

## CAMPYLOBACTER IN HUMANS AND POULTRY MEAT FOOD CHAIN - SECTION B

### SURVEILLANCE OF DISEASE IN ANIMALS

Dear participant,  
in the context of the OHEJP Matrix, Work-Package 2 (Best-practices and multi-sectorial collaboration) implemented this online questionnaire to collect information about the surveillance of **Campylobacter** in the **poultry meat food chain**, in three sectors: public health, animal health, and food safety.

We would like to thank you for your willingness to fill in the questionnaire for the **animal health** sector.

Please find hereby some information regarding personal data processing.

*Under Articles 13 and 14 of Regulation (EU) 2016/679, the personal data processing concerns the personal data - name, family name, institution, email address - of those who answer the questionnaire as part of the Matrix project.*

*The data controller is the legal representative of Istituto Zooprofilattico Sperimentale Abruzzo e Molise "G. Caporale" – Teramo (Italy), [www.izs.it](http://www.izs.it) - [protocollo@pec.izs.it](mailto:protocollo@pec.izs.it), +3908613321. The contact details of the DPO of the Institute are: [dpo@izs.it](mailto:dpo@izs.it), +39 0861 3321.*

*Personal data collected will be processed for purposes connected with the handling of the contractual requirements related to the management of the Matrix project (art. 6, § 1, letter b) of Regulation).*

*The personal data provided will not be subject to communication and/or dissemination.*

*All personal data collected will be processed electronically on digital medium using the specific information systems and, in any case, the processing is made exclusively by personnel in charge. All data collected will be retained anonymously on digital.*

*At any time, data subjects have the right to ask the data controller for accessing their personal data, confirming such data exist, to know the content, the origin, and the processing terms, to request the update, the rectification, the erasure, the transformation into anonymity or the blocking of the data processed in breach of the law or to object the processing. The related request should be made by contacting the Data Protection Officer or the supervisory authority, in particular in the Member State of his or her habitual residence.*

\* 1. Country

\* 2. Contact info of the person replying to the questionnaire

Name and Surname

Institution

E-mail address

## CAMPYLOBACTER IN HUMANS AND POULTRY MEAT FOOD CHAIN - SECTION B

### SURVEILLANCE - General

3. Is Campylobacteriosis in poultry a notifiable disease\* in animals in your country?

\* "A disease that, by law, must be reported to public health authorities upon diagnosis." (EJP ORION Glossary)

YES

NO

4. Is there any legal (official) "case definition" and/or "outbreak definition" in your country?

YES

NO

5. If yes, please specify the "case definition" and/or "outbreak definition"

## CAMPYLOBACTER IN HUMANS AND POULTRY MEAT FOOD CHAIN - SECTION B

### SURVEILLANCE - Hatchery

6. Is the surveillance\* for Campylobacter in poultry **at hatchery** in place in your country?

\*Surveillance understood as "Targeted Surveillance that is focused on one or more pre-defined hazards (disease, condition, biological, chemical or physical agent, or event) often this form of surveillance uses diagnostic tests for the detection of particular pathogens (e.g. molecular diagnostic methods)." (EJP ORION Glossary)

YES

NO

7. Are different types of surveillance activities in place for Campylobacter in poultry **at hatchery** carrying out based on:

	EU legal obligation	National legal obligation	Voluntary based
Official control program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Baseline survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monitoring program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Research project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outbreak investigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

8. Who are the actors in charge of carrying out surveillance activities for Campylobacter in poultry **at hatchery**?

Farmer

Official Control Authorities

Vet technician/Private Vet

Other (please specify)

9. How often are the samplings performed in poultry **at hatchery**?

	Ongoing	Monthly	Quarterly	As required (E.g. as a part of a defined study or during a defined period)
Official control program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Baseline survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monitoring program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Research project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outbreak investigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

10. If the data collection is “ongoing”, what is the required notification time period?

- 24 hours
- 48 hours
- one week
- two weeks
- Other (please specify)

11. What types of specimens are collected during surveillance activities in poultry **at hatchery**?

	Official control program	Baseline survey	Monitoring program	Research project	Outbreak investigation
Litter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boot swabs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eggs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental samples	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cloacal swabs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Caecal contents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

12. Do surveillance activities in place for Campylobacter activities in poultry **at hatchery** also include data collection on:

- Personnel movement
- Cleaning and sanitation procedures
- Other (please specify)

## CAMPYLOBACTER IN HUMANS AND POULTRY MEAT FOOD CHAIN - SECTION B

### SURVEILLANCE - Broiler farms

13. Is the surveillance\* for Campylobacter in poultry **in broiler farms** in place in your country?

*\*Targeted Surveillance that is focused on one or more pre-defined hazards (disease, condition, biological, chemical or physical agent, or event) often this form of surveillance uses diagnostic tests for the detection of particular pathogens (e.g. molecular diagnostic methods).” (EJP ORION Glossary)*

YES

NO

14. Are different types of surveillance activities in place for Campylobacter in poultry **in broiler farms** carrying out based on:

	EU legal obligation	National legal obligation	Voluntary based
Official control program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Baseline survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monitoring program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Research project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outbreak investigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

15. Who are the actors in charge of carrying out surveillance activities for Campylobacter in poultry **in broiler farms**?

