



## SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS BIOCONTAM UNIT

MINUTES OF THE 12<sup>th</sup> MEETING OF THE WORKING GROUP ON the  
"Pathogenicity assessment of Shiga toxin-producing *Escherichia coli*  
(STEC) and the public health risk posed by contamination of food with  
STEC"

**Held on 29 October 2019, Web-conference**

**(Agreed on 12 November 2019)**

### Participants

■ Working Group Members:

Declan Bolton (Chair), Claire Jenkins, Stefano Morabito, Maarten Nauta, Taina Niskanen (ECDC), Sara Pires, Flemming Scheutz.

■ EFSA:

BIOCONTAM Unit: Maria Teresa Da Silva Felicio, Winy Messens, Alice Vismarra

### 1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies for absence were received from Pamina Mika Suzuki (DG SANTE).

### 2. Adoption of agenda

The agenda was adopted without changes.

### 3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of this meeting.

<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>



#### 4. Agreement of the minutes of the 11<sup>th</sup> Working Group meeting held on 2 October 2019, web-conference.

The minutes of the 11<sup>th</sup> Working Group meeting were agreed by written procedure on 9 October 2019.<sup>3</sup>

#### 5. Scientific topic(s) for discussion

##### 5.1. **Opinion on the pathogenicity assessment of Shiga toxin-producing *Escherichia coli* (STEC) and the public health risk posed by contamination of food with STEC<sup>4</sup>**

The contributions to the draft opinion were discussed with the WG experts as well as all feedback/comments received from the BIOHAZ Panel members. Tasks were allocated to WG experts and EFSA staff to update the draft opinion reflecting all the agreements made during the meeting.

#### 6. Next meetings

No further WG meeting is foreseen.

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<sup>3</sup> <https://www.efsa.europa.eu/sites/default/files/wgs/biological-hazards/wg-stec.pdf>

<sup>4</sup> <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2018-00293>



## SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS BIOCONTAM UNIT

MINUTES OF THE 11<sup>th</sup> MEETING OF THE WORKING GROUP ON the  
"Pathogenicity assessment of Shiga toxin-producing *Escherichia coli*  
(STEC) and the public health risk posed by contamination of food with  
STEC"

**Held on 2 October 2019, Web-conference**

**(Agreed on 9 October 2019)**

### Participants

- Working Group Members:  
Declan Bolton (Chair), Claire Jenkins, Stefano Morabito, Maarten Nauta, Taina Niskanen (ECDC), Sara Pires, Flemming Scheutz.
- European Commission:  
Pamina Mika Suzuki (DG SANTE)
- EFSA:  
BIOCONTAM Unit: Maria Teresa Da Silva Felicio, Winy Messens

### 1. Welcome and apologies for absence

The Chair welcomed the participants. No apologies for absence were received. Taina Niskanen (ECDC) only attended from 10:00-11:15.

### 2. Adoption of agenda

The agenda was adopted without changes.

### 3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declaration

<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>



of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of this meeting.

#### 4. Agreement of the minutes of the 10<sup>th</sup> Working Group meeting held on 21 June 2019, Brussels.

The minutes of the 10<sup>th</sup> Working Group meeting were agreed by written procedure on 12 July 2019.<sup>3</sup>

#### 5. Scientific topic(s) for discussion

##### 5.1. **Opinion on the pathogenicity assessment of Shiga toxin-producing *Escherichia coli* (STEC) and the public health risk posed by contamination of food with STEC<sup>4</sup>**

The contributions to the draft opinion were discussed with the WG experts and tasks were allocated to WG experts and EFSA staff to update the draft opinion reflecting all the agreements made during the meeting. The WG agreed to:

- move the uncertainty table and associated text into an Appendix;
- refine the molecular approach proposed in the 2013 STEC opinion describing the proposed approach in narrative form. The key message will be that: (i) all STEC strains are pathogenic in humans, capable of at least causing diarrhoea; (ii) a distinction can be made between strain types capable of causing serious illness and strain types that are less often identified in human cases resulting in BD and/or HUS with or without hospitalisation. This distinction will be summarised in an updated summary table.
- keep under section 3.1.2.2. the graphs summarising the number of hospitalised/HUS/BD cases divided by the total number of cases carrying the specified *stx* gene and/or *stx* gene combination and *eae* gene indicating the 95% confidence interval (CI).

