | 5                               | 0.15               | 0                                    | -                                      | 0                                    |
| B3e <sup>(f)</sup>             |                                 |                    |                                      |  |                                      |
| B3f                            | 865                             | 26.48              | 13                                   | 1.50                                   | 13                                   |
| <b>Total</b>                   | <b>3,266</b>                    | <b>100.00</b>      | <b>47</b>                            | <b>1.44</b>                            | <b>54</b>                            |

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

For group A, one non-compliant sample and result was reported for group A6 (AOZ (3-amino-2-oxazolidone)).



For antibacterials (B1), 14 non-compliant samples (21 non-compliant results) were reported. Three non-compliant samples and results were reported for 'other pharmacologically active substances' (B2f), 16 non-compliant samples and 16 non-compliant results were reported for chemical elements (B3c) (four for lead and 12 for copper) by five countries and 13 non-compliant samples and 13 non-compliant results were reported for 'others' residues (B3f).

More details on the specific substances identified and the number of non-compliant results reported by each country are given in Appendix A.

### 3.14. Suspect, import and other samples

In addition to the targeted samples collected in conformity with the specification of the NRCP for 2021, results were reported on samples collected through sampling strategies other than targeted. According to Directive 96/23/EC in case of infringements of maximum residue limits when animals or animal products are placed on the market, intensified checks on the animals and products from the farm and/or establishment in question must be carried out by the competent authorities. Also, in the event of possession or presence of prohibited substances at any point during manufacture, storage, distribution or sale through the food and feed production chain, or suspicion or evidence of illegal treatment or non-compliance with the withdrawal period for an authorised medicinal veterinary product the competent authorities have to apply special measures including repeated sampling in the farm or establishment concerned. Thus, these samples are not representative for the assessment of the residue situation in the reporting countries and therefore they are reported separately in the residue database as 'suspect samples', as part of the follow-up measures taken in case of infringements.

In 2021, 4,562 suspect samples were reported of which 119 (0.03%) were non-compliant, that is by far lower compared to 200 (0.05%) non-compliant of 2020. It is to note that the number of non-compliant results reported from suspect sampling, does not accurately reflect the residue situation of a country. The suspect samples are taken as follow-up of non-compliance of targeted samples or evidence of possession and use of prohibited substances. In addition, the sampling procedure applied in case of suspicion might be different among countries. For example, in Belgium, at slaughterhouse each injection site must be sampled together with a sample of muscle which are then analysed by a multi-residue method. This approach results in a higher probability that a suspect sample is found non-compliant for more than one substance. An overview on the number of suspect samples analysed for the different animal species/product categories and the frequency of non-compliant samples is presented in Table 42. Further details on the substances identified and country which reported non-compliant results are given in Appendix B.



**Table 42:** Number of suspect, import and other samples analysed and frequency of non-compliant samples and in all species and product categories

| Product Group     | Suspect samples total | Suspect samples non-compliant | Import samples total | Import samples non-compliant | Other samples total | Other samples non-compliant |
|-------------------|-----------------------|-------------------------------|----------------------|------------------------------|---------------------|-----------------------------|
| Aquaculture       | 56                    | 2                             | 1,390                | 19                           | 171                 | 0                           |
| Bovines           | 3,132                 | 51                            | 294                  | 1                            | 18,671              | 40                          |
| Eggs              | 111                   | 9                             | 30                   | -                            | 334                 | 17                          |
| Game              | 0                     | 0                             | 0                    | -                            | 0                   | 0                           |
| Game (Wild        | 4                     | 3                             | 8                    | -                            | 40                  | 4                           |
| Honey             | 17                    | 8                             | 269                  | -                            | 135                 | 3                           |
| Horses            | 42                    | 0                             | 32                   | -                            | 78                  | 0                           |
| Milk              | 223                   | 8                             | 24                   | -                            | 801                 | 0                           |
| Pigs              | 560                   | 14                            | 150                  | 2                            | 236,622             | 26                          |
| Poultry           | 121                   | 13                            | 515                  | -                            | 320                 | 1                           |
| Rabbits           | 7                     | 0                             | 9                    | -                            | 87                  | 2                           |
| Sheep/goats       | 289                   | 11                            | 71                   | 1                            | 4,934               | 7                           |
| <b>Total</b>      | <b>4,562</b>          | <b>119</b>                    | <b>2,792</b>         | <b>23</b>                    | <b>262,193</b>      | <b>100</b>                  |
| <b>Percentage</b> |                       | <b>0.03</b>                   |                      | <b>0.01</b>                  |                     | <b>0</b>                    |

Apart from the data submitted in accordance to NRCs, a certain amount of results on samples checked at import are reported ( $n = 2,792$ ). As the control of samples at import is more linked to the third country monitoring than to residue monitoring in the EU, those results are reported to the EC using the TRACES and RASFF tools. Therefore, those data are of limited value and are not representative of the overall situation of residue control at import. An overview on the number of import samples analysed for the different animal species/product categories and the frequency of non-compliant samples is presented in Table 42. Further details on the substances identified and countries which reported non-compliant results are given in Appendix C.

In total, 262,193 samples were collected in the framework of other monitoring programmes developed under the national legislation. An overview on the number of 'other' samples analysed for the different animal species/product categories and the frequency of non-compliant samples is presented in Table 42. Further details on the substances identified and countries which reported non-compliant results are given in Appendix D.



## 4. Conclusions

- In 2021, 27 out of 27 European Union (EU) Member States, Iceland, Norway and United Kingdom (Northern Ireland) reported in the framework of the residue monitoring the results for 621,205 samples. For 2021, the only United Kingdom data that were reported to EFSA were from Northern Ireland. In accordance with the Agreement on the withdrawal of the United Kingdom from the European Union, and in particular with the Protocol on Ireland/Northern Ireland, the European Union requirements on data sampling are also applicable to and in the United Kingdom with respect to Northern Ireland.
- A total of 351,637 targeted samples and 4,562 suspect samples were reported under the legal framework set by Council Directive 96/23/EC. Additionally, 262,203 samples collected in the framework of other programmes developed under the national legislation and 2,803 samples checked at import, were taken in 2021.
- The majority of countries fulfilled the requirements for sampling frequency laid down in Council Directive 96/23/EC and in Commission Decision 97/747/EC.
- Overall, were reported 0.24% of non-compliant samples out of the 351,637 targeted samples in 2021.
- No non-compliant targeted samples were reported for stilbenes and derivatives (A1) in any of the animal product groups tested.
- For antithyroid agents (A2), there were 0.31% non-compliant targeted samples, all reported for the same residue (thiouracil).
- In the group of steroids (A3), non-compliant targeted samples were found in bovines (0.12%), pigs (0.18%), poultry (0.11%), rabbit meat (1.89%) and sheep and goats (1.46%).
- In the group of resorcylic acid lactones (A4), 0.05% of the samples were non-compliant; the non-compliant samples were found in bovines (0.06%) and pigs (0.07%).
- For beta-agonists (A5), there were two non-compliant samples reported, one for clenbuterol and one for sulbatamol found in bovines.
- Prohibited substances (A6) were found in 0.03% of the targeted samples analysed. Substances identified were chloramphenicol (n = 11), semicarbazide (n=6), metronidazole (n = 4), AMOZ (5-methylmorpholino-3-amino-2-oxazolidone) (n = 3), furaltadone (n = 1), dimetridazole (n = 1) and AOZ (3-amino-2-oxazolidone) (n = 1).
- For antibacterials (B1), 0.14% of the targeted samples analysed under the Directive 96/23/EC monitoring were non-compliant. The highest frequency of non-compliant samples for antibacterials was found in honey (0.96%).
- In Group B2 (other veterinary drugs), the highest proportion of non-compliant targeted samples was found for non-steroidal anti-inflammatory drugs (NSAIDs) (B2e) (0.25%). For NSAIDs (B2e), the non-compliant samples were reported across the different species as follows; bovines (0.42%), horses (0.75%), milk (0.47%), pigs (0.01%) and poultry (0.18%).



- Instances of non-compliance for anthelmintics (B2a) were reported in bovines (0.06% of targeted samples), farmed game (0.40%), milk (0.04%), pigs (0.05%) and sheep and goats (0.23%).
- For anticoccidials (B2b), 0.11% of the targeted samples analysed were non-compliant and were reported across the different species as follows: eggs (0.42%), pigs (0.06%), poultry (0.07%), rabbit meat (0.87%) and sheep and goats (0.15%).
- Since 2009, an important decrease has been observed in the frequency of non-compliant targeted samples for anticoccidials (B2b) in poultry. This decrease is most likely the result of the awareness and the measures that followed the implementation of the Commission Directive 2009/8/EC setting up maximum levels of unavoidable carry-over of coccidiostats in non-target feed.
- No non-compliant targeted samples were reported for pyrethroids (B2c) or sedatives (B2d) in any of the animal product groups tested.
- Non-compliant targeted samples were reported for the legislative residue group 'other pharmacologically active substances' (B2f), in bovines (0.16%), honey (0.37%), pigs (0.03%) and sheep and goats (0.12%).
- In the Group B3 (other substances and environmental contaminants), the 'chemical elements' (B3c) had the highest overall percentage of non-compliant targeted samples (2.59%), with cadmium, copper, lead and total mercury being most frequently identified.
- Instances of non-compliance for organochlorine compounds (B3a) and organophosphorus compounds (B3b) were 0.13% and 0.02%, of the targeted samples analysed, respectively.
- For mycotoxins (B3d), non-compliant targeted samples were reported for bovines (0.30%), milk (0.36%) and pigs (0.16%), with those identified being zearalenone and aflatoxin M1.
- For dyes (B3e), non-compliant targeted samples were reported for aquaculture (0.40%). The substances found were sum of crystal violet and leucocrystal violet and sum of malachite green and leucomalachite green.
- For 'other substances' (B3f), non-compliant targeted samples were reported for bovines (1.31%), eggs (0.07%), wild game (12.70%), honey (1.50%) and sheep and goats (1.10%). The substances identified were copper compounds, acetamiprid, didecyldimethylammonium chloride and fipronil.
- Overall, for all sampling strategies, the percentage of non-compliant samples in 2021 (0.17%) was lower compared to the previous 12 years (0.19%-0.37%); the same is true for what it concerns the targeted samples, for which the sample non-compliance rate was 0.24% in 2021 while it decreased from 0.35% in 2017 to 0.27% in 2020.
- Compared to the results from 2017 to 2020, in 2021 the frequency of non-compliant targeted samples was decreased for antithyroid agents (A2), while for steroids (A3) and resorcylic acid lactones (A4) the frequency of non-compliant results was higher than in 2020, but lower compared to the previous years. For prohibited substances (A6),



compared to 2020 the frequency on non-compliance in 2021 was higher, although in line with that of 2017 and 2018.

- Decreases compared to all previous years were noted for targeted samples for other substances and environmental contaminants (B3), chemical elements (including metals) (B3c) and dyes (B3e).
- Compared to 2020, for antibacterials (B1), anthelmintics (B2a), pyrethroids (B2c) and sedatives (B2d), the frequency on non-compliance was stable, while for anticoccidials (B2b), non-steroidal anti-inflammatory drugs (NSAIDs) (B2e), 'other pharmacologically active substances' (B2f), organochlorine compounds (B3a), organophosphorus compounds (B3b) and mycotoxins (B3d), the frequency on non-compliance targeted samples was higher. Finally a sharp increase compared to all previous years was found for 'other substances' (B3f).





## 5. Abbreviations

|          |  |
|----------|--|
| AMOZ     | 5-methylmorpholino-3-amino-2-oxazolidone       |
| AOZ      | 3-amino-2-oxazolidone                          |
| DG SANTÉ | Directorate General for Health and Food Safety |
| EC       | European Commission                            |
| EFSA     | European Food Safety Authority                 |
| IS       | Iceland  |
| MRL      | Maximum Residue Limit                          |
| MRL      | Maximum Residue Level                          |
| MS       | EU Member States                               |
| NO       | Norway   |
| NRCs     | National Residue Control Plans                 |
| NSAIDs   | Non-Steroidal Anti-Inflammatory Drugs          |
| RASFF    | Rapid Alert System for Food and Feed           |
| RPA      | Reference Points for Actions                   |
| SEM      | Semicarbazide                                  |
| TRACES   | Trade Control and Expert System                |