Farmer

Official Control Authorities

Vet technician/Private Vet

Other (please specify)

16. How often are the samplings performed in poultry **in broiler farms**?

	Ongoing	Monthly	Quarterly	As required (E.g. as a part of a defined study or during a defined period)
Official control program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Baseline survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monitoring program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Research project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outbreak investigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

17. If the data collection is "ongoing", what is the required notification time period?

- 24 hours
- 48 hours
- one week
- two weeks
- Other (please specify)

18. What types of specimens are collected during surveillance activities in poultry in broiler farms?

	Official control program	Baseline survey	Monitoring program	Research project	Outbreak investigation
Litter	<input type="checkbox"/>				
Boot swabs	<input type="checkbox"/>				
Water	<input type="checkbox"/>				
Environmental samples	<input type="checkbox"/>				
Feed	<input type="checkbox"/>				
Cloacal swabs	<input type="checkbox"/>				
Caecal contents	<input type="checkbox"/>				
Other	<input type="checkbox"/>				

Other (please specify)

19. Do surveillance activities in place for Campylobacter activities in poultry in broiler farms also include data collection on:

- Personnel movement
- Cleaning and sanitation procedures
- Other (please specify)

## CAMPYLOBACTER IN HUMANS AND POULTRY MEAT FOOD CHAIN - SECTION B

### SURVEILLANCE - Transport

20. Is the surveillance\* for Campylobacter in poultry **during transport** in place in your country?

*\*Targeted Surveillance that is focused on one or more pre-defined hazards (disease, condition, biological, chemical or physical agent, or event) often this form of surveillance uses diagnostic tests for the detection of particular pathogens (e.g. molecular diagnostic methods).” (EJP ORION Glossary)*

YES

NO

21. Are different types of surveillance activities in place for Campylobacter in poultry **during transport** carrying out based on:

	EU legal obligation	National legal obligation	Voluntary based
Official control program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Baseline survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monitoring program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Research project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outbreak investigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

22. Who are the actors in charge of carrying out surveillance activities for Campylobacter in poultry **during transport**?

Farmer

Official Control Authorities

Vet technician/Private Vet

Transporter

Other (please specify)

23. How often are the samplings performed in poultry **during transport**?

	Ongoing	Monthly	Quarterly	As required (E.g. as a part of a defined study or during a defined period)
Official control program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Baseline survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monitoring program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Research project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outbreak investigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

24. If the data collection is "ongoing", what is the required notification time period?

- 24 hours
- 48 hours
- one week
- two weeks
- Other (please specify)

25. What types of specimens are collected during surveillance activities in poultry **during transport**?

	Official control program	Baseline survey	Monitoring program	Research project	Outbreak investigation
Litter	<input type="checkbox"/>				
Boot swabs	<input type="checkbox"/>				
Environmental samples	<input type="checkbox"/>				
Cloacal swabs	<input type="checkbox"/>				
Caecal contents	<input type="checkbox"/>				
Other	<input type="checkbox"/>				

Other (please specify)

26. Do surveillance activities in place for Campylobacter activities in poultry **during transport** also include data collection on:

- Personnel movement
- Cleaning and sanitation procedures
- Carrier route
- Other (please specify)

## CAMPYLOBACTER IN HUMANS AND POULTRY MEAT FOOD CHAIN - SECTION B

### SURVEILLANCE - Increased mortality

27. Is surveillance\* for Campylobacter in poultry in place in case of increased mortality **at hatchery**?

*\*Surveillance understood as "The real-time (or near real-time) collection, analysis, interpretation and dissemination of health-related data to enable the early identification of the impact (or absence of impact) of potential human or veterinary public health threats which require effective public health action". (EJP ORION Glossary)*

Yes

No

28. In case of yes, which organs/tissues of the animal are investigated?

29. Is surveillance for Campylobacter in poultry in place in case of increased mortality **in broiler farms**?

Yes

No

30. In case of yes, which organs/tissues of the animal are investigated?

31. Is surveillance for Campylobacter in poultry in place in case of increased mortality **during transport**?

Yes

No

32. In case of yes, which organs/tissues of the animal are investigated?

## CAMPYLOBACTER IN HUMANS AND POULTRY MEAT FOOD CHAIN - SECTION B

### DATA MANAGEMENT AND LABORATORY METHODS

33. Do you have a National Animal Identification System of poultry in place in your country?

- Yes  
 No

34. Do you have a National Animal Movement Identification System of poultry in place in your country?

- Yes  
 No

35. Are data on surveillance activities in place for Campylobacter in poultry, at different stages, stored in electronic data collection systems at national level?