The EC asked to include in the answer to ToR4 an analysis of the feasibility of a possible Part 2 STEC mandate focusing on possible control options and considerations on potential microbiological criteria/performance objectives and/or targets at different stages of the food chain. The WG clarified that it wouldn't be possible to assess this feasibility in the context of the replies to the current ToRs of this mandate and admitted not having the expertise to answer this question. As indicated in the background of this mandate, the outcome of this mandate should be discussed between risk assessors (EFSA) and risk managers (EC) in order to decide how to proceed on a possible second mandate after the adoption of the STEC opinion.

#### 6. Next meetings

The next WG meeting will take place, as a web conference, on 29 October 2019 (10:00-14:00, Parma time).

<sup>3</sup> <https://www.efsa.europa.eu/sites/default/files/wgs/biological-hazards/wg-stec.pdf>

<sup>4</sup> <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2018-00293>



## SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS BIOCONTAM UNIT

MINUTES OF THE 10<sup>th</sup> MEETING OF THE WORKING GROUP ON the  
"Pathogenicity assessment of Shiga toxin-producing *Escherichia coli*  
(STEC) and the public health risk posed by contamination of food with  
STEC"

**Held on 21 June 2019, Parma**

**(Agreed on 12 July 2019)**

### Participants

■ Working Group Members:

Declan Bolton (Chair), Claire Jenkins, Stefano Morabito, Maarten Nauta, Sara Pires, Flemming Scheutz.

■ EFSA:

BIOCONTAM Unit: Maria Teresa Da Silva Felicio

### 1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies for absence were received from Taina Niskanen (ECDC).

### 2. Adoption of agenda

The agenda was adopted without changes.

### 3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of this meeting.

<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>



#### 4. Agreement of the minutes of the 9<sup>th</sup> sub Working Group meeting held on 13 May 2019, WEB-conference.

The minutes of the 9<sup>th</sup> sub Working Group meeting were agreed by written procedure on 16 May 2019.<sup>3</sup>

#### 5. Scientific topic(s) for discussion

##### 5.1. **Opinion on the pathogenicity assessment of Shiga toxin-producing *Escherichia coli* (STEC) and the public health risk posed by contamination of food with STEC<sup>4</sup>**

WG experts reviewed and discussed the contributions received on the draft opinion. The WG agreed on the assumptions considered for the model used to answer ToR3 and on the relevant justifications which will be provided for these. Tasks were allocated to WG experts and EFSA staff reflecting the agreements made during the meeting.

#### 6. Next meetings

The next WG meeting will take place as a web conference in October 2019 (10:00-14:00, Parma time). The exact date will be confirmed in the next days (either 2 or 11 October).

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<sup>3</sup> <https://www.efsa.europa.eu/sites/default/files/wgs/biological-hazards/wg-stec.pdf>

<sup>4</sup> <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2018-00293>



## SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS BIOCONTAM UNIT

MINUTES OF THE 9<sup>th</sup> MEETING OF THE sub WORKING GROUP ON the  
"Pathogenicity assessment of Shiga toxin-producing *Escherichia coli*  
(STEC) and the public health risk posed by contamination of food with  
STEC"

**Held on 13 May 2019, Parma**

**(Agreed on 16 May 2019)**

### Participants

■ Working Group Members:

Sara Pires

■ EFSA:

BIOCONTAM Unit: Frank Boelaert, Maria Teresa Da Silva Felicio (Chair), Winy Messens, Eleonora Sarno

### 1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies for absence were received from Declan Bolton and Maarten Nauta.

### 2. Adoption of agenda

The agenda was adopted without changes.