## 6. References

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## Appendix A – List of non-compliant results: targeted sampling

| Category           | Group            | Substance   | Country     | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|--------------------|------------------|---|-------------|------------------|-----------------------|--------------------------------|
| Aquaculture        | Group B3a        | DDT (sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-TDE (DDD) expressed as DDT) | Spain       | 16               | 1                     | 6.25                           |
| <b>Aquaculture</b> | <b>Group B3a</b> | <b>Sub-total for Group B3a</b>  | <b>1</b>    |                  | <b>1</b>              |                                |
| Aquaculture        | Group B3b        | Azinphos-ethyl  | Spain       | 6                | 1                     | 16.67                          |
| <b>Aquaculture</b> | <b>Group B3b</b> | <b>Sub-total for Group B3b</b>  | <b>1</b>    |                  | <b>1</b>              |                                |
| Aquaculture        | Group B3c        | Total mercury   | Spain       | 81               | 2                     | 2.47                           |
| <b>Aquaculture</b> | <b>Group B3c</b> | <b>Sub-total for Group B3c</b>  | <b>1</b>    |                  | <b>2</b>              |                                |
| Aquaculture        | Group B3e        | Sum of crystal violet and leucocristal violet                                 | Czechia     | 85               | 1                     | 1.18                           |
| Aquaculture        | Group B3e        | Sum of malachite green and leucomalachite green                               | Czechia     | 85               | 4                     | 4.71                           |
| Aquaculture        | Group B3e        | Sum of malachite green and leucomalachite green                               | Poland      | 222              | 3                     | 1.35                           |
| <b>Aquaculture</b> | <b>Group B3e</b> | <b>Sub-total for Group B3e</b>  | <b>2</b>    |                  | <b>8</b>              |                                |
| <b>Aquaculture</b> |                  | <b>Total for Aquaculture</b>  |             |                  | <b>12</b>             |                                |
| Bovines            | Group A2         | Thiouracil  | Ireland     | 278              | 3                     | 1.08                           |
| Bovines            | Group A2         | Thiouracil  | Netherlands | 213              | 25                    | 11.74                          |
| Bovines            | Group A2         | Thiouracil  | Poland      | 314              | 1                     | 0.32                           |
| Bovines            | Group A2         | Thiouracil  | Spain       | 573              | 1                     | 0.17                           |
| <b>Bovines</b>     | <b>Group A2</b>  | <b>Sub-total for Group A2</b>   | <b>4</b>    |                  | <b>30</b>             |                                |
| Bovines            | Group A3         | 17 $\alpha$ -Boldenone Glucuronide  | Netherlands | 12               | 1                     | 8.33                           |
| Bovines            | Group A3         | Boldenone-Alpha   | Austria     | 318              | 4                     | 1.26                           |
| Bovines            | Group A3         | Boldenone-Alpha   | Poland      | 284              | 4                     | 1.41                           |



| Category       | Group           | Substance                             | Country   | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|----------------|-----------------|---------------------------------------|-----------|------------------|-----------------------|--------------------------------|
| Bovines        | Group A3        | Epinandrolone (19-Norepitestosterone) | Poland    | 189              | 6                     | 3.17                           |
| Bovines        | Group A3        | Progesterone                          | Lithuania | 14               | 6                     | 42.86                          |
| Bovines        | Group A3        | Testosterone-17-Beta                  | Latvia    | 10               | 3                     | 30.00                          |
| Bovines        | Group A3        | Testosterone-17-Beta                  | Lithuania | 57               | 3                     | 5.26                           |
| Bovines        | Group A3        | Testosterone-17-Beta                  | Poland    | 188              | 3                     | 1.60                           |
| <b>Bovines</b> | <b>Group A3</b> | <b>Sub-total for Group A3</b>         | <b>5</b>  |                  | <b>30</b>             |                                |
| Bovines        | Group A4        | Alpha-Zearalanol (Zeranol)            | Romania   | 93               | 2                     | 2.15                           |
| Bovines        | Group A4        | Beta Zearalanol (Taleranol)           | Ireland   | 67               | 3                     | 4.48                           |
| Bovines        | Group A4        | Beta Zearalanol (Taleranol)           | Romania   | 93               | 2                     | 2.15                           |
| Bovines        | Group A4        | Zearalanol                            | Ireland   | 286              | 1                     | 0.35                           |
| Bovines        | Group A4        | Zearalanone                           | Ireland   | 67               | 2                     | 2.99                           |
| Bovines        | Group A4        | Zearalenol alpha                      | Ireland   | 67               | 4                     | 5.97                           |
| Bovines        | Group A4        | Zearalenol alpha                      | Romania   | 30               | 1                     | 3.33                           |
| Bovines        | Group A4        | Zearalenol beta                       | Ireland   | 67               | 4                     | 5.97                           |
| Bovines        | Group A4        | Zearalenol beta                       | Romania   | 30               | 2                     | 6.67                           |
| <b>Bovines</b> | <b>Group A4</b> | <b>Sub-total for Group A4</b>         | <b>2</b>  |                  | <b>21</b>             |                                |
| Bovines        | Group A5        | Clenbuterol                           | Germany   | 1,219            | 1                     | 0.08                           |
| Bovines        | Group A5        | Salbutamol (albuterol)                | Portugal  | 314              | 1                     | 0.32                           |
| <b>Bovines</b> | <b>Group A5</b> | <b>Sub-total for Group A5</b>         | <b>2</b>  |                  | <b>2</b>              |                                |
| Bovines        | Group A6        | Chloramphenicol                       | Germany   | 2,932            | 1                     | 0.03                           |
| Bovines        | Group A6        | SEM (semicarbazide)                   | Czechia   | 14               | 1                     | 7.14                           |
| Bovines        | Group A6        | SEM (semicarbazide)                   | Ireland   | 335              | 2                     | 0.60                           |
| Bovines        | Group A6        | SEM (semicarbazide)                   | Poland    | 238              | 1                     | 0.42                           |
| <b>Bovines</b> | <b>Group A6</b> | <b>Sub-total for Group A6</b>         | <b>4</b>  |                  | <b>5</b>              |                                |



| Category       | Group           | Substance  | Country  | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|----------------|-----------------|--|----------|------------------|-----------------------|--------------------------------|
| Bovines        | Group B1        | Benzylpenicillin (Penicillin G)                                      | Germany  | 2,387            | 1                     | 0.04                           |
| Bovines        | Group B1        | Benzylpenicillin (Penicillin G)                                      | Spain    | 1,336            | 1                     | 0.07                           |
| Bovines        | Group B1        | Dihydrostreptomycin  | Czechia  | 143              | 1                     | 0.70                           |
| Bovines        | Group B1        | Dihydrostreptomycin  | France   | 1,786            | 2                     | 0.11                           |
| Bovines        | Group B1        | Dihydrostreptomycin  | Poland   | 1,220            | 1                     | 0.08                           |
| Bovines        | Group B1        | Marbofloxacin  | Ireland  | 1,564            | 1                     | 0.06                           |
| Bovines        | Group B1        | Neomycin   | Poland   | 918              | 1                     | 0.11                           |
| Bovines        | Group B1        | Sulfadimidine  | France   | 1,784            | 1                     | 0.06                           |
| Bovines        | Group B1        | Sum of enrofloxacin and ciprofloxacin                                | Italy    | 830              | 1                     | 0.12                           |
| Bovines        | Group B1        | Sum of enrofloxacin and ciprofloxacin                                | Spain    | 1,648            | 2                     | 0.12                           |
| Bovines        | Group B1        | Sum of florfenicol and its metabolites measured as florfenicol-amine | France   | 1,785            | 5                     | 0.28                           |
| Bovines        | Group B1        | Sum of oxytetracycline and its 4-epimer                              | Cyprus   | 15               | 1                     | 6.67                           |
| Bovines        | Group B1        | Sum of oxytetracycline and its 4-epimer                              | France   | 1,781            | 7                     | 0.39                           |
| Bovines        | Group B1        | Sum of oxytetracycline and its 4-epimer                              | Poland   | 1,219            | 3                     | 0.25                           |
| Bovines        | Group B1        | Sum of spiramycin and neospiramycin                                  | France   | 1,786            | 2                     | 0.11                           |
| Bovines        | Group B1        | Sum of spiramycin and neospiramycin                                  | Spain    | 987              | 1                     | 0.10                           |
| Bovines        | Group B1        | Tulathromycin  | Czechia  | 143              | 1                     | 0.70                           |
| Bovines        | Group B1        | Tulathromycin  | France   | 1,786            | 2                     | 0.11                           |
| Bovines        | Group B1        | Tulathromycin  | Germany  | 2,385            | 2                     | 0.08                           |
| Bovines        | Group B1        | Tylon (Tylosin, Tylosin A)   | France   | 1,786            | 1                     | 0.06                           |
| <b>Bovines</b> | <b>Group B1</b> | <b>Sub-total for Group B1</b>  | <b>8</b> |                  | <b>37</b>             |                                |



| Category       | Group            | Substance   | Country          | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|----------------|------------------|---|------------------|------------------|-----------------------|--------------------------------|
| Bovines        | Group B2a        | Levamisole  | France           | 327              | 1                     | 0.31                           |
| Bovines        | Group B2a        | Levamisole  | Northern Ireland |                  | 1                     |                                |
| Bovines        | Group B2a        | Oxyclozanide  | Northern Ireland |                  | 1                     |                                |
| <b>Bovines</b> | <b>Group B2a</b> | <b>Sub-total for Group B2a</b>                      | <b>2</b>         |                  | <b>3</b>              |                                |
| Bovines        | Group B2e        | Acetaminophen (Paracetamol)                         | Germany          | 3                | 3                     | 100.00                         |
| Bovines        | Group B2e        | Acetaminophen (Paracetamol)                         | Netherlands      | 307              | 1                     | 0.33                           |
| Bovines        | Group B2e        | Antipyrin-4-Methylamino                             | Germany          | 359              | 3                     | 0.84                           |
| Bovines        | Group B2e        | Diclofen (Diclofenac)                               | France           | 876              | 1                     | 0.11                           |
| Bovines        | Group B2e        | Diclofen (Diclofenac)                               | Greece           | 6                | 1                     | 16.67                          |
| Bovines        | Group B2e        | Ibuprofen   | Finland          | 69               | 1                     | 1.45                           |
| Bovines        | Group B2e        | Meloxicam   | Belgium          | 89               | 1                     | 1.12                           |
| Bovines        | Group B2e        | Meloxicam   | France           | 876              | 2                     | 0.23                           |
| Bovines        | Group B2e        | Meloxicam   | Germany          | 1,651            | 11                    | 0.67                           |
| Bovines        | Group B2e        | Naproxen  | Austria          | 106              | 1                     | 0.94                           |
| Bovines        | Group B2e        | Paracetamol-glucuronide (Acetaminophen glucuronide) | Netherlands      | 2                | 1                     | 50.00                          |
| Bovines        | Group B2e        | Paracetamol-sulfate (Acetaminophen sulfate)         | Netherlands      | 2                | 1                     | 50.00                          |
| <b>Bovines</b> | <b>Group B2e</b> | <b>Sub-total for Group B2e</b>                      | <b>7</b>         |                  | <b>27</b>             |                                |
| Bovines        | Group B2f        | Dexamethasone                                       | France           | 669              | 4                     | 0.60                           |
| Bovines        | Group B2f        | Dexamethasone                                       | Germany          | 1,117            | 9                     | 0.81                           |
| Bovines        | Group B2f        | Dexamethasone                                       | Italy            | 1,873            | 2                     | 0.11                           |
| Bovines        | Group B2f        | Dexamethasone                                       | Poland           | 134              | 2                     | 1.49                           |
| Bovines        | Group B2f        | Dexamethasone                                       | Spain            | 747              | 2                     | 0.27                           |
| <b>Bovines</b> | <b>Group B2f</b> | <b>Sub-total for Group B2f</b>                      | <b>5</b>         |                  | <b>19</b>             |                                |
| Bovines        | Group B3a        | 1,2,3,4,6,7,8-HpCDD                                 | France           | 181              | 2                     | 1.10                           |



| Category | Group     | Substance                      | Country | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|----------|-----------|--------------------------------|---------|------------------|-----------------------|--------------------------------|
| Bovines  | Group B3a | 1,2,3,4,6,7,8-HpCDF            | France  | 181              | 2                     | 1.10                           |
| Bovines  | Group B3a | 1,2,3,4,7,8-HxCDD              | France  | 181              | 1                     | 0.55                           |
| Bovines  | Group B3a | 1,2,3,4,7,8-HxCDF              | France  | 181              | 2                     | 1.10                           |
| Bovines  | Group B3a | 1,2,3,6,7,8-HxCDD              | France  | 181              | 2                     | 1.10                           |
| Bovines  | Group B3a | 1,2,3,6,7,8-HxCDF              | France  | 181              | 2                     | 1.10                           |
| Bovines  | Group B3a | 1,2,3,7,8,9-HxCDD              | France  | 181              | 2                     | 1.10                           |
| Bovines  | Group B3a | 1,2,3,7,8-PeCDD                | France  | 181              | 1                     | 0.55                           |
| Bovines  | Group B3a | 2,3,4,6,7,8-HxCDF              | France  | 181              | 2                     | 1.10                           |
| Bovines  | Group B3a | 2,3,4,7,8-PeCDF                | France  | 181              | 2                     | 1.10                           |
| Bovines  | Group B3a | Non-dioxin-like PCBs LB        | France  | 349              | 2                     | 0.57                           |
| Bovines  | Group B3a | Non-dioxin-like PCBs MB        | France  | 367              | 2                     | 0.54                           |
| Bovines  | Group B3a | Non-dioxin-like PCBs UB        | France  | 367              | 1                     | 0.27                           |
| Bovines  | Group B3a | OCDD                           | France  | 181              | 2                     | 1.10                           |
| Bovines  | Group B3a | PCB-101                        | France  | 367              | 2                     | 0.54                           |
| Bovines  | Group B3a | PCB-138                        | France  | 367              | 2                     | 0.54                           |
| Bovines  | Group B3a | PCB-153                        | France  | 367              | 2                     | 0.54                           |
| Bovines  | Group B3a | PCB-180                        | France  | 367              | 2                     | 0.54                           |
| Bovines  | Group B3a | PCB-28                         | France  | 367              | 2                     | 0.54                           |
| Bovines  | Group B3a | PCB-52                         | France  | 367              | 2                     | 0.54                           |
| Bovines  | Group B3a | TEQ Dioxin-like PCBs LB        | France  | 181              | 2                     | 1.10                           |
| Bovines  | Group B3a | TEQ Dioxin-like PCBs MB        | France  | 181              | 2                     | 1.10                           |
| Bovines  | Group B3a | TEQ Dioxin-like PCBs UB        | France  | 181              | 2                     | 1.10                           |
| Bovines  | Group B3a | TEQ dioxins (PCDD and PCDF) MB | France  | 181              | 2                     | 1.10                           |
| Bovines  | Group B3a | TEQ dioxins (PCDD and PCDF) UB | France  | 181              | 1                     | 0.55                           |



