

# Results of the epidemiological investigation of ASF in 18 outbreak farms of Estonia

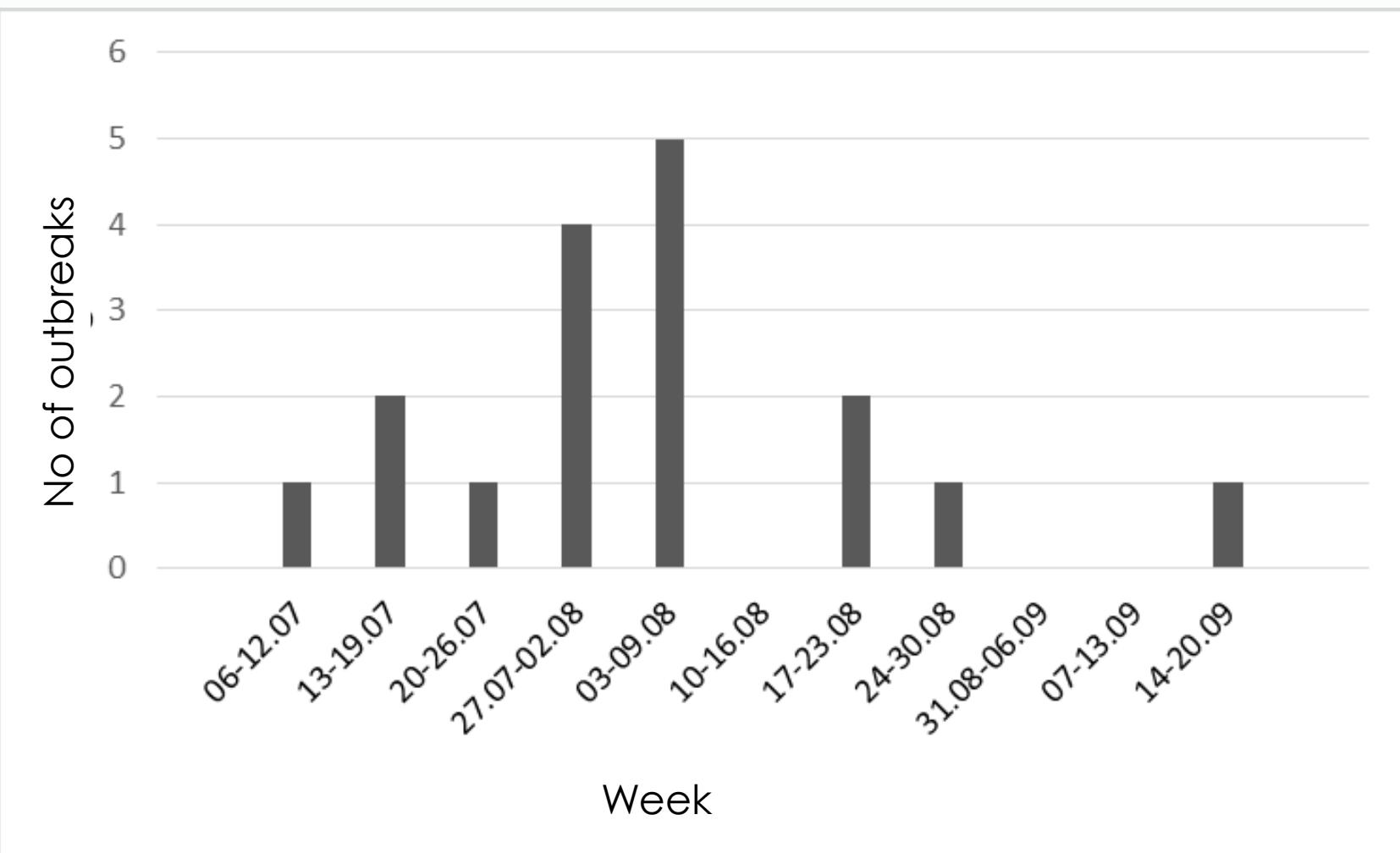
Arvo Viltrop

Professor of veterinary epidemiology  
Estonian University of Life Sciences

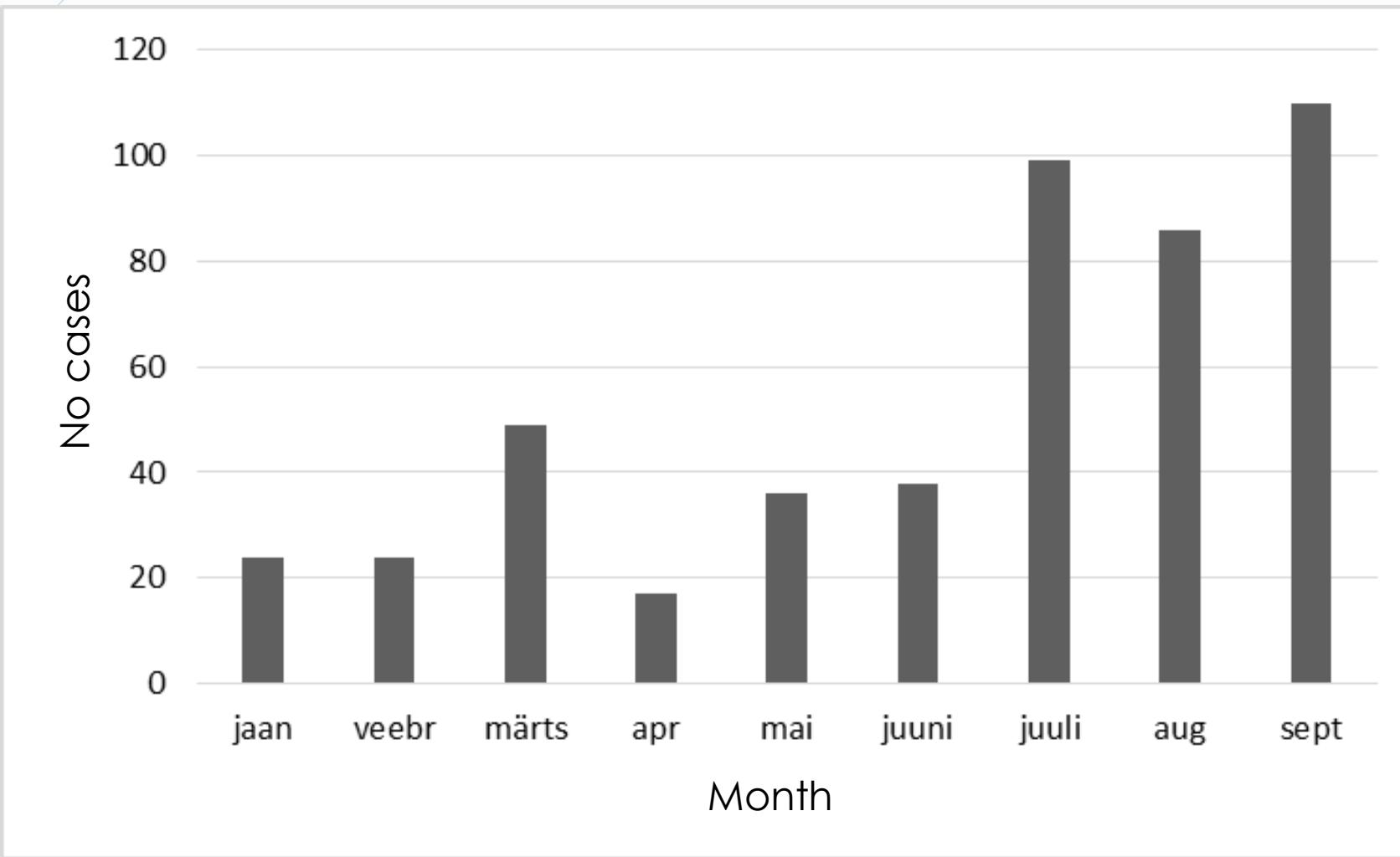
# Introduction

- ▶ Data used for analysis
  - ▶ Data collected during preliminary epidemiological investigation
  - ▶ Additional questioning of veterinarians and owners involved using standard questionnaire
  - ▶ Dataset established

# Distribution of outbreaks in time



## No of wild boar cases in counties with outbreaks in domestic pigs



# Geographic distribution of ASF outbreaks

County	Outbreaks in domestic pigs		ASF positive wild boar (01.01.-31.10.2015)	
	No	%	No	%
Lääne-Viru	1	6%	28	6%
Jõgeva	1*	6%	10	2%
Järva	1	6%	31	7%
Tartu	2	12%	65	14%
Viljandi	6	35%	141	30%
Võru	2	12%	95	20%
Valga	4	24%	97	21%
<b>Total</b>	<b>17</b>	<b>100%</b>	<b>467</b>	<b>100%</b>

# Farm types of ASF outbreak herds

Type of the farm	No pigs	No outbreaks
Backyard	1-15	6
Small-producer	100-500	5
Producer	1100 - 6500	7

# Farm types of ASF outbreak herds 2

<b>Farm type</b>	<b>Herd size group</b>			<b>Total</b>
	1-15	100-500	1100-6500	
<b>Farrow to finish</b>		3	3	6
<b>Multiplier</b>		1	2	3
<b>Fattening</b>	6	1	2	9