### 3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of this meeting.

<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>



#### 4. Agreement of the minutes of the 8<sup>th</sup> Working Group meeting held on 2 May 2019, WEB-conference.

The minutes of the 8<sup>th</sup> Working Group meeting will be agreed by written procedure by the 15 May 2019.<sup>3</sup>

#### 5. Scientific topic(s) for discussion

##### 5.1. **Opinion on the pathogenicity assessment of Shiga toxin-producing *Escherichia coli* (STEC) and the public health risk posed by contamination of food with STEC<sup>4</sup>**

The aim of this subWG meeting was to clarify questions related to: (i) the STEC foodborne outbreak dataset and (ii) the source attribution model which was adapted to answer the Tor3 of this mandate. Specific questions related to:

- the matching of the categories for 'implicated food vehicle' from the zoonoses database catalogue to the categories currently used in the 'ToR 3 model';
- the disentanglement of 'complex foods' into the respective adequate ingredients;
- discrepancies of total number of strong/weak evidence foodborne outbreaks and
- the publication in EFSA's 'Knowledge junction' of the R code for the 'ToR3 model' as well as the dataset used as input

were clarified. Sara will update accordingly the relevant sections of the draft opinion, i.e. sections 2.2.2.2. and 3.3.2, reflecting the agreements made.

#### 6. Next meetings

The next WG meeting will take place as a physical meeting on 21 June 2019 in Brussels (10:30-18:30, Brussels time).

<sup>3</sup> <https://www.efsa.europa.eu/sites/default/files/wgs/biological-hazards/wg-stec.pdf>

<sup>4</sup> <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2018-00293>





## SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS BIOCONTAM UNIT

MINUTES OF THE 8<sup>th</sup> MEETING OF THE WORKING GROUP ON the  
"Pathogenicity assessment of Shiga toxin-producing *Escherichia coli*  
(STEC) and the public health risk posed by contamination of food with  
STEC"

**Held on 2 May 2019, Parma**

**(Agreed on 15 May 2019)**

### Participants

- Working Group Members:  
Declan Bolton (Chair), Stefano Morabito, Maarten Nauta, Taina Niskanen (ECDC), Sara Pires, Flemming Scheutz.
- EFSA:  
BIOCONTAM Unit: Maria Teresa Da Silva Felicio

### 1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies for absence were received from Claire Jenkins.

### 2. Adoption of agenda

The agenda was adopted without changes.

### 3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of this meeting.

<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>



#### 4. Agreement of the minutes of the 7<sup>th</sup> Working Group meeting held on 8 March 2019, WEB-conference.

The minutes of the 7<sup>th</sup> Working Group meeting were agreed by written procedure on 29 March 2019.<sup>3</sup>

#### 5. Scientific topic(s) for discussion

##### 5.1. **Opinion on the pathogenicity assessment of Shiga toxin-producing *Escherichia coli* (STEC) and the public health risk posed by contamination of food with STEC<sup>4</sup>**

WG experts reviewed and discussed the contributions received on the draft opinion. Tasks were allocated to WG experts and EFSA staff reflecting the agreements made during the meeting.

#### 6. Next meetings

The next WG meeting will take place as a physical meeting on 21 June 2019 in Brussels (10:30-18:30, Brussels time). Previous to that a subWG meeting will be organised with one WG member on 13 May 2019 (via web conference) to clarify questions related to the STEC foodborne outbreak data used in the model which was developed to answer ToR 3.

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<sup>3</sup> <https://www.efsa.europa.eu/sites/default/files/wgs/biological-hazards/wg-stec.pdf>

<sup>4</sup> <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2018-00293>



## SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS BIOCONTAM UNIT

MINUTES OF THE 7<sup>th</sup> MEETING OF THE WORKING GROUP ON the  
"Pathogenicity assessment of Shiga toxin-producing *Escherichia coli*  
(STEC) and the public health risk posed by contamination of food with  
STEC"

**Held on 8 March 2019, Parma**

**(Agreed on 29 March 2019)**

### Participants

■ Working Group Members:

Declan Bolton (Chair), Stefano Morabito, Maarten Nauta, Taina Niskanen (ECDC), Sara Pires, Flemming Scheutz.

■ EFSA:

BIOCONTAM Unit: Maria Teresa Da Silva Felicio, Winy Messens, Henok Ayalew Tegegne (only from 8:00-10:00)

### 1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies for absence were received from Claire Jenkins.

### 2. Adoption of agenda

The agenda was adopted without changes.