| Category       | Group            | Substance                           | Country     | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|----------------|------------------|-------------------------------------|-------------|------------------|-----------------------|--------------------------------|
| Bovines        | Group B3a        | TEQ dioxins and dioxin-like PCBs LB | France      | 171              | 2                     | 1.17                           |
| Bovines        | Group B3a        | TEQ dioxins and dioxin-like PCBs UB | France      | 181              | 2                     | 1.10                           |
| <b>Bovines</b> | <b>Group B3a</b> | <b>Sub-total for Group B3a</b>      | <b>1</b>    |                  | <b>50</b>             |                                |
| Bovines        | Group B3c        | Cadmium (Cd)                        | Croatia     | 14               | 1                     | 7.14                           |
| Bovines        | Group B3c        | Cadmium (Cd)                        | Czechia     | 65               | 3                     | 4.62                           |
| Bovines        | Group B3c        | Cadmium (Cd)                        | France      | 654              | 1                     | 0.15                           |
| Bovines        | Group B3c        | Cadmium (Cd)                        | Germany     | 277              | 3                     | 1.08                           |
| Bovines        | Group B3c        | Cadmium (Cd)                        | Netherlands | 197              | 25                    | 12.69                          |
| Bovines        | Group B3c        | Cadmium (Cd)                        | Slovakia    | 19               | 1                     | 5.26                           |
| Bovines        | Group B3c        | Cadmium (Cd)                        | Spain       | 197              | 13                    | 6.60                           |
| Bovines        | Group B3c        | Copper (Cu)                         | Austria     | 233              | 5                     | 2.15                           |
| Bovines        | Group B3c        | Copper (Cu)                         | Czechia     | 14               | 1                     | 7.14                           |
| Bovines        | Group B3c        | Copper (Cu)                         | Germany     | 277              | 44                    | 15.88                          |
| Bovines        | Group B3c        | Copper (Cu)                         | Slovenia    | 7                | 1                     | 14.29                          |
| Bovines        | Group B3c        | Lead (Pb)                           | Austria     | 232              | 1                     | 0.43                           |
| Bovines        | Group B3c        | Lead (Pb)                           | France      | 654              | 1                     | 0.15                           |
| Bovines        | Group B3c        | Lead (Pb)                           | Germany     | 277              | 1                     | 0.36                           |
| Bovines        | Group B3c        | Lead (Pb)                           | Netherlands | 197              | 4                     | 2.03                           |
| Bovines        | Group B3c        | Total mercury                       | Germany     | 277              | 2                     | 0.72                           |
| Bovines        | Group B3c        | Total mercury                       | Netherlands | 197              | 3                     | 1.52                           |
| <b>Bovines</b> | <b>Group B3c</b> | <b>Sub-total for Group B3c</b>      | <b>9</b>    |                  | <b>110</b>            |                                |
| Bovines        | Group B3d        | Zearalenone                         | Ireland     | 67               | 4                     | 5.97                           |
| Bovines        | Group B3d        | Zearalenone                         | Romania     | 30               | 2                     | 6.67                           |
| <b>Bovines</b> | <b>Group B3d</b> | <b>Sub-total for Group B3d</b>      | <b>2</b>    |                  | <b>6</b>              |                                |
| Bovines        | Group B3f        | Copper compounds (Copper)           | Denmark     | 24               | 10                    | 41.67                          |





| Category       | Group            | Substance   | Country     | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|----------------|------------------|---|-------------|------------------|-----------------------|--------------------------------|
| Bovines        | Group B3f        | Didecyldimethylammonium chloride (mixture of alkyl-quaternary ammonium salts with alkyl chain lengths of C8, C10 and C12) | Netherlands | 111              | 1                     | 0.90                           |
| <b>Bovines</b> | <b>Group B3f</b> | <b>Sub-total for Group B3f</b>  | <b>2</b>    |                  | <b>11</b>             |                                |
| <b>Bovines</b> |                  | <b>Total for Bovines</b>  |             |                  | <b>351</b>            |                                |
| Eggs           | Group A6         | Metronidazole   | France      | 149              | 4                     | 2.68                           |
| <b>Eggs</b>    | <b>Group A6</b>  | <b>Sub-total for Group A6</b>   | <b>1</b>    |                  | <b>4</b>              |                                |
| Eggs           | Group B1         | Doxycycline   | Belgium     | 121              | 3                     | 2.48                           |
| Eggs           | Group B1         | Doxycycline   | Poland      | 295              | 2                     | 0.68                           |
| Eggs           | Group B1         | Doxycycline   | Spain       | 421              | 2                     | 0.48                           |
| Eggs           | Group B1         | Sulfadiazine  | Spain       | 462              | 7                     | 1.52                           |
| Eggs           | Group B1         | Sum of enrofloxacin and ciprofloxacin   | Poland      | 295              | 1                     | 0.34                           |
| Eggs           | Group B1         | Trimethoprim  | Spain       | 396              | 2                     | 0.51                           |
| <b>Eggs</b>    | <b>Group B1</b>  | <b>Sub-total for Group B1</b>   | <b>3</b>    |                  | <b>17</b>             |                                |
| Eggs           | Group B2b        | Decoquinat  | Poland      | 269              | 1                     | 0.37                           |
| Eggs           | Group B2b        | Diclazuril  | Croatia     | 170              | 1                     | 0.59                           |
| Eggs           | Group B2b        | Lasalocid   | Iceland     | 80               | 1                     | 1.25                           |
| Eggs           | Group B2b        | Monensin  | Poland      | 269              | 1                     | 0.37                           |
| Eggs           | Group B2b        | Narasin   | Croatia     | 170              | 1                     | 0.59                           |
| Eggs           | Group B2b        | Narasin   | Portugal    | 142              | 1                     | 0.70                           |
| Eggs           | Group B2b        | Nicarbazin  | Croatia     | 170              | 1                     | 0.59                           |
| Eggs           | Group B2b        | Salinomycin   | France      | 554              | 1                     | 0.18                           |
| Eggs           | Group B2b        | Salinomycin   | Latvia      | 145              | 1                     | 0.69                           |
| Eggs           | Group B2b        | Salinomycin   | Poland      | 269              | 7                     | 2.60                           |
| Eggs           | Group B2b        | Salinomycin   | Slovenia    | 180              | 1                     | 0.56                           |
| Eggs           | Group B2b        | Salinomycin sodium  | Latvia      | 4                | 2                     | 50.00                          |
| Eggs           | Group B2b        | Salinomycin sodium  | Malta       | 140              | 4                     | 2.86                           |



| Category                  | Group            | Substance   | Country  | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|---------------------------|------------------|---|----------|------------------|-----------------------|--------------------------------|
| Eggs                      | Group B2b        | Toltrazuril sulfoxide   | Slovenia | 1                | 1                     | 100.00                         |
| Eggs                      | Group B2b        | Toltrazurilsulfon   | Estonia  | 43               | 1                     | 2.33                           |
| Eggs                      | Group B2b        | Toltrazurilsulfon   | Slovenia | 1                | 1                     | 100.00                         |
| <b>Eggs</b>               | <b>Group B2b</b> | <b>Sub-total for Group B2b</b>  | <b>9</b> |                  | <b>26</b>             |                                |
| Eggs                      | Group B3a        | DDT (sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-TDE (DDD) expressed as DDT) | Slovakia | 35               | 1                     | 2.86                           |
| Eggs                      | Group B3a        | TEQ Dioxins and dioxin-like PCBs MB   | Germany  | 122              | 2                     | 1.64                           |
| Eggs                      | Group B3a        | TEQ dioxins (PCDD and PCDF) MB  | Germany  | 122              | 1                     | 0.82                           |
| Eggs                      | Group B3a        | TEQ dioxins (PCDD and PCDF) UB  | Germany  | 156              | 1                     | 0.64                           |
| Eggs                      | Group B3a        | TEQ dioxins and dioxin-like PCBs LB   | Germany  | 88               | 1                     | 1.14                           |
| Eggs                      | Group B3a        | TEQ dioxins and dioxin-like PCBs UB   | Germany  | 156              | 1                     | 0.64                           |
| <b>Eggs</b>               | <b>Group B3a</b> | <b>Sub-total for Group B3a</b>  | <b>2</b> |                  | <b>7</b>              |                                |
| Eggs                      | Group B3f        | Fipronil (sum fipronil + sulfone metabolite (MB46136) expressed as fipronil)  | Slovenia | 20               | 1                     | 5.00                           |
| <b>Eggs</b>               | <b>Group B3f</b> | <b>Sub-total for Group B3f</b>  | <b>1</b> |                  | <b>1</b>              |                                |
| <b>Eggs</b>               |                  | <b>Total for Eggs</b>   |          |                  | <b>55</b>             |                                |
| Game (Farmed Game)        | Group B2a        | Avermectin B1a-22-23-Dihydro  | Finland  | 42               | 1                     | 2.38                           |
| <b>Game (Farmed Game)</b> | <b>Group B2a</b> | <b>Sub-total for Group B2a</b>  | <b>1</b> |                  | <b>1</b>              |                                |
| Game (Farmed Game)        | Group B3a        | Hexachlorobenzene   | Finland  | 10               | 1                     | 10.00                          |
| Game (Farmed Game)        | Group B3a        | Hexachlorobenzene   | Sweden   | 10               | 5                     | 50.00                          |
| <b>Game (Farmed Game)</b> | <b>Group B3a</b> | <b>Sub-total for Group B3a</b>  | <b>2</b> |                  | <b>6</b>              |                                |



| Category                  | Group            | Substance   | Country  | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|---------------------------|------------------|---|----------|------------------|-----------------------|--------------------------------|
| Game (Farmed Game)        | Group B3c        | Cadmium (Cd)  | Finland  | 31               | 13                    | 41.94                          |
| Game (Farmed Game)        | Group B3c        | Copper (Cu)   | Germany  | 27               | 1                     | 3.70                           |
| Game (Farmed Game)        | Group B3c        | Lead (Pb)   | Czechia  | 12               | 1                     | 8.33                           |
| Game (Farmed Game)        | Group B3c        | Lead (Pb)   | France   | 12               | 2                     | 16.67                          |
| <b>Game (Farmed Game)</b> | <b>Group B3c</b> | <b>Sub-total for Group B3c</b>  | <b>4</b> |                  | <b>17</b>             |                                |
| <b>Game (Farmed Game)</b> |                  | <b>Total for Game (Farmed Game)</b>   |          |                  | <b>24</b>             |                                |
| Game (Wild Game)          | Group B3a        | DDT (sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-TDE (DDD) expressed as DDT) | Czechia  | 17               | 1                     | 5.88                           |
| Game (Wild Game)          | Group B3a        | DDT (sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-TDE (DDD) expressed as DDT) | Germany  | 86               | 9                     | 10.47                          |
| Game (Wild Game)          | Group B3a        | DDT (sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-TDE (DDD) expressed as DDT) | Slovakia | 23               | 1                     | 4.35                           |
| Game (Wild Game)          | Group B3a        | Hexachlorobenzene   | Germany  | 86               | 2                     | 2.33                           |
| Game (Wild Game)          | Group B3a        | Hexachlorocyclohexane (HCH), alpha-isomer                                     | Germany  | 86               | 1                     | 1.16                           |
| Game (Wild Game)          | Group B3a        | Hexachlorocyclohexane (HCH), beta-isomer                                      | Germany  | 86               | 2                     | 2.33                           |
| Game (Wild Game)          | Group B3a        | Lindane (Gamma-isomer of hexachlorocyclohexane (HCH))                         | Germany  | 86               | 1                     | 1.16                           |
| <b>Game (Wild Game)</b>   | <b>Group B3a</b> | <b>Sub-total for Group B3a</b>  | <b>3</b> |                  | <b>17</b>             |                                |
| Game (Wild Game)          | Group B3c        | Cadmium (Cd)  | France   | 66               | 4                     | 6.06                           |
| Game (Wild Game)          | Group B3c        | Cadmium (Cd)  | Latvia   | 105              | 35                    | 33.33                          |
| Game (Wild Game)          | Group B3c        | Cadmium (Cd)  | Poland   | 196              | 1                     | 0.51                           |



