

ESCV/ENPEN COVID-19 SURVEILLANCE ON SEROLOGICAL TESTING

Fields marked with * are mandatory.

QUESTIONNAIRE 1

YOUR DETAILS

* Name of your Institute:

* How would you classify your institution?

- National public health institute
- Regional public health institute
- Hospital virology or microbiology laboratory
- University laboratory or research unit
- Other please specify

Other, please specify

* City:

* Country:

* Job title:

* Email address:

BACKGROUND TO SARS-CoV-2 EPIDEMIOLOGY IN YOUR CONTEST

1. What was the case definition applied in your institution for a confirmed case of COVID-19?

2. Please estimate the number of confirmed cases of COVID-19 identified or reported at your institution between 1st March and 31st June 2020?

- <10
 10-100
 101-1,000
 1,000-5,000
 5,000-10,000
 >10,000

3. Which month were the highest number of cases detected?

- February
 March
 April
 May
 June

MITIGATION STRATEGY APPLIED

4. Were any mitigation strategies applied to reduce the number of new SARS-CoV-2 infections?

- Yes
 No

4a. What actions were undertaken as mitigation strategy and how long these were applied to?

Outbreak / increased number of cases	February	March	April	May	June
A national lockdown was undertaken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A regional lockdown was undertaken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local lockdown was undertaken where a new outbreak was identified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Schools were closed in regions where an outbreak was identified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restaurants were closed in regions where an outbreak was identified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other, please specify

5. Was a quarantine introduced to reduce the number of new SARS-CoV-2 infections?

- Yes
- No

5b. If "Yes", in which epidemiological circumstances did you require to start a quarantine and how long for?

	14 days	More than 14 days	Depending on swab test results of source patient	Depending on serology results of exposed individual
Known close contact with a confirmed SARS-CoV-2 case	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Known close contact with a suspected SARS-CoV-2 case	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Known travel in the European area with ongoing outbreak	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Known travel in an extra European area with ongoing outbreak	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other, please specify

SEROLOGICAL TESTING

6. Did your institution perform/have access to any serological SARS-CoV-2 results?

- Yes
- No

6a. If "No", is your institute planning a serological study on SARS-CoV-2 in the next few months?

- Yes
- No

Please specify which assay you have chosen and considering for serology:

7. What is/are the target/s in your serological assay/es?

	ELISA	CLIA	LFA	Rapid test	IgG	IgM	IgA	Total Ig	Antigen S	Antigen N	Antigen RBD
Commercial assay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In-house assay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Virus neutralisation assay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pseudotype assay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide the name for commercial assay(s) you have used:

Please provide the reference or details for your in-house assay:

Please provide reference or details for neutralisation assay used (i.e. cell line, virus strain and method [plaque assay, microneutralisation or other] used)

Please provide reference or details for pseudotype