### 3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of this meeting.

<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>



#### 4. Agreement of the minutes of the 6<sup>th</sup> Working Group meeting held on 1 February 2019, WEB-conference.

The minutes of the 6<sup>th</sup> Working Group meeting were agreed by written procedure on 15 February 2019.<sup>3</sup>

#### 5. Scientific topic(s) for discussion

##### 5.1. **Opinion on the pathogenicity assessment of Shiga toxin-producing *Escherichia coli* (STEC) and the public health risk posed by contamination of food with STEC<sup>4</sup>**

WG experts reviewed and discussed the contributions received on the draft opinion. Tasks were allocated to WG experts and EFSA staff reflecting the agreements made during the meeting.

#### 6. Next meetings

The 8<sup>th</sup> WG meeting will take place as a web conference on 2 May 2019 (10:00-14:00, Parma time).

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<sup>3</sup> <https://www.efsa.europa.eu/sites/default/files/wgs/biological-hazards/wg-stec.pdf>

<sup>4</sup> <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2018-00293>



## SCIENTIFIC PANEL ON BIOLOGICAL HAZARDS BIOCONTAM UNIT

MINUTES OF THE 6<sup>TH</sup> MEETING OF THE WORKING GROUP ON the  
"Pathogenicity assessment of Shiga toxin-producing *Escherichia coli*  
(STEC) and the public health risk posed by contamination of food with  
STEC"

**WEB-conference, 1 February 2019**

**(Agreed on 15 February 2019)**

### Participants

- Working Group Members:  
Declan Bolton (Chair), Claire Jenkins, Stefano Morabito (only from 10:00-12:00), Maarten Nauta, Taina Niskanen (ECDC), Sara Pires.
- EFSA:  
BIOCONTAM Unit: Maria Teresa Da Silva Felicio, Winy Messens, Frank Boelaert (only from 10:00-11:00)

### 1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies for absence were received from Flemming Scheutz.

### 2. Adoption of agenda

The agenda was adopted without changes.

### 3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of this meeting.

<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>



#### 4. Agreement of the minutes of the 5<sup>TH</sup> SUB Working Group meeting held on 23 January 2019, WEB-conference.

The minutes of the 5<sup>th</sup> Working Group meeting were agreed by written procedure on 25 January 2019.<sup>3</sup>

#### 5. Scientific topic(s) for discussion

##### 5.1. **Opinion on the pathogenicity assessment of Shiga toxin-producing *Escherichia coli* (STEC) and the public health risk posed by contamination of food with STEC<sup>4</sup>**

The WG was updated on the progress of work made with the ongoing MS consultations using EU survey tool and via ECDC's and EFSA's networks. The WG members were updated on the datasets extracted by EFSA/ECDC (STEC foodborne outbreaks data, STEC occurrence data in food/feed/animals, STEC data in humans) and provided to the WG.

WG experts reviewed and discussed the contributions received on the draft opinion. Tasks were allocated to WG experts and EFSA staff.

#### 6. Next meetings

The 7<sup>th</sup> and 8<sup>th</sup> WG meetings will take place as a physical meeting on 8 March 2019 (08:00-15:00, Parma) and a web conference on 2 May 2019 (10:00-14:00, Parma time), respectively.

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<sup>3</sup> <https://www.efsa.europa.eu/sites/default/files/wgs/biological-hazards/wg-stec.pdf>

<sup>4</sup> <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2018-00293>

## Scientific Panel on Biological Hazards

### BIOCONTAM Unit

Minutes of the 5th meeting of the sub Working Group on the “Pathogenicity assessment of Shiga toxin-producing *Escherichia coli* (STEC) and the public health risk posed by contamination of food with STEC”

Held on 23 January 2019, by WEB-conference (10:00 – 12:00, Parma time)

#### Participants

- **Working Group Members:**

Declan Bolton and Flemming Scheutz.

- **EFSA:**

BIOCONTAM Unit: Maria Teresa Da Silva Felicio, Eleonora Sarno, Winy Messens (from 10:00 to 11:00 ).

#### 1. Welcome and apologies for absence

The Chair opened the meeting and welcomed the members of the sub Working Group (WG).

#### 2. Adoption of agenda

The agenda was adopted without changes.