| Category                | Group            | Substance                         | Country     | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|-------------------------|------------------|-----------------------------------|-------------|------------------|-----------------------|--------------------------------|
| Game (Wild Game)        | Group B3c        | Cadmium (Cd)                      | Spain       | 78               | 4                     | 5.13                           |
| Game (Wild Game)        | Group B3c        | Copper (Cu)                       | Netherlands | 82               | 1                     | 1.22                           |
| Game (Wild Game)        | Group B3c        | Lead (Pb)                         | Austria     | 165              | 4                     | 2.42                           |
| Game (Wild Game)        | Group B3c        | Lead (Pb)                         | Croatia     | 18               | 1                     | 5.56                           |
| Game (Wild Game)        | Group B3c        | Lead (Pb)                         | Czechia     | 100              | 1                     | 1.00                           |
| Game (Wild Game)        | Group B3c        | Lead (Pb)                         | France      | 66               | 16                    | 24.24                          |
| Game (Wild Game)        | Group B3c        | Lead (Pb)                         | Greece      | 21               | 3                     | 14.29                          |
| Game (Wild Game)        | Group B3c        | Lead (Pb)                         | Latvia      | 105              | 5                     | 4.76                           |
| Game (Wild Game)        | Group B3c        | Lead (Pb)                         | Portugal    | 61               | 3                     | 4.92                           |
| Game (Wild Game)        | Group B3c        | Lead (Pb)                         | Slovakia    | 92               | 1                     | 1.09                           |
| Game (Wild Game)        | Group B3c        | Lead (Pb)                         | Slovenia    | 101              | 2                     | 1.98                           |
| Game (Wild Game)        | Group B3c        | Lead (Pb)                         | Spain       | 78               | 1                     | 1.28                           |
| Game (Wild Game)        | Group B3c        | Lead (Pb)                         | Sweden      | 94               | 3                     | 3.19                           |
| Game (Wild Game)        | Group B3c        | Total mercury                     | Germany     | 88               | 2                     | 2.27                           |
| Game (Wild Game)        | Group B3c        | Total mercury                     | Slovakia    | 92               | 1                     | 1.09                           |
| <b>Game (Wild Game)</b> | <b>Group B3c</b> | <b>Sub-total for Group B3c</b>    | <b>14</b>   |                  | <b>88</b>             |                                |
| Game (Wild Game)        | Group B3f        | Copper compounds (Copper)         | Denmark     | 8                | 8                     | 100.00                         |
| <b>Game (Wild Game)</b> | <b>Group B3f</b> | <b>Sub-total for Group B3f</b>    | <b>1</b>    |                  | <b>8</b>              |                                |
| <b>Game (Wild Game)</b> |                  | <b>Total for Game (Wild Game)</b> |             |                  | <b>113</b>            |                                |
| Honey                   | Group A6         | AOZ (3-amino-2-oxazolidone)       | Ireland     | 10               | 1                     | 10.00                          |
| <b>Honey</b>            | <b>Group A6</b>  | <b>Sub-total for Group A6</b>     | <b>1</b>    |                  | <b>1</b>              |                                |
| Honey                   | Group B1         | Doxycycline                       | Spain       | 70               | 2                     | 2.86                           |



| Category     | Group            | Substance  | Country  | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|--------------|------------------|--|----------|------------------|-----------------------|--------------------------------|
| Honey        | Group B1         | Streptomycin   | Poland   | 45               | 1                     | 2.22                           |
| Honey        | Group B1         | Sulfacetamide  | Poland   | 232              | 2                     | 0.86                           |
| Honey        | Group B1         | Sulfachlorpyrazine   | Poland   | 45               | 2                     | 4.44                           |
| Honey        | Group B1         | Sulfadimethoxine   | Hungary  | 47               | 2                     | 4.26                           |
| Honey        | Group B1         | Sulfamethazine (sulfadimidin)  | Poland   | 231              | 3                     | 1.30                           |
| Honey        | Group B1         | Sulfamonomethoxine   | Croatia  | 49               | 1                     | 2.04                           |
| Honey        | Group B1         | Sulfathiazole  | Poland   | 232              | 2                     | 0.86                           |
| Honey        | Group B1         | Sulfonamides   | Croatia  | 1                | 1                     | 100.00                         |
| Honey        | Group B1         | Sum of oxytetracycline and its 4-epimer  | Romania  | 90               | 1                     | 1.11                           |
| Honey        | Group B1         | Trimethoprim   | Hungary  | 47               | 2                     | 4.26                           |
| Honey        | Group B1         | Tylon (Tylosin, Tylosin A)   | Romania  | 90               | 2                     | 2.22                           |
| <b>Honey</b> | <b>Group B1</b>  | <b>Sub-total for Group B1</b>  | <b>5</b> |                  | <b>21</b>             |                                |
| Honey        | Group B2f        | Amitraz (amitraz including the metabolites containing the 2,4-dimethylaniline moiety expressed as amitraz) | Cyprus   | 17               | 3                     | 17.65                          |
| <b>Honey</b> | <b>Group B2f</b> | <b>Sub-total for Group B2f</b>   | <b>1</b> |                  | <b>3</b>              |                                |
| Honey        | Group B3c        | Copper (Cu)  | Germany  | 26               | 12                    | 46.15                          |
| Honey        | Group B3c        | Lead (Pb)  | Austria  | 74               | 1                     | 1.35                           |
| Honey        | Group B3c        | Lead (Pb)  | Greece   | 28               | 1                     | 3.57                           |
| Honey        | Group B3c        | Lead (Pb)  | Portugal | 16               | 1                     | 6.25                           |
| Honey        | Group B3c        | Lead (Pb)  | Sweden   | 11               | 1                     | 9.09                           |
| <b>Honey</b> | <b>Group B3c</b> | <b>Sub-total for Group B3c</b>   | <b>5</b> |                  | <b>16</b>             |                                |
| Honey        | Group B3f        | Acetamiprid  | Slovakia | 11               | 1                     | 9.09                           |
| Honey        | Group B3f        | Copper compounds (Copper)  | Denmark  | 16               | 12                    | 75.00                          |
| <b>Honey</b> | <b>Group B3f</b> | <b>Sub-total for Group B3f</b>   | <b>2</b> |                  | <b>13</b>             |                                |
| <b>Honey</b> |                  | <b>Total for Honey</b>   |          |                  | <b>54</b>             |                                |



| Category      | Group            | Substance                       | Country     | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|---------------|------------------|---------------------------------|-------------|------------------|-----------------------|--------------------------------|
| Horses        | Group A6         | Chloramphenicol                 | Netherlands | 3                | 1                     | 33.33                          |
| <b>Horses</b> | <b>Group A6</b>  | <b>Sub-total for Group A6</b>   | <b>1</b>    |                  | <b>1</b>              |                                |
| Horses        | Group B2e        | Diclofen (Diclofenac)           | Austria     | 23               | 1                     | 4.35                           |
| Horses        | Group B2e        | Oxyphenbutazone Anhydrate       | Germany     | 13               | 1                     | 7.69                           |
| Horses        | Group B2e        | Oxyphenbutazone Anhydrate       | Ireland     | 64               | 1                     | 1.56                           |
| Horses        | Group B2e        | Phenylbutazone                  | Germany     | 24               | 1                     | 4.17                           |
| Horses        | Group B2e        | Phenylbutazone                  | Ireland     | 64               | 1                     | 1.56                           |
| <b>Horses</b> | <b>Group B2e</b> | <b>Sub-total for Group B2e</b>  | <b>3</b>    |                  | <b>5</b>              |                                |
| Horses        | Group B3c        | Cadmium (Cd)                    | Germany     | 7                | 6                     | 85.71                          |
| Horses        | Group B3c        | Cadmium (Cd)                    | Italy       | 85               | 1                     | 1.18                           |
| Horses        | Group B3c        | Cadmium (Cd)                    | Romania     | 13               | 1                     | 7.69                           |
| Horses        | Group B3c        | Cadmium (Cd)                    | Slovenia    | 6                | 3                     | 50.00                          |
| Horses        | Group B3c        | Cadmium (Cd)                    | Spain       | 16               | 5                     | 31.25                          |
| Horses        | Group B3c        | Lead (Pb)                       | Spain       | 16               | 1                     | 6.25                           |
| Horses        | Group B3c        | Total mercury                   | Germany     | 7                | 4                     | 57.14                          |
| <b>Horses</b> | <b>Group B3c</b> | <b>Sub-total for Group B3c</b>  | <b>5</b>    |                  | <b>21</b>             |                                |
| <b>Horses</b> |                  | <b>Total for Horses</b>         |             |                  | <b>27</b>             |                                |
| Milk          | Group A6         | Chloramphenicol                 | Malta       | 184              | 3                     | 1.63                           |
| Milk          | Group A6         | SEM (semicarbazide)             | Croatia     | 115              | 1                     | 0.87                           |
| <b>Milk</b>   | <b>Group A6</b>  | <b>Sub-total for Group A6</b>   | <b>2</b>    |                  | <b>4</b>              |                                |
| Milk          | Group B1         | Amoxicillin                     | Italy       | 339              | 1                     | 0.29                           |
| Milk          | Group B1         | Amoxicillin                     | Poland      | 1,409            | 1                     | 0.07                           |
| Milk          | Group B1         | Benzylpenicillin (Penicillin G) | Cyprus      | 85               | 1                     | 1.18                           |
| Milk          | Group B1         | Benzylpenicillin (Penicillin G) | Finland     | 304              | 1                     | 0.33                           |
| Milk          | Group B1         | Benzylpenicillin (Penicillin G) | Poland      | 1,409            | 1                     | 0.07                           |
| Milk          | Group B1         | Cefquinom                       | Luxembourg  | 105              | 1                     | 0.95                           |
| Milk          | Group B1         | Tulathromycin                   | Italy       | 174              | 1                     | 0.57                           |



| Category    | Group            | Substance   | Country     | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|-------------|------------------|---|-------------|------------------|-----------------------|--------------------------------|
| <b>Milk</b> | <b>Group B1</b>  | <b>Sub-total for Group B1</b>   | <b>5</b>    |                  | <b>7</b>              |                                |
| Milk        | Group B2a        | Levamisole  | Ireland     | 406              | 2                     | 0.49                           |
| Milk        | Group B2a        | Sum of albendazole sulphoxide, albendazole sulphone, and albendazole 2-amino sulphone, expressed as albendazole | Italy       | 44               | 1                     | 2.27                           |
| <b>Milk</b> | <b>Group B2a</b> | <b>Sub-total for Group B2a</b>  | <b>2</b>    |                  | <b>3</b>              |                                |
| Milk        | Group B2e        | Acetaminophen (Paracetamol)   | Germany     | 87               | 1                     | 1.15                           |
| Milk        | Group B2e        | Diclofen (Diclofenac)   | Croatia     | 136              | 1                     | 0.74                           |
| Milk        | Group B2e        | Diclofen (Diclofenac)   | Cyprus      | 42               | 1                     | 2.38                           |
| Milk        | Group B2e        | Diclofen (Diclofenac)   | Finland     | 124              | 3                     | 2.42                           |
| Milk        | Group B2e        | Diclofen (Diclofenac)   | Germany     | 1,556            | 2                     | 0.13                           |
| Milk        | Group B2e        | Diclofen (Diclofenac)   | Greece      | 42               | 1                     | 2.38                           |
| Milk        | Group B2e        | Diclofen (Diclofenac)   | Malta       | 209              | 6                     | 2.87                           |
| Milk        | Group B2e        | Diclofen (Diclofenac)   | Slovenia    | 202              | 1                     | 0.50                           |
| Milk        | Group B2e        | Ketoprofen  | Croatia     | 136              | 2                     | 1.47                           |
| Milk        | Group B2e        | Salicylic acid  | Belgium     | 34               | 5                     | 14.71                          |
| Milk        | Group B2e        | Salicylic acid  | Denmark     | 142              | 1                     | 0.70                           |
| Milk        | Group B2e        | Salicylic acid  | Netherlands | 608              | 2                     | 0.33                           |
| Milk        | Group B2e        | Salicylic acid  | Norway      | 214              | 1                     | 0.47                           |
| <b>Milk</b> | <b>Group B2e</b> | <b>Sub-total for Group B2e</b>  | <b>11</b>   |                  | <b>27</b>             |                                |
| Milk        | Group B3d        | Aflatoxin M1  | Croatia     | 71               | 2                     | 2.82                           |
| Milk        | Group B3d        | Aflatoxin M1  | Greece      | 89               | 4                     | 4.49                           |
| <b>Milk</b> | <b>Group B3d</b> | <b>Sub-total for Group B3d</b>  | <b>2</b>    |                  | <b>6</b>              |                                |
| <b>Milk</b> |                  | <b>Total for Milk</b>   |             |                  | <b>47</b>             |                                |
| Pigs        | Group A3         | Boldenone   | Austria     | 152              | 1                     | 0.66                           |



| Category    | Group           | Substance                       | Country     | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|-------------|-----------------|---------------------------------|-------------|------------------|-----------------------|--------------------------------|
| Pigs        | Group A3        | Boldenone                       | Ireland     | 30               | 1                     | 3.33                           |
| Pigs        | Group A3        | Boldenone                       | Spain       | 18               | 2                     | 11.11                          |
| Pigs        | Group A3        | Nandrolone                      | Austria     | 152              | 1                     | 0.66                           |
| Pigs        | Group A3        | Nandrolone                      | Ireland     | 20               | 2                     | 10.00                          |
| Pigs        | Group A3        | Nandrolone                      | Lithuania   | 43               | 1                     | 2.33                           |
| Pigs        | Group A3        | Nandrolone                      | Poland      | 657              | 7                     | 1.07                           |
| Pigs        | Group A3        | Nandrolone                      | Spain       | 14               | 2                     | 14.29                          |
| Pigs        | Group A3        | Normethandrolone                | France      | 270              | 1                     | 0.37                           |
| Pigs        | Group A3        | Progesterone                    | Lithuania   | 13               | 5                     | 38.46                          |
| Pigs        | Group A3        | Progesterone-17-Alpha-Hydroxy   | Lithuania   | 5                | 2                     | 40.00                          |
| <b>Pigs</b> | <b>Group A3</b> | <b>Sub-total for Group A3</b>   | <b>6</b>    |                  | <b>25</b>             |                                |
| Pigs        | Group A4        | Zearalanone                     | Ireland     | 42               | 1                     | 2.38                           |
| Pigs        | Group A4        | Zearalenol alpha                | Ireland     | 42               | 1                     | 2.38                           |
| Pigs        | Group A4        | Zearalenol alpha                | Romania     | 64               | 2                     | 3.12                           |
| Pigs        | Group A4        | Zearalenol alpha                | Spain       | 2                | 1                     | 50.00                          |
| Pigs        | Group A4        | Zearalenol beta                 | Romania     | 64               | 2                     | 3.12                           |
| <b>Pigs</b> | <b>Group A4</b> | <b>Sub-total for Group A4</b>   | <b>3</b>    |                  | <b>7</b>              |                                |
| Pigs        | Group A6        | Chloramphenicol                 | Austria     | 1,498            | 1                     | 0.07                           |
| Pigs        | Group A6        | Chloramphenicol                 | Italy       | 705              | 2                     | 0.28                           |
| <b>Pigs</b> | <b>Group A6</b> | <b>Sub-total for Group A6</b>   | <b>2</b>    |                  | <b>3</b>              |                                |
| Pigs        | Group B1        | Ampicillin                      | Netherlands | 2,625            | 1                     | 0.04                           |
| Pigs        | Group B1        | Benzylpenicillin (Penicillin G) | Netherlands | 2,626            | 2                     | 0.08                           |
| Pigs        | Group B1        | Benzylpenicillin (Penicillin G) | Poland      | 2,335            | 2                     | 0.09                           |
| Pigs        | Group B1        | Dihydrostreptomycin             | Poland      | 2,493            | 2                     | 0.08                           |
| Pigs        | Group B1        | Doxycycline                     | Belgium     | 1,030            | 1                     | 0.10                           |
| Pigs        | Group B1        | Doxycycline                     | Italy       | 1,064            | 1                     | 0.09                           |
| Pigs        | Group B1        | Doxycycline                     | Poland      | 2,493            | 1                     | 0.04                           |
| Pigs        | Group B1        | Doxycycline                     | Portugal    | 670              | 1                     | 0.15                           |
| Pigs        | Group B1        | Doxycycline                     | Romania     | 9                | 1                     | 11.11                          |