- Yes  
 No

36. Please, provide the name and contact details of the institution in charge of collecting and storing data coming from surveillance activities at the national level.

Institution

City

Website

37. What kind of information collected during surveillance is shared at national level?

- |   |   |
|---|---|
| <input type="checkbox"/> Number of confirmed cases  | <input type="checkbox"/> Sampler  |
| <input type="checkbox"/> Number of suspected cases  | <input type="checkbox"/> Date of sample collection  |
| <input type="checkbox"/> Number of depopulated animals  | <input type="checkbox"/> Place of sample collection                                       |
| <input type="checkbox"/> Number of dead animals   | <input type="checkbox"/> Sampling context<br>(official control program, monitoring, etc.) |
| <input type="checkbox"/> Type of specimen<br>(litter, boot swabs, water, environmental samples, etc.) |   |
| <input type="checkbox"/> Other (please specify)   |   |

38. Please specify the laboratory test used routinely for each type of specimen

	Litter	Boot swabs	Water	Environmental samples	Feed	Cloacal swabs	Caecal contents
PCR	<input type="checkbox"/>						
ISO 10272-1 (detection)	<input type="checkbox"/>						
ISO 10272-1 (enumeration)	<input type="checkbox"/>						
Other culture dependent methods	<input type="checkbox"/>						
Culture dependent methods + PCR	<input type="checkbox"/>						
Other	<input type="checkbox"/>						

Other (please specify)

39. Are the Campylobacter strains characterized?

- Yes  
 No

40. If yes, which laboratory methods are used routinely to characterize Campylobacter strains?

	Always	Sometimes	Never
PCR Typing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MALDI_TOF	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Serotyping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MLST	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PFGE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whole genome sequencing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WGS - MLST in silico	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WGS - cgMLST/wgMLST	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WGS - SNP analysis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Antibiotic susceptibility testing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

41. How do you share the results of laboratory methods? Please check for each diagnostic test one or more possibilities:

	National level	Sub-national / Regional level	Local level	Intersectorial: human, animal, food	Not shared
PCR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Culture dependent methods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Culture dependent methods + PCR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enumeration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Serotyping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MALDI_TOF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MLST	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PFGE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whole genome sequencing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WGS - MLST in silico	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WGS - cgMLST/wgMLST	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WGS - SNP analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Antibiotic susceptibility testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

42. When are the results shared for each analytical method used?

	Routinely	Outbreak investigation	Research	As required (E.g. as a part of a defined study or during a defined period)
PCR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Culture dependent methods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Culture dependent methods + PCR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enumeration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Serotyping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MALDI_TOF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MLST	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PFGE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whole genome sequencing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WGS - MLST in silico	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WGS - cgMLST/wgMLST	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WGS - SNP analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Antibiotic susceptibility testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

43. Are laboratory data stored in databases at the national level?

Yes

No

44. If yes, which information on isolates is collected

	National level	Sub-national / Regional level	Local level	Intersectorial: human, animal, food	Not shared
Type of specimen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sampler	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date of sample collection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Place of sample collection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date of sample receipt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date of laboratory result	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

45. Please, provide the name and contact details of the National Reference Laboratory in charge of *Campylobacter* in poultry.

Institution

City

Website

46. Information on biosecurity measures in place are shared at which level?

- Only locally
- Sub-national / Regional level
- National level
- Other (please specify)

47. Basing on the biosecurity measures in place, are farms categorized depending the level of risk?

- Yes
- No

## CAMPYLOBACTER IN HUMANS AND POULTRY MEAT FOOD CHAIN - SECTION B

### SURVEILLANCE SYSTEM EVALUATION

48. Has the surveillance system been evaluated?

*Please, consider any known evaluations of functioning, performance, organizational aspects, and/or cost-effectiveness.*

Yes

No

49. Which method of evaluation has been used?

Auto-evaluation

OASIS method

SERVAL method

Other (please specify)

50. Please, provide contact details of the institution that conducted the surveillance system evaluation.

Institution

City