#### 3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of this meeting.

#### **4. Agreement of the minutes of the 4<sup>th</sup> Working Group meeting held on 20 November 2018, 10:00-14:00 (web conference, Parma time).**

The minutes of the 4<sup>th</sup> Working Group meeting were agreed by written procedure on 30 November 2018<sup>3</sup>.

#### **5. Scientific topic(s) for discussion**

##### **5.1. Opinion on the pathogenicity assessment of Shiga toxin-producing *Escherichia coli* (STEC) and the public health risk posed by contamination of food with STEC<sup>4</sup>**

The WG experts reviewed and discussed the contributions received on the draft opinion. Tasks were allocated to EFSA staff and WG experts.

#### **6. Next meeting**

The 6<sup>th</sup> and 7<sup>th</sup> WG meetings will take place as a web conference on 1 February 2019 (10:00-14:00, Parma time) and as a physical meeting on 8 March 2019 (08:00-15:00, Parma), respectively.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

<sup>3</sup> <https://www.efsa.europa.eu/sites/default/files/wgs/biological-hazards/wg-stec.pdf>

<sup>4</sup> <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-O-2018-00293>



## Scientific Panel on Biological Hazards

### BIOCONTAM Unit

#### Minutes of the 4<sup>th</sup> meeting of the Working Group on the "Pathogenicity assessment of Shiga toxin-producing *Escherichia coli* (STEC) and the public health risk posed by contamination of food with STEC"

Held on 20 November 2018, by WEB-conference (10:00 – 14:00, Parma time)

#### Participants

- **Working Group Members:**

Declan Bolton (Chair), Stefano Morabito, Maarten Nauta, Flemming Scheutz, Claire Jenkins, Sara Pires.

- **EFSA:**

BIOCONTAM Unit: Maria Teresa Da Silva Felicio, Eleonora Sarno, Giusi Amore (from 10:30 to 11:00 ).

#### 1. Welcome and apologies for absence

The Chair opened the meeting and welcomed the members of the Working Group (WG). Apologies for absence were received from Taina Niskanen (ECDC).

#### 2. Adoption of agenda

The agenda was adopted without changes.

#### 3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of this meeting.

#### **4. Agreement of the minutes of the 3<sup>rd</sup> Working Group meeting held on 23 October 2018, 09:00-16:00 (Parma).**

The minutes of the 3<sup>rd</sup> Working Group meeting were agreed by written procedure on 8 November 2018<sup>3</sup>.

#### **5. Scientific topic(s) for discussion**

##### **5.1. Opinion on the pathogenicity assessment of Shiga toxin-producing *Escherichia coli* (STEC) and the public health risk posed by contamination of food with STEC<sup>4</sup>**

The WG experts reviewed and discussed the contributions received on the draft opinion. It was agreed to produce a glossary defining critical terminology used in this opinion such as pathogenicity, virulence, serotype, seropathotype, pathotype, and risk. The draft surveys on "monitoring for STEC in humans" and "monitoring for STEC in food/feed/animals" have been finalized for pilot testing before distribution to the ECDC's Food and waterborne disease network and EFSA's Zoonoses network, respectively. The summary tables and figures of the monitoring data on STEC in humans from ECDC and on STEC in food/feed/animals from EFSA were discussed. WG experts were appointed to further develop each of the sections in the draft opinion and tasks were allocated to EFSA staff and WG experts.

#### **6. Next meeting**

The 5<sup>th</sup> and 6<sup>th</sup> WG meetings will take place as web conference on 1 February 2019 (10:00-14:00, Parma time) and as physical meeting on 8 March 2019 (08:00-15:00, Parma), respectively.