| Category    | Group           | Substance   | Country     | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|-------------|-----------------|---|-------------|------------------|-----------------------|--------------------------------|
| Pigs        | Group B1        | Doxycycline   | Spain       | 4,496            | 3                     | 0.07                           |
| Pigs        | Group B1        | Lincomycin  | France      | 1,726            | 1                     | 0.06                           |
| Pigs        | Group B1        | Lincomycin  | Spain       | 4,035            | 1                     | 0.02                           |
| Pigs        | Group B1        | Marbofloxacin   | Spain       | 4,208            | 3                     | 0.07                           |
| Pigs        | Group B1        | Sulfadiazine  | Netherlands | 2,611            | 1                     | 0.04                           |
| Pigs        | Group B1        | Sulfadiazine  | Spain       | 4,322            | 1                     | 0.02                           |
| Pigs        | Group B1        | Sulfadimethoxine  | France      | 1,725            | 1                     | 0.06                           |
| Pigs        | Group B1        | Sulfonamides  | Belgium     | 1,037            | 1                     | 0.10                           |
| Pigs        | Group B1        | Sulfonamides  | Denmark     | 2,892            | 1                     | 0.03                           |
| Pigs        | Group B1        | Sulfonamides  | Germany     | 7,736            | 1                     | 0.01                           |
| Pigs        | Group B1        | Sulfonamides  | Italy       | 1,236            | 1                     | 0.08                           |
| Pigs        | Group B1        | Sum of chlortetracyclin and its 4-epimer                                  | Poland      | 2,493            | 2                     | 0.08                           |
| Pigs        | Group B1        | Sum of enrofloxacin and ciprofloxacin                                     | Spain       | 7,587            | 1                     | 0.01                           |
| Pigs        | Group B1        | Sum of florfenicol and its metabolites measured as florfenicol-amine      | Belgium     | 1,030            | 1                     | 0.10                           |
| Pigs        | Group B1        | Sum of oxytetracycline and its 4-epimer                                   | Cyprus      | 79               | 1                     | 1.27                           |
| Pigs        | Group B1        | Sum of oxytetracycline and its 4-epimer                                   | Czechia     | 260              | 3                     | 1.15                           |
| Pigs        | Group B1        | Tiamulin  | Croatia     | 127              | 1                     | 0.79                           |
| Pigs        | Group B1        | Tulathromycin   | France      | 1,725            | 4                     | 0.23                           |
| <b>Pigs</b> | <b>Group B1</b> | <b>Sub-total for Group B1</b>   | <b>13</b>   |                  | <b>40</b>             |                                |
| Pigs        | Group B2a       | Levamisole  | France      | 754              | 1                     | 0.13                           |
| Pigs        | Group B2a       | Levamisole  | Italy       | 416              | 1                     | 0.24                           |
| Pigs        | Group B2a       | Levamisole  | Netherlands | 5                | 1                     | 20.00                          |
| Pigs        | Group B2a       | Levamisole  | Spain       | 42               | 1                     | 2.38                           |
| Pigs        | Group B2a       | Sum of extractable residues which may be oxidised to oxfendazole sulphone | Belgium     | 178              | 1                     | 0.56                           |



| Category    | Group            | Substance                      | Country  | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|-------------|------------------|--------------------------------|----------|------------------|-----------------------|--------------------------------|
| <b>Pigs</b> | <b>Group B2a</b> | <b>Sub-total for Group B2a</b> | <b>5</b> |                  | <b>5</b>              |                                |
| Pigs        | Group B2b        | Maduramicin                    | Poland   | 64               | 1                     | 1.56                           |
| Pigs        | Group B2b        | Toltrazuril                    | Spain    | 807              | 2                     | 0.25                           |
| Pigs        | Group B2b        | Toltrazurilsulfon              | Spain    | 824              | 6                     | 0.73                           |
| <b>Pigs</b> | <b>Group B2b</b> | <b>Sub-total for Group B2b</b> | <b>2</b> |                  | <b>9</b>              |                                |
| Pigs        | Group B2e        | Diclofen (Diclofenac)          | Germany  | 604              | 1                     | 0.17                           |
| <b>Pigs</b> | <b>Group B2e</b> | <b>Sub-total for Group B2e</b> | <b>1</b> |                  | <b>1</b>              |                                |
| Pigs        | Group B2f        | Dexamethasone                  | Germany  | 980              | 1                     | 0.10                           |
| Pigs        | Group B2f        | Prednisone                     | Germany  | 114              | 2                     | 1.75                           |
| <b>Pigs</b> | <b>Group B2f</b> | <b>Sub-total for Group B2f</b> | <b>1</b> |                  | <b>3</b>              |                                |
| Pigs        | Group B3a        | 1,2,3,4,6,7,8-HpCDD            | France   | 529              | 5                     | 0.95                           |
| Pigs        | Group B3a        | 1,2,3,4,6,7,8-HpCDF            | France   | 529              | 4                     | 0.76                           |
| Pigs        | Group B3a        | 1,2,3,4,7,8,9-HpCDF            | France   | 529              | 1                     | 0.19                           |
| Pigs        | Group B3a        | 1,2,3,4,7,8-HxCDD              | France   | 529              | 2                     | 0.38                           |
| Pigs        | Group B3a        | 1,2,3,4,7,8-HxCDF              | France   | 529              | 3                     | 0.57                           |
| Pigs        | Group B3a        | 1,2,3,6,7,8-HxCDD              | France   | 529              | 3                     | 0.57                           |
| Pigs        | Group B3a        | 1,2,3,6,7,8-HxCDF              | France   | 529              | 3                     | 0.57                           |
| Pigs        | Group B3a        | 1,2,3,7,8,9-HxCDD              | France   | 529              | 2                     | 0.38                           |
| Pigs        | Group B3a        | 1,2,3,7,8-PeCDD                | France   | 529              | 2                     | 0.38                           |
| Pigs        | Group B3a        | 1,2,3,7,8-PeCDF                | France   | 529              | 4                     | 0.76                           |
| Pigs        | Group B3a        | 2,3,4,6,7,8-HxCDF              | France   | 529              | 2                     | 0.38                           |
| Pigs        | Group B3a        | 2,3,4,7,8-PeCDF                | France   | 529              | 6                     | 1.13                           |
| Pigs        | Group B3a        | 2,3,7,8-TCDD                   | France   | 529              | 1                     | 0.19                           |
| Pigs        | Group B3a        | 2,3,7,8-TCDF                   | France   | 529              | 4                     | 0.76                           |
| Pigs        | Group B3a        | Non-dioxin-like PCBs LB        | France   | 731              | 6                     | 0.82                           |



| Category | Group     | Substance                      | Country | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|----------|-----------|--------------------------------|---------|------------------|-----------------------|--------------------------------|
| Pigs     | Group B3a | Non-dioxin-like PCBs MB        | France  | 1,072            | 6                     | 0.56                           |
| Pigs     | Group B3a | Non-dioxin-like PCBs UB        | France  | 1,073            | 3                     | 0.28                           |
| Pigs     | Group B3a | OCDD                           | France  | 529              | 5                     | 0.95                           |
| Pigs     | Group B3a | OCDF                           | France  | 529              | 3                     | 0.57                           |
| Pigs     | Group B3a | PCB-101                        | France  | 1,073            | 6                     | 0.56                           |
| Pigs     | Group B3a | PCB-105                        | France  | 3                | 1                     | 33.33                          |
| Pigs     | Group B3a | PCB-114                        | France  | 3                | 1                     | 33.33                          |
| Pigs     | Group B3a | PCB-118                        | France  | 3                | 1                     | 33.33                          |
| Pigs     | Group B3a | PCB-123                        | France  | 3                | 1                     | 33.33                          |
| Pigs     | Group B3a | PCB-126                        | France  | 3                | 1                     | 33.33                          |
| Pigs     | Group B3a | PCB-138                        | France  | 1,073            | 6                     | 0.56                           |
| Pigs     | Group B3a | PCB-153                        | France  | 1,073            | 6                     | 0.56                           |
| Pigs     | Group B3a | PCB-156                        | France  | 3                | 1                     | 33.33                          |
| Pigs     | Group B3a | PCB-157                        | France  | 3                | 1                     | 33.33                          |
| Pigs     | Group B3a | PCB-167                        | France  | 3                | 1                     | 33.33                          |
| Pigs     | Group B3a | PCB-169                        | France  | 3                | 1                     | 33.33                          |
| Pigs     | Group B3a | PCB-180                        | France  | 1,073            | 6                     | 0.56                           |
| Pigs     | Group B3a | PCB-189                        | France  | 3                | 1                     | 33.33                          |
| Pigs     | Group B3a | PCB-28                         | France  | 1,073            | 6                     | 0.56                           |
| Pigs     | Group B3a | PCB-52                         | France  | 1,073            | 6                     | 0.56                           |
| Pigs     | Group B3a | PCB-77                         | France  | 3                | 1                     | 33.33                          |
| Pigs     | Group B3a | PCB-81                         | France  | 3                | 1                     | 33.33                          |
| Pigs     | Group B3a | TEQ Dioxin-like PCBs LB        | France  | 397              | 4                     | 1.01                           |
| Pigs     | Group B3a | TEQ Dioxin-like PCBs MB        | France  | 529              | 6                     | 1.13                           |
| Pigs     | Group B3a | TEQ Dioxin-like PCBs UB        | France  | 529              | 6                     | 1.13                           |
| Pigs     | Group B3a | TEQ dioxins (PCDD and PCDF) MB | France  | 529              | 6                     | 1.13                           |
| Pigs     | Group B3a | TEQ dioxins (PCDD and PCDF) UB | France  | 529              | 5                     | 0.95                           |



| Category       | Group            | Substance                                       | Country     | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|----------------|------------------|---|-------------|------------------|-----------------------|--------------------------------|
| Pigs           | Group B3a        | TEQ dioxins and dioxin-like PCBs LB             | France      | 433              | 6                     | 1.39                           |
| Pigs           | Group B3a        | TEQ dioxins and dioxin-like PCBs UB             | France      | 529              | 6                     | 1.13                           |
| <b>Pigs</b>    | <b>Group B3a</b> | <b>Sub-total for Group B3a</b>                  | <b>1</b>    |                  | <b>152</b>            |                                |
| Pigs           | Group B3c        | Cadmium (Cd)                                    | France      | 534              | 2                     | 0.37                           |
| Pigs           | Group B3c        | Cadmium (Cd)                                    | Netherlands | 286              | 2                     | 0.70                           |
| Pigs           | Group B3c        | Cadmium (Cd)                                    | Spain       | 579              | 3                     | 0.52                           |
| Pigs           | Group B3c        | Copper (Cu)                                     | Austria     | 74               | 12                    | 16.22                          |
| Pigs           | Group B3c        | Copper (Cu)                                     | Germany     | 1,314            | 28                    | 2.13                           |
| Pigs           | Group B3c        | Copper (Cu)                                     | Netherlands | 286              | 1                     | 0.35                           |
| Pigs           | Group B3c        | Total mercury                                   | Germany     | 1,314            | 15                    | 1.14                           |
| <b>Pigs</b>    | <b>Group B3c</b> | <b>Sub-total for Group B3c</b>                  | <b>5</b>    |                  | <b>63</b>             |                                |
| Pigs           | Group B3d        | Zearalenone                                     | Ireland     | 42               | 1                     | 2.38                           |
| Pigs           | Group B3d        | Zearalenone                                     | Romania     | 64               | 2                     | 3.12                           |
| Pigs           | Group B3d        | Zearalenone                                     | Spain       | 6                | 1                     | 16.67                          |
| <b>Pigs</b>    | <b>Group B3d</b> | <b>Sub-total for Group B3d</b>                  | <b>3</b>    |                  | <b>4</b>              |                                |
| <b>Pigs</b>    |                  | <b>Total for Pigs</b>                           |             |                  | <b>312</b>            |                                |
| Poultry        | Group A3         | Normethandrolone                                | France      | 454              | 6                     | 1.32                           |
| <b>Poultry</b> | <b>Group A3</b>  | <b>Sub-total for Group A3</b>                   | <b>1</b>    |                  | <b>6</b>              |                                |
| Poultry        | Group A6         | AMOZ (5-methylmorpholino-3-amino-2-oxazolidone) | Netherlands | 3                | 3                     | 100.00                         |
| Poultry        | Group A6         | Chloramphenicol                                 | Netherlands | 508              | 1                     | 0.20                           |
| Poultry        | Group A6         | Chloramphenicol                                 | Poland      | 919              | 2                     | 0.22                           |
| Poultry        | Group A6         | Dimetridazole                                   | Slovakia    | 66               | 1                     | 1.52                           |
| Poultry        | Group A6         | Furaltadone                                     | Portugal    | 97               | 1                     | 1.03                           |
| <b>Poultry</b> | <b>Group A6</b>  | <b>Sub-total for Group A6</b>                   | <b>4</b>    |                  | <b>8</b>              |                                |
| Poultry        | Group B1         | Ampicillin                                      | Poland      | 2,238            | 1                     | 0.04                           |
| Poultry        | Group B1         | Doxycycline                                     | Germany     | 2,213            | 1                     | 0.05                           |