<b>Total</b>	6	5	7	18

# Possible causes of introduction

Cause of introduction	Herd size class			Total
	1-15	100-500	1100-6500	
Biosecurity mistakes	6	1	4	11
Feeding of grass		1		1
Contamination of cereal feed		3	3	6
Kokku	6	5	7	18

# Possible causes of introduction

- ▶ All introductions due to indirect transmission
  - ▶ „secondary“ contamination of cereal feeding staffs at –
    - ▶ storage
    - ▶ milling
    - ▶ mixing
  - ▶ „direct“ contamination of green fodder in the field
  - ▶ humans – contaminated footwear, cloths, tools
  - ▶ contaminated vehicles entering the territory or the building
  - ▶ Other animals – production animals kept with pigs, pets

# Possible causes of introduction

- ▶ Biosecurity measures on very good or good level - 2 (n=18)
- ▶ Production farms having their own mill or using a local mill - 8 (n=11)
  - ▶ flower used to mix feed for pigs – all have feed mixers on farm
- ▶ Feed contamination can be suspected in 1 herd where feed originated from specialised producer

# Suspicion and notification

- ▶ Causes of suspicion
  - ▶ morbidity – 11
  - ▶ mortality – 6
  - ▶ surveillance – 1
- ▶ Diseases suspected:
  - ▶ feed poisoning – 5
  - ▶ Erysipelas – 2
  - ▶ Pneumonia – 1
- ▶ Lag time from first symptoms to notification 0-7 days



# Thank you!