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

<sup>3</sup> <https://www.efsa.europa.eu/sites/default/files/wgs/biological-hazards/wg-stec.pdf>

<sup>4</sup> <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-O-2018-00293>

## Scientific Panel on Biological Hazards

### BIOCONTAM Unit

Minutes of the 3<sup>rd</sup> meeting of the Working Group on the "Pathogenicity assessment of Shiga toxin-producing *Escherichia coli* (STEC) and the public health risk posed by contamination of food with STEC"

Held on 23 October 2018, in Parma (Italy),  
(09:00 – 16:00)

**(Agreed on 8 November 2018)**

#### Participants

- **Working Group Members:**

Declan Bolton (Chair), Maarten Nauta, Flemming Scheutz, Claire Jenkins, Sara Pires

- **European Commission (DG Santé – Unit G4):**

Not applicable

- **ECDC:**

Taina Niskanen

- **EFSA:**

BIOCONTAM Unit: Maria Teresa Da Silva Felicio, Winy Messens (until 14:45), Eleonora Sarno, Giusi Amore (from 09:10 to 10:00), Pietro Stella (from 13:30 to 14:20)

#### 1. Welcome and apologies for absence

The Chair opened the meeting and welcomed the members of the Working Group (WG). Apologies for absence were received by Stefano Morabito (WG Member) and by Martial Plantady [European Commission (DG Santé – Unit G4)].

## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of this meeting.

## 4. Agreement of the minutes of the 2<sup>nd</sup> sub Working Group meeting held on 16 October 2018, WEB-conference, 11.30-13.00 (Parma time).

The minutes of the 2<sup>nd</sup> sub Working Group meeting were agreed by written procedure on 8 November 2018<sup>3</sup>.

## 5. Scientific topic(s) for discussion

### 5.1. Opinion on the pathogenicity assessment of Shiga toxin-producing *Escherichia coli* (STEC) and the public health risk posed by contamination of food with STEC<sup>4</sup>

A brief overview of the STEC occurrence data in foods and animals and STEC foodborne outbreak data extracted from the EU Zoonosis monitoring database (from 2012 to 2017) was presented. Major limitations of these data were discussed, i.e.: (i) data are not comparable across MSs and do not originate from harmonised monitoring or surveillance; (ii) reported data are generated using different diagnostic methods; (iii) the ISO method 13136 is being revised currently; (iv) the distinction between strong and weak foodborne outbreaks is subjective and not harmonised.

A brief overview of the STEC monitoring data in humans extracted from ECDC's TESSy monitoring database (from 2012 to 2017) was also

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

<sup>3</sup> <https://www.efsa.europa.eu/sites/default/files/wgs/biological-hazards/wg-stec.pdf>

<sup>4</sup> <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2018-00293>

presented as well as a preliminary exploratory analysis of the data from ECDC's surveillance atlas for infectious diseases (TESSy data) was also discussed.

The results of the JEMRA global and regional attribution of STEC infections to food sources were presented as well as the approach used based on international consultation and evidence synthesis. Limitations of this analysis were discussed.

The WG agreed to: (i) use both updated TESSy data from 2012 to 2017 characterising the human STEC strains as well as updated literature to analyse carefully which virulence genes/pathogenicity islands show potential for diarrhoea, bloody diarrhoea or HUS; (ii) redo a similar analysis to the source attribution performed within the 2018 JEMRA STEC No.31 report using the EU foodborne outbreak data extracted from 2012 to 2017; and (iii) review the draft questionnaires on the monitoring for STEC in humans and on the monitoring for STEC in food, feed and animals for consultation of Member States via ECDC's Food and waterborne disease network and EFSA's Zoonoses network contact points. The STEC draft opinion must include considerations on uncertainty following the EFSA guidance, but the BIOHAZ Panel does not expect a full implementation of this guidance in the STEC opinion.

## **6. Next meeting**

The next WG meeting will take place as a physical meeting on 20 November via Web Conference from 10:00 to 14:00 (Parma time).

## Scientific Panel on Biological Hazards

### BIOCONTAM Unit

Minutes of the 2<sup>nd</sup> meeting of the sub Working Group on the “Pathogenicity assessment of Shiga toxin-producing *Escherichia coli* (STEC) and the public health risk posed by contamination of food with STEC”

Held on 16 October 2018 by WEB-conference  
(11:30 – 13:00, Parma times)

**(Agreed on 8 November 2018)**

#### Participants

- **Working Group Members:**

Declan Bolton, Stefano Morabito.

- **EFSA:**

BIOCONTAM Unit: Maria Teresa Da Silva Felicio (Chair), Giusi Amore (from 11:30 to 12:20).

#### 1. Welcome and apologies for absence

The Chair opened the meeting and welcomed the members of the sub Working Group (WG).