| Category       | Group            | Substance                      | Country     | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|----------------|------------------|--------------------------------|-------------|------------------|-----------------------|--------------------------------|
| Poultry        | Group B1         | Doxycycline                    | Greece      | 136              | 1                     | 0.74                           |
| Poultry        | Group B1         | Doxycycline                    | Netherlands | 196              | 2                     | 1.02                           |
| Poultry        | Group B1         | Doxycycline                    | Romania     | 1                | 1                     | 100.00                         |
| Poultry        | Group B1         | Sulfadimethoxine               | France      | 1,641            | 2                     | 0.12                           |
| <b>Poultry</b> | <b>Group B1</b>  | <b>Sub-total for Group B1</b>  | <b>6</b>    |                  | <b>8</b>              |                                |
| Poultry        | Group B2b        | Lasalocid-Sodium               | Hungary     | 4                | 1                     | 25.00                          |
| Poultry        | Group B2b        | Monensin sodium                | Hungary     | 17               | 1                     | 5.88                           |
| Poultry        | Group B2b        | Narasin                        | Czechia     | 95               | 1                     | 1.05                           |
| Poultry        | Group B2b        | Narasin                        | Hungary     | 104              | 1                     | 0.96                           |
| Poultry        | Group B2b        | Narasin                        | Malta       | 65               | 1                     | 1.54                           |
| Poultry        | Group B2b        | Nicarbazin                     | Hungary     | 102              | 1                     | 0.98                           |
| Poultry        | Group B2b        | Robenidine                     | Malta       | 64               | 1                     | 1.56                           |
| Poultry        | Group B2b        | Salinomycin sodium             | Czechia     | 97               | 1                     | 1.03                           |
| Poultry        | Group B2b        | Salinomycin sodium             | Hungary     | 11               | 3                     | 27.27                          |
| Poultry        | Group B2b        | Salinomycin sodium             | Malta       | 65               | 1                     | 1.54                           |
| <b>Poultry</b> | <b>Group B2b</b> | <b>Sub-total for Group B2b</b> | <b>3</b>    |                  | <b>12</b>             |                                |
| Poultry        | Group B2e        | Antipyrin-4-Methylamino        | Austria     | 24               | 1                     | 4.17                           |
| Poultry        | Group B2e        | Ketoprofen                     | Austria     | 24               | 4                     | 16.67                          |
| <b>Poultry</b> | <b>Group B2e</b> | <b>Sub-total for Group B2e</b> | <b>1</b>    |                  | <b>5</b>              |                                |
| Poultry        | Group B3b        | Chlorpyrifos                   | Spain       | 285              | 1                     | 0.35                           |
| <b>Poultry</b> | <b>Group B3b</b> | <b>Sub-total for Group B3b</b> | <b>1</b>    |                  | <b>1</b>              |                                |
| Poultry        | Group B3c        | Cadmium (Cd)                   | France      | 253              | 1                     | 0.40                           |
| Poultry        | Group B3c        | Cadmium (Cd)                   | Germany     | 160              | 1                     | 0.62                           |
| Poultry        | Group B3c        | Copper (Cu)                    | Czechia     | 15               | 1                     | 6.67                           |
| Poultry        | Group B3c        | Copper (Cu)                    | Germany     | 160              | 4                     | 2.50                           |
| Poultry        | Group B3c        | Copper (Cu)                    | Netherlands | 135              | 6                     | 4.44                           |
| Poultry        | Group B3c        | Lead (Pb)                      | France      | 253              | 1                     | 0.40                           |
| <b>Poultry</b> | <b>Group B3c</b> | <b>Sub-total for Group B3c</b> | <b>4</b>    |                  | <b>14</b>             |                                |



| Category           | Group            | Substance                             | Country     | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|--------------------|------------------|---------------------------------------|-------------|------------------|-----------------------|--------------------------------|
| <b>Poultry</b>     |                  | <b>Total for Poultry</b>              |             |                  | <b>54</b>             |                                |
| Rabbits            | Group A3         | Testosterone-17-Beta                  | Cyprus      | 1                | 1                     | 100.00                         |
| <b>Rabbits</b>     | <b>Group A3</b>  | <b>Sub-total for Group A3</b>         | <b>1</b>    |                  | <b>1</b>              |                                |
| Rabbits            | Group B1         | Amoxicillin                           | Malta       | 13               | 1                     | 7.69                           |
| Rabbits            | Group B1         | Tulathromycin                         | Poland      | 6                | 1                     | 16.67                          |
| <b>Rabbits</b>     | <b>Group B1</b>  | <b>Sub-total for Group B1</b>         | <b>2</b>    |                  | <b>2</b>              |                                |
| Rabbits            | Group B2b        | Salinomycin                           | Czechia     | 5                | 1                     | 20.00                          |
| Rabbits            | Group B2b        | Salinomycin sodium                    | Malta       | 8                | 1                     | 12.50                          |
| <b>Rabbits</b>     | <b>Group B2b</b> | <b>Sub-total for Group B2b</b>        | <b>2</b>    |                  | <b>2</b>              |                                |
| <b>Rabbits</b>     |                  | <b>Total for Rabbits</b>              |             |                  | <b>5</b>              |                                |
| Sheep/goats        | Group A2         | Thiouracil                            | Ireland     | 18               | 2                     | 11.11                          |
| <b>Sheep/goats</b> | <b>Group A2</b>  | <b>Sub-total for Group A2</b>         | <b>1</b>    |                  | <b>2</b>              |                                |
| Sheep/goats        | Group A3         | Boldenone                             | Austria     | 40               | 1                     | 2.50                           |
| Sheep/goats        | Group A3         | Boldenone-Alpha                       | Austria     | 40               | 1                     | 2.50                           |
| Sheep/goats        | Group A3         | Epinandrolone (19-Norepitestosterone) | Austria     | 40               | 3                     | 7.50                           |
| Sheep/goats        | Group A3         | Epinandrolone (19-Norepitestosterone) | France      | 73               | 5                     | 6.85                           |
| <b>Sheep/goats</b> | <b>Group A3</b>  | <b>Sub-total for Group A3</b>         | <b>2</b>    |                  | <b>10</b>             |                                |
| Sheep/goats        | Group A6         | SEM (semicarbazide)                   | Netherlands | 1                | 1                     | 100.00                         |
| <b>Sheep/goats</b> | <b>Group A6</b>  | <b>Sub-total for Group A6</b>         | <b>1</b>    |                  | <b>1</b>              |                                |
| Sheep/goats        | Group B1         | Amoxicillin                           | France      | 550              | 1                     | 0.18                           |
| Sheep/goats        | Group B1         | Dihydrostreptomycin                   | France      | 547              | 1                     | 0.18                           |
| Sheep/goats        | Group B1         | Dihydrostreptomycin                   | Greece      | 108              | 3                     | 2.78                           |
| Sheep/goats        | Group B1         | Gamithromycin                         | Netherlands | 1                | 1                     | 100.00                         |
| Sheep/goats        | Group B1         | Sulfadiazine                          | Portugal    | 142              | 4                     | 2.82                           |



| Category           | Group            | Substance                               | Country     | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|--------------------|------------------|---|-------------|------------------|-----------------------|--------------------------------|
| Sheep/goats        | Group B1         | Sulfadiazine                            | Spain       | 304              | 1                     | 0.33                           |
| Sheep/goats        | Group B1         | Sulfadimethoxine                        | France      | 541              | 4                     | 0.74                           |
| Sheep/goats        | Group B1         | Sulfonamides                            | Belgium     | 41               | 1                     | 2.44                           |
| Sheep/goats        | Group B1         | Sulfonamides                            | Spain       | 140              | 2                     | 1.43                           |
| Sheep/goats        | Group B1         | Sum of oxytetracycline and its 4-epimer | Cyprus      | 44               | 3                     | 6.82                           |
| Sheep/goats        | Group B1         | Sum of oxytetracycline and its 4-epimer | Greece      | 108              | 2                     | 1.85                           |
| Sheep/goats        | Group B1         | Sum of oxytetracycline and its 4-epimer | Spain       | 408              | 1                     | 0.25                           |
| <b>Sheep/goats</b> | <b>Group B1</b>  | <b>Sub-total for Group B1</b>           | <b>7</b>    |                  | <b>24</b>             |                                |
| Sheep/goats        | Group B2a        | Closantel                               | Ireland     | 391              | 5                     | 1.28                           |
| <b>Sheep/goats</b> | <b>Group B2a</b> | <b>Sub-total for Group B2a</b>          | <b>1</b>    |                  | <b>5</b>              |                                |
| Sheep/goats        | Group B2b        | Monensin                                | Spain       | 119              | 1                     | 0.84                           |
| <b>Sheep/goats</b> | <b>Group B2b</b> | <b>Sub-total for Group B2b</b>          | <b>1</b>    |                  | <b>1</b>              |                                |
| Sheep/goats        | Group B2f        | Prednisolone                            | Spain       | 140              | 1                     | 0.71                           |
| <b>Sheep/goats</b> | <b>Group B2f</b> | <b>Sub-total for Group B2f</b>          | <b>1</b>    |                  | <b>1</b>              |                                |
| Sheep/goats        | Group B3a        | WHO-PCDD/F-PCB-TEQ                      | Belgium     | 18               | 1                     | 5.56                           |
| Sheep/goats        | Group B3a        | WHO-PCDD/F-TEQ                          | Belgium     | 30               | 2                     | 6.67                           |
| <b>Sheep/goats</b> | <b>Group B3a</b> | <b>Sub-total for Group B3a</b>          | <b>1</b>    |                  | <b>3</b>              |                                |
| Sheep/goats        | Group B3c        | Cadmium (Cd)                            | Croatia     | 4                | 1                     | 25.00                          |
| Sheep/goats        | Group B3c        | Cadmium (Cd)                            | Czechia     | 5                | 3                     | 60.00                          |
| Sheep/goats        | Group B3c        | Cadmium (Cd)                            | France      | 90               | 8                     | 8.89                           |
| Sheep/goats        | Group B3c        | Cadmium (Cd)                            | Greece      | 29               | 1                     | 3.45                           |
| Sheep/goats        | Group B3c        | Cadmium (Cd)                            | Netherlands | 9                | 2                     | 22.22                          |
| Sheep/goats        | Group B3c        | Cadmium (Cd)                            | Portugal    | 18               | 1                     | 5.56                           |
| Sheep/goats        | Group B3c        | Cadmium (Cd)                            | Spain       | 83               | 1                     | 1.20                           |
| Sheep/goats        | Group B3c        | Copper (Cu)                             | Germany     | 50               | 14                    | 28.00                          |
| Sheep/goats        | Group B3c        | Lead (Pb)                               | Germany     | 50               | 1                     | 2.00                           |



| Category           | Group            | Substance                      | Country     | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|--------------------|------------------|--------------------------------|-------------|------------------|-----------------------|--------------------------------|
| Sheep/goats        | Group B3c        | Lead (Pb)                      | Netherlands | 9                | 1                     | 11.11                          |
| Sheep/goats        | Group B3c        | Total mercury                  | Germany     | 50               | 3                     | 6.00                           |
| <b>Sheep/goats</b> | <b>Group B3c</b> | <b>Sub-total for Group B3c</b> | <b>8</b>    |                  | <b>36</b>             |                                |
| Sheep/goats        | Group B3f        | Copper compounds (Copper)      | Denmark     | 5                | 3                     | 60.00                          |
| <b>Sheep/goats</b> | <b>Group B3f</b> | <b>Sub-total for Group B3f</b> | <b>1</b>    |                  | <b>3</b>              |                                |
| <b>Sheep/goats</b> |                  | <b>Total for Sheep/goats</b>   |             |                  | <b>86</b>             |                                |

(a): the % of non-compliant is calculated as ratio between the number of non-compliant results over the total number of sample events, therefore it can result in a value higher than 100%.





## Appendix B – List of non-compliant results: suspect sampling

| Category           | Group            | Substance                                       | Country  | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|--------------------|------------------|---|----------|------------------|-----------------------|--------------------------------|
| Aquaculture        | Group B3e        | Sum of malachite green and leucomalachite green | Poland   | 3                | 2                     | 66.67                          |
| <b>Aquaculture</b> | <b>Group B3e</b> | <b>Sub-total for Group B3e</b>                  | <b>1</b> |                  | <b>2</b>              |                                |
| <b>Aquaculture</b> |                  | <b>Total for Aquaculture</b>                    |          |                  | <b>2</b>              |                                |
| Bovines            | Group A3         | Boldenone-Alpha                                 | Austria  | 19               | 1                     | 5.26                           |
| <b>Bovines</b>     | <b>Group A3</b>  | <b>Sub-total for Group A3</b>                   | <b>1</b> |                  | <b>1</b>              |                                |
| Bovines            | Group A5         | Clenbuterol                                     | Portugal | 14               | 2                     | 14.29                          |
| Bovines            | Group A5         | Salbutamol (albuterol)                          | Portugal | 14               | 3                     | 21.43                          |
| <b>Bovines</b>     | <b>Group A5</b>  | <b>Sub-total for Group A5</b>                   | <b>1</b> |                  | <b>5</b>              |                                |
| Bovines            | Group A6         | Chloramphenicol                                 | Malta    | 9                | 1                     | 11.11                          |
| <b>Bovines</b>     | <b>Group A6</b>  | <b>Sub-total for Group A6</b>                   | <b>1</b> |                  | <b>1</b>              |                                |
| Bovines            | Group B1         | Ampicillin                                      | Italy    | 628              | 1                     | 0.16                           |
| Bovines            | Group B1         | Dihydrostreptomycin                             | Spain    | 203              | 1                     | 0.49                           |
| Bovines            | Group B1         | Marbofloxacin                                   | Italy    | 622              | 4                     | 0.64                           |
| Bovines            | Group B1         | Sulfonamides                                    | Italy    | 427              | 1                     | 0.23                           |
| Bovines            | Group B1         | Sum of enrofloxacin and ciprofloxacin           | Italy    | 624              | 1                     | 0.16                           |
| Bovines            | Group B1         | Sum of enrofloxacin and ciprofloxacin           | Spain    | 204              | 3                     | 1.47                           |
| Bovines            | Group B1         | Sum of oxytetracycline and its 4-epimer         | France   | 13               | 1                     | 7.69                           |
| Bovines            | Group B1         | Sum of oxytetracycline and its 4-epimer         | Italy    | 626              | 3                     | 0.48                           |
| Bovines            | Group B1         | Sum of spiramycin and neospiramycin             | Spain    | 204              | 1                     | 0.49                           |
| Bovines            | Group B1         | Tilmicosin                                      | Spain    | 202              | 1                     | 0.50                           |
| Bovines            | Group B1         | Tulathromycin                                   | Austria  | 386              | 2                     | 0.52                           |



| Category       | Group            | Substance   | Country     | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|----------------|------------------|---|-------------|------------------|-----------------------|--------------------------------|
| Bovines        | Group B1         | Tulathromycin   | Ireland     | 1                | 1                     | 100.00                         |
| Bovines        | Group B1         | Tulathromycin   | Italy       | 436              | 2                     | 0.46                           |
| Bovines        | Group B1         | Tulathromycin   | Spain       | 5                | 1                     | 20.00                          |
| <b>Bovines</b> | <b>Group B1</b>  | <b>Sub-total for Group B1</b>   | <b>5</b>    |                  | <b>23</b>             |                                |
| Bovines        | Group B2e        | Acetaminophen (Paracetamol)   | Netherlands | 1                | 1                     | 100.00                         |
| Bovines        | Group B2e        | Diclofen (Diclofenac)   | Italy       | 185              | 1                     | 0.54                           |
| <b>Bovines</b> | <b>Group B2e</b> | <b>Sub-total for Group B2e</b>  | <b>2</b>    |                  | <b>2</b>              |                                |
| Bovines        | Group B2f        | Dexamethasone   | Italy       | 471              | 12                    | 2.55                           |
| <b>Bovines</b> | <b>Group B2f</b> | <b>Sub-total for Group B2f</b>  | <b>1</b>    |                  | <b>12</b>             |                                |
| Bovines        | Group B3c        | Copper (Cu)   | Austria     | 9                | 2                     | 22.22                          |
| Bovines        | Group B3c        | Copper (Cu)   | Germany     | 8                | 7                     | 87.50                          |
| Bovines        | Group B3c        | Lead (Pb)   | Austria     | 4                | 2                     | 50.00                          |
| Bovines        | Group B3c        | Total mercury   | Germany     | 2                | 1                     | 50.00                          |
| <b>Bovines</b> | <b>Group B3c</b> | <b>Sub-total for Group B3c</b>  | <b>2</b>    |                  | <b>12</b>             |                                |
| <b>Bovines</b> |                  | <b>Total for Bovines</b>  |             |                  | <b>56</b>             |                                |
| Eggs           | Group B1         | Doxycycline   | Poland      | 7                | 2                     | 28.57                          |
| Eggs           | Group B1         | Sum of enrofloxacin and ciprofloxacin   | Romania     | 18               | 4                     | 22.22                          |
| <b>Eggs</b>    | <b>Group B1</b>  | <b>Sub-total for Group B1</b>   | <b>2</b>    |                  | <b>6</b>              |                                |
| Eggs           | Group B2b        | Decoquinat  | Poland      | 6                | 1                     | 16.67                          |
| Eggs           | Group B2b        | Toltrazurilsulfon   | Estonia     | 1                | 1                     | 100.00                         |
| <b>Eggs</b>    | <b>Group B2b</b> | <b>Sub-total for Group B2b</b>  | <b>2</b>    |                  | <b>2</b>              |                                |
| Eggs           | Group B3a        | DDT (sum of p,p'-DDT, o,p'-DDT, p,p'-DDE and p,p'-TDE (DDD) expressed as DDT) | Slovakia    | 1                | 1                     | 100.00                         |
| Eggs           | Group B3a        | Non-dioxin-like PCBs  | Slovakia    | 1                | 1                     | 100.00                         |
| <b>Eggs</b>    | <b>Group B3a</b> | <b>Sub-total for Group B3a</b>  | <b>1</b>    |                  | <b>2</b>              |                                |



| Category                | Group            | Substance   | Country     | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|-------------------------|------------------|---|-------------|------------------|-----------------------|--------------------------------|
| <b>Eggs</b>             |                  | <b>Total for Eggs</b>   |             |                  | <b>10</b>             |                                |
| Game (Wild Game)        | Group B3a        | DDT (sum of p,p'-DDT, o,p'-DDT, p,p'-DDE and p,p'-TDE (DDD) expressed as DDT) | Czechia     | 1                | 10                    | 1,000.00                       |
| <b>Game (Wild Game)</b> | <b>Group B3a</b> | <b>Sub-total for Group B3a</b>  | <b>1</b>    |                  | <b>10</b>             |                                |
| Game (Wild Game)        | Group B3c        | Lead (Pb)   | Slovakia    | 1                | 1                     | 100.00                         |
| Game (Wild Game)        | Group B3c        | Total mercury   | Slovakia    | 2                | 1                     | 50.00                          |
| <b>Game (Wild Game)</b> | <b>Group B3c</b> | <b>Sub-total for Group B3c</b>  | <b>1</b>    |                  | <b>2</b>              |                                |
| <b>Game (Wild Game)</b> |                  | <b>Total for Game (Wild Game)</b>   |             |                  | <b>12</b>             |                                |
| Honey                   | Group B1         | Streptomycin  | Poland      | 1                | 1                     | 100.00                         |
| Honey                   | Group B1         | Sulfachlorpyrazine  | Poland      | 5                | 1                     | 20.00                          |
| Honey                   | Group B1         | Sulfamethazine (sulfadimidin)   | Poland      | 4                | 4                     | 100.00                         |
| Honey                   | Group B1         | Sulfathiazole   | Poland      | 1                | 1                     | 100.00                         |
| <b>Honey</b>            | <b>Group B1</b>  | <b>Sub-total for Group B1</b>   | <b>1</b>    |                  | <b>7</b>              |                                |
| Honey                   | Group B3c        | Copper (Cu)   | Germany     | 3                | 2                     | 66.67                          |
| <b>Honey</b>            | <b>Group B3c</b> | <b>Sub-total for Group B3c</b>  | <b>1</b>    |                  | <b>2</b>              |                                |
| <b>Honey</b>            |                  | <b>Total for Honey</b>  |             |                  | <b>9</b>              |                                |
| Milk                    | Group B1         | Cefalonium  | Italy       | 26               | 1                     | 3.85                           |
| Milk                    | Group B1         | Sum of tetracycline and its 4-epimer  | France      | 1                | 1                     | 100.00                         |
| <b>Milk</b>             | <b>Group B1</b>  | <b>Sub-total for Group B1</b>   | <b>2</b>    |                  | <b>2</b>              |                                |
| Milk                    | Group B2e        | Salicylic acid  | Netherlands | 1                | 1                     | 100.00                         |
| <b>Milk</b>             | <b>Group B2e</b> | <b>Sub-total for Group B2e</b>  | <b>1</b>    |                  | <b>1</b>              |                                |
| Milk                    | Group B3c        | Lead (Pb)   | Finland     | 3                | 2                     | 66.67                          |
| <b>Milk</b>             | <b>Group B3c</b> | <b>Sub-total for Group B3c</b>  | <b>1</b>    |                  | <b>2</b>              |                                |
| Milk                    | Group B3d        | Aflatoxin M1  | Italy       | 33               | 3                     | 9.09                           |



| Category           | Group            | Substance                                | Country  | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|--------------------|------------------|--|----------|------------------|-----------------------|--------------------------------|
| <b>Milk</b>        | <b>Group B3d</b> | <b>Sub-total for Group B3d</b>           | <b>1</b> |                  | <b>3</b>              |                                |
| <b>Milk</b>        |                  | <b>Total for Milk</b>                    |          |                  | <b>8</b>              |                                |
| Pigs               | Group B1         | Lincomycin                               | Spain    | 1                | 1                     | 100.00                         |
| Pigs               | Group B1         | Sum of chlortetracyclin and its 4-epimer | Poland   | 9                | 2                     | 22.22                          |
| <b>Pigs</b>        | <b>Group B1</b>  | <b>Sub-total for Group B1</b>            | <b>2</b> |                  | <b>3</b>              |                                |
| Pigs               | Group B3a        | Non-dioxin-like PCBs UB                  | Austria  | 9                | 6                     | 66.67                          |
| <b>Pigs</b>        | <b>Group B3a</b> | <b>Sub-total for Group B3a</b>           | <b>1</b> |                  | <b>6</b>              |                                |
| Pigs               | Group B3c        | Copper (Cu)                              | Austria  | 8                | 1                     | 12.50                          |
| Pigs               | Group B3c        | Copper (Cu)                              | Germany  | 10               | 1                     | 10.00                          |
| Pigs               | Group B3c        | Total mercury                            | Germany  | 10               | 12                    | 120.00                         |
| <b>Pigs</b>        | <b>Group B3c</b> | <b>Sub-total for Group B3c</b>           | <b>2</b> |                  | <b>14</b>             |                                |
| <b>Pigs</b>        |                  | <b>Total for Pigs</b>                    |          |                  | <b>23</b>             |                                |
| Poultry            | Group B1         | Doxycycline                              | Poland   | 10               | 7                     | 70.00                          |
| Poultry            | Group B1         | Sum of enrofloxacin and ciprofloxacin    | Poland   | 9                | 6                     | 66.67                          |
| <b>Poultry</b>     | <b>Group B1</b>  | <b>Sub-total for Group B1</b>            | <b>1</b> |                  | <b>13</b>             |                                |
| <b>Poultry</b>     |                  | <b>Total for Poultry</b>                 |          |                  | <b>13</b>             |                                |
| Sheep/goats        | Group A3         | Boldenone-Alpha                          | Austria  | 2                | 1                     | 50.00                          |
| Sheep/goats        | Group A3         | Epinandrolone (19-Norepitestosterone)    | France   | 1                | 1                     | 100.00                         |
| <b>Sheep/goats</b> | <b>Group A3</b>  | <b>Sub-total for Group A3</b>            | <b>2</b> |                  | <b>2</b>              |                                |
| Sheep/goats        | Group B1         | Dihydrostreptomycin                      | Greece   | 9                | 1                     | 11.11                          |
| Sheep/goats        | Group B1         | Norfloxacin                              | Spain    | 102              | 1                     | 0.98                           |
| Sheep/goats        | Group B1         | Sum of oxytetracycline and its 4-epimer  | Greece   | 9                | 1                     | 11.11                          |
| Sheep/goats        | Group B1         | Sum of oxytetracycline and its 4-epimer  | Spain    | 80               | 5                     | 6.25                           |



| Category           | Group            | Substance                      | Country  | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|--------------------|------------------|--------------------------------|----------|------------------|-----------------------|--------------------------------|
| <b>Sheep/goats</b> | <b>Group B1</b>  | <b>Sub-total for Group B1</b>  | <b>2</b> |                  | <b>8</b>              |                                |
| Sheep/goats        | Group B3a        | Non-dioxin-like PCBs UB        | Austria  | 8                | 2                     | 25.00                          |
| <b>Sheep/goats</b> | <b>Group B3a</b> | <b>Sub-total for Group B3a</b> | <b>1</b> |                  | <b>2</b>              |                                |
| Sheep/goats        | Group B3c        | Total mercury                  | Germany  | 3                | 1                     | 33.33                          |
| <b>Sheep/goats</b> | <b>Group B3c</b> | <b>Sub-total for Group B3c</b> | <b>1</b> |                  | <b>1</b>              |                                |
| <b>Sheep/goats</b> |                  | <b>Total for Sheep/goats</b>   |          |                  | <b>13</b>             |                                |

(a): the % of non-compliant is calculated as ratio between the number of non-compliant results over the total number of sample events, therefore it can result in a value higher than 100%.