#### 2. Adoption of agenda

The agenda was adopted without changes.

#### 3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of this meeting.

#### **4. Agreement of the minutes of the 1<sup>st</sup> Working Group meeting held on 4 September October 2018, WEB-conference, 10:00-14:00 (Parma time).**

The minutes of the 1<sup>st</sup> Working Group meeting were agreed by written procedure on 13 September 2018<sup>3</sup>.

#### **5. Scientific topic(s) for discussion**

##### **5.1. Opinion on the pathogenicity assessment of Shiga toxin-producing *Escherichia coli* (STEC) and the public health risk posed by contamination of food with STEC<sup>4</sup>**

The sub WG discussed thoroughly the available: (i) zoonoses STEC monitoring data from EFSA (occurrence in food and foodborne outbreak data), (ii) TESSy STEC monitoring data in humans. Proposals for possible use of these datasets were agreed and will be presented for discussion with the complete WG at the 3rd WG meeting. Tasks were allocated to EFSA staff and WG experts.

#### **6. Next meeting**

The next WG meeting will take place as a physical meeting in Parma on 23 October (9:00-17:00) followed by a web conference on 20 November (10:00-14:00, Parma times).

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

<sup>3</sup> <https://www.efsa.europa.eu/sites/default/files/wgs/biological-hazards/wg-stec.pdf>

<sup>4</sup> <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2018-00293>

## Scientific Panel on Biological Hazards

### BIOCONTAM Unit

#### Minutes of the 1<sup>st</sup> meeting of the Working Group on the "Pathogenicity assessment of Shiga toxin-producing *Escherichia coli* (STEC) and the public health risk posed by contamination of food with STEC"

Held on 04 September 2018, Parma (Italy), by WEB-conference (10:00 – 14:00, Parma times)

#### Participants

- **Working Group Members:**

Declan Bolton (Chair), Maarten Nauta, Flemming Scheutz, Claire Jenkins, Sara Pires.

- **European Commission (DG Santé – Unit G4):**

Martial Plantady (from 10:00 to 12:00).

- **ECDC:**

Taina Niskanen (from 10:00 to 12:15).

- **EFSA:**

BIOCONTAM Unit: Maria Teresa Da Silva Felicio, Winy Messens, Eleonora Sarno, Giusi Amore (from 11:30 to 12:15), Frank Boelaert (from 11:30 to 12:15).

#### 1. Welcome and apologies for absence

The Chair opened the meeting and welcomed the members of the Working Group (WG). Apologies for absence were received from Stefano Morabito.



## 2. Adoption of agenda

The agenda was adopted without changes.

## 3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes<sup>1</sup> and the Decision of the Executive Director on Declarations of Interest<sup>2</sup>, EFSA screened the Annual Declaration of Interest filled in by the working group members invited for the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process or at the Oral Declaration of Interest at the beginning of this meeting.

## 4. Scientific topic(s) for discussion

### 4.1. Opinion on the pathogenicity assessment of Shiga toxin-producing *Escherichia coli* (STEC) and the public health risk posed by contamination of food with STEC<sup>3</sup>

The WG discussed the terms of reference received from the European Commission (EC), clarified these with the EC representative, discussed and agreed on a common understanding of these. Possible approaches to be taken to answer these were discussed and it was concluded that the WG needs to first check the available monitoring data from ECDC and EFSA. ECDC and EFSA staff will provide the WG with a summary assessment of the completeness and quality of these data in order to allow further analysis on which data can/should be included in the assessments of each ToR. The WG discussed data needs and all possible data sources. The preliminary table of contents of the draft opinion was agreed, WG experts were appointed to further develop each of the sections in the draft opinion and tasks were allocated to EFSA staff and WG experts.

## 5. Next meeting

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<sup>1</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencypolicy.pdf>

<sup>2</sup> <http://www.efsa.europa.eu/en/keydocs/docs/independencerules2014.pdf>

<sup>3</sup> <http://registerofquestions.efsa.europa.eu/roqFrontend/questionLoader?question=EFSA-Q-2018-00293>

The next WG meetings will take place as a physical meeting in Parma on 23 October (9:00-17:00) followed by a web conference on 20 November (10:00-14:00, Parma times).