## Appendix C – List of non-compliant results: import sampling

| Category           | Group            | Substance                                       | Country     | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|--------------------|------------------|---|-------------|------------------|-----------------------|--------------------------------|
| Aquaculture        | Group A6         | AOZ (3-amino-2-oxazolidone)                     | Germany     | 157              | 1                     | 0.64                           |
| Aquaculture        | Group A6         | SEM (semicarbazide)                             | Germany     | 157              | 1                     | 0.64                           |
| <b>Aquaculture</b> | <b>Group A6</b>  | <b>Sub-total for Group A6</b>                   | <b>1</b>    |                  | <b>2</b>              |                                |
| Aquaculture        | Group B2a        | Ivermectin                                      | Germany     | 7                | 1                     | 14.29                          |
| <b>Aquaculture</b> | <b>Group B2a</b> | <b>Sub-total for Group B2a</b>                  | <b>1</b>    |                  | <b>1</b>              |                                |
| Aquaculture        | Group B3c        | Cadmium (Cd)                                    | Germany     | 133              | 2                     | 1.50                           |
| Aquaculture        | Group B3c        | Total mercury                                   | Germany     | 123              | 2                     | 1.63                           |
| Aquaculture        | Group B3c        | Total mercury                                   | Portugal    | 29               | 1                     | 3.45                           |
| <b>Aquaculture</b> | <b>Group B3c</b> | <b>Sub-total for Group B3c</b>                  | <b>2</b>    |                  | <b>5</b>              |                                |
| Aquaculture        | Group B3e        | Sum of crystal violet and leucocristal violet   | Netherlands | 21               | 1                     | 4.76                           |
| Aquaculture        | Group B3e        | Sum of malachite green and leucomalachite green | Portugal    | 5                | 1                     | 20.00                          |
| <b>Aquaculture</b> | <b>Group B3e</b> | <b>Sub-total for Group B3e</b>                  | <b>2</b>    |                  | <b>2</b>              |                                |
| Aquaculture        | Group B3f        | Histamine                                       | Germany     | 193              | 9                     | 4.66                           |
| <b>Aquaculture</b> | <b>Group B3f</b> | <b>Sub-total for Group B3f</b>                  | <b>1</b>    |                  | <b>9</b>              |                                |
| <b>Aquaculture</b> |                  | <b>Total for Aquaculture</b>                    |             |                  | <b>19</b>             |                                |
| Bovines            | Group A6         | SEM (semicarbazide)                             | Germany     | 22               | 1                     | 4.55                           |
| <b>Bovines</b>     | <b>Group A6</b>  | <b>Sub-total for Group A6</b>                   | <b>1</b>    |                  | <b>1</b>              |                                |
| <b>Bovines</b>     |                  | <b>Total for Bovines</b>                        |             |                  | <b>1</b>              |                                |
| Pigs               | Group A6         | SEM (semicarbazide)                             | Germany     | 14               | 2                     | 14.29                          |
| <b>Pigs</b>        | <b>Group A6</b>  | <b>Sub-total for Group A6</b>                   | <b>1</b>    |                  | <b>2</b>              |                                |
| <b>Pigs</b>        |                  | <b>Total for Pigs</b>                           |             |                  | <b>2</b>              |                                |
| Sheep/goats        | Group B2e        | Mefenamic Acid                                  | Germany     | 7                | 1                     | 14.29                          |



| <b>Category</b>    | <b>Group</b>     | <b>Substance</b>               | <b>Country</b> | <b>Samples analysed</b> | <b>Non-compliant results</b> | <b>% Non-compliant<sup>(a)</sup></b> |
|--------------------|------------------|--------------------------------|----------------|-------------------------|------------------------------|--------------------------------------|
| <b>Sheep/goats</b> | <b>Group B2e</b> | <b>Sub-total for Group B2e</b> | <b>1</b>       |                         | <b>1</b>                     |                                      |
| <b>Sheep/goats</b> |                  | <b>Total for Sheep/goats</b>   |                |                         | <b>1</b>                     |                                      |

(a): the % of non-compliant is calculated as ratio between the number of non-compliant results over the total number of sample events, therefore it can result in a value higher than 100%.



## Appendix D – List of non-compliant results: other sampling

| Category       | Group            | Substance   | Country  | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|----------------|------------------|---|----------|------------------|-----------------------|--------------------------------|
| Bovines        | Group B1         | Amoxicillin   | Germany  | 65               | 3                     | 4.62                           |
| Bovines        | Group B1         | Benzylpenicillin (Penicillin G)   | Germany  | 17,702           | 12                    | 0.07                           |
| Bovines        | Group B1         | Gentamicin  | Germany  | 46               | 1                     | 2.17                           |
| Bovines        | Group B1         | Marbofloxacin   | Germany  | 17,702           | 2                     | 0.01                           |
| Bovines        | Group B1         | Neomycin  | Germany  | 47               | 1                     | 2.13                           |
| Bovines        | Group B1         | Sulfonamides  | Germany  | 66               | 2                     | 3.03                           |
| Bovines        | Group B1         | Sum of enrofloxacin and ciprofloxacin   | Germany  | 17,702           | 7                     | 0.04                           |
| Bovines        | Group B1         | Sum of oxytetracycline and its 4-epimer   | Germany  | 17,702           | 2                     | 0.01                           |
| Bovines        | Group B1         | Sum of tetracycline and its 4-epimer  | Germany  | 17,702           | 4                     | 0.02                           |
| <b>Bovines</b> | <b>Group B1</b>  | <b>Sub-total for Group B1</b>   | <b>1</b> |                  | <b>34</b>             |                                |
| Bovines        | Group B2e        | Flunixin  | Germany  | 30               | 1                     | 3.33                           |
| Bovines        | Group B2e        | Meloxicam   | Germany  | 29               | 4                     | 13.79                          |
| Bovines        | Group B2e        | Tolfenamic acid   | Germany  | 25               | 1                     | 4.00                           |
| <b>Bovines</b> | <b>Group B2e</b> | <b>Sub-total for Group B2e</b>  | <b>1</b> |                  | <b>6</b>              |                                |
| Bovines        | Group B2f        | Dexamethasone   | Germany  | 46               | 3                     | 6.52                           |
| Bovines        | Group B2f        | Dexamethasone   | Italy    | 38               | 1                     | 2.63                           |
| <b>Bovines</b> | <b>Group B2f</b> | <b>Sub-total for Group B2f</b>  | <b>2</b> |                  | <b>4</b>              |                                |
| Bovines        | Group B3f        | Bromide ion   | Portugal | 20               | 12                    | 60.00                          |
| Bovines        | Group B3f        | Didecyldimethylammonium chloride (mixture of alkyl-quaternary ammonium salts with alkyl chain lengths of C8, C10 and C12) | Portugal | 20               | 1                     | 5.00                           |
| <b>Bovines</b> | <b>Group B3f</b> | <b>Sub-total for Group B3f</b>  | <b>1</b> |                  | <b>13</b>             |                                |
| <b>Bovines</b> |                  | <b>Total for Bovines</b>  |          |                  | <b>57</b>             |                                |
| Eggs           | Group B3f        | Bromide ion   | Portugal | 18               | 17                    | 94.44                          |





| Category                | Group            | Substance  | Country  | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|-------------------------|------------------|--|----------|------------------|-----------------------|--------------------------------|
| <b>Eggs</b>             | <b>Group B3f</b> | <b>Sub-total for Group B3f</b>   | <b>1</b> |                  | <b>17</b>             |                                |
| <b>Eggs</b>             |                  | <b>Total for Eggs</b>  |          |                  | <b>17</b>             |                                |
| Game (Wild Game)        | Group B3c        | Cadmium (Cd)   | France   | 18               | 2                     | 11.11                          |
| Game (Wild Game)        | Group B3c        | Lead (Pb)  | France   | 18               | 4                     | 22.22                          |
| <b>Game (Wild Game)</b> | <b>Group B3c</b> | <b>Sub-total for Group B3c</b>   | <b>1</b> |                  | <b>6</b>              |                                |
| <b>Game (Wild Game)</b> |                  | <b>Total for Game (Wild Game)</b>  |          |                  | <b>6</b>              |                                |
| Honey                   | Group B3b        | Fosetyl-Al (sum of fosetyl, phosphonic acid and their salts, expressed as fosetyl) | Italy    | 74               | 1                     | 1.35                           |
| Honey                   | Group B3b        | Glyphosate   | Italy    | 74               | 1                     | 1.35                           |
| <b>Honey</b>            | <b>Group B3b</b> | <b>Sub-total for Group B3b</b>   | <b>1</b> |                  | <b>2</b>              |                                |
| Honey                   | Group B3c        | Cadmium (Cd)   | France   | 4                | 1                     | 25.00                          |
| <b>Honey</b>            | <b>Group B3c</b> | <b>Sub-total for Group B3c</b>   | <b>1</b> |                  | <b>1</b>              |                                |
| <b>Honey</b>            |                  | <b>Total for Honey</b>   |          |                  | <b>3</b>              |                                |
| Pigs                    | Group A3         | Normethandrolone   | France   | 32               | 1                     | 3.12                           |
| <b>Pigs</b>             | <b>Group A3</b>  | <b>Sub-total for Group A3</b>  | <b>1</b> |                  | <b>1</b>              |                                |
| Pigs                    | Group A4         | Zearalenol beta  | Romania  | 1                | 1                     | 100.00                         |
| <b>Pigs</b>             | <b>Group A4</b>  | <b>Sub-total for Group A4</b>  | <b>1</b> |                  | <b>1</b>              |                                |
| Pigs                    | Group B1         | Amoxicillin  | Germany  | 528              | 2                     | 0.38                           |
| Pigs                    | Group B1         | Benzylpenicillin (Penicillin G)  | Germany  | 235,915          | 3                     | 0.00                           |
| Pigs                    | Group B1         | Doxycycline  | Germany  | 235,722          | 16                    | 0.01                           |
| Pigs                    | Group B1         | Sum of enrofloxacin and ciprofloxacin  | Germany  | 235,719          | 9                     | 0.00                           |
| Pigs                    | Group B1         | Sum of oxytetracycline and its 4-epimer  | Germany  | 235,719          | 4                     | 0.00                           |
| Pigs                    | Group B1         | Tulathromycin  | Germany  | 235,717          | 2                     | 0.00                           |



| Category           | Group            | Substance                             | Country  | Samples analysed | Non-compliant results | % Non-compliant <sup>(a)</sup> |
|--------------------|------------------|---------------------------------------|----------|------------------|-----------------------|--------------------------------|
| <b>Pigs</b>        | <b>Group B1</b>  | <b>Sub-total for Group B1</b>         | <b>1</b> |                  | <b>36</b>             |                                |
| Pigs               | Group B2e        | Flunixin                              | Germany  | 262              | 1                     | 0.38                           |
| <b>Pigs</b>        | <b>Group B2e</b> | <b>Sub-total for Group B2e</b>        | <b>1</b> |                  | <b>1</b>              |                                |
| Pigs               | Group B3d        | Zearalenone                           | Romania  | 1                | 1                     | 100.00                         |
| <b>Pigs</b>        | <b>Group B3d</b> | <b>Sub-total for Group B3d</b>        | <b>1</b> |                  | <b>1</b>              |                                |
| <b>Pigs</b>        |                  | <b>Total for Pigs</b>                 |          |                  | <b>40</b>             |                                |
| Poultry            | Group B3c        | Cadmium (Cd)                          | France   | 7                | 1                     | 14.29                          |
| <b>Poultry</b>     | <b>Group B3c</b> | <b>Sub-total for Group B3c</b>        | <b>1</b> |                  | <b>1</b>              |                                |
| <b>Poultry</b>     |                  | <b>Total for Poultry</b>              |          |                  | <b>1</b>              |                                |
| Rabbits            | Group B1         | Dihydrostreptomycin                   | France   | 7                | 1                     | 14.29                          |
| Rabbits            | Group B1         | Sulfadimethoxine                      | Italy    | 32               | 1                     | 3.12                           |
| Rabbits            | Group B1         | Sulfonamides                          | Italy    | 32               | 1                     | 3.12                           |
| <b>Rabbits</b>     | <b>Group B1</b>  | <b>Sub-total for Group B1</b>         | <b>2</b> |                  | <b>3</b>              |                                |
| <b>Rabbits</b>     |                  | <b>Total for Rabbits</b>              |          |                  | <b>3</b>              |                                |
| Sheep/goats        | Group B1         | Sum of enrofloxacin and ciprofloxacin | Germany  | 4,798            | 13                    | 0.27                           |
| <b>Sheep/goats</b> | <b>Group B1</b>  | <b>Sub-total for Group B1</b>         | <b>1</b> |                  | <b>13</b>             |                                |
| <b>Sheep/goats</b> |                  | <b>Total for Sheep/goats</b>          |          |                  | <b>13</b>             |                                |

(a): the % of non-compliant is calculated as ratio between the number of non-compliant results over the total number of sample events, therefore it can result in a value higher than 100%.



## **Appendix E – Annex I to Directive 96/23/EC**

### **GROUP A – Substances having anabolic effect and unauthorised substances**

- A.1. Stilbenes, stilbene derivatives, and their salts and esters
- A.2. Antithyroid agents
- A.3. Steroids
- A.4. Resorcylic acid lactones, including zeranol
- A.5. Beta-agonists
- A.6. Compounds included in Annex IV to Council Regulation (EEC) N° 2377/90 of 26 June 1990<sup>16</sup>

### **GROUP B – Veterinary drugs and contaminants**

- B.1. Antibacterial substances, including sulphonamides, quinolones
- B.2. Other veterinary drugs
  - a. Anthelmintics
  - b. Anticoccidials
  - c. Carbamates and pyrethroids
  - d. Sedatives
  - e. Non-steroidal anti-inflammatory drugs (NSAIDs)
  - f. Other pharmacologically active substances
- B.3. Other substances and environmental contaminants
  - a. Organochlorine compounds, including PCBs
  - b. Organophosphorus compounds
  - c. Chemical elements
  - d. Mycotoxins
  - e. Dyes
  - f. Others

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<sup>16</sup> Council Regulation (EEC) No 2377/90 of 26 June 1990 laying down a Community procedure for the establishment of maximum residue limits of veterinary medicinal products in foodstuffs of animal origin. OJ L 224, 18.8.1990, p. 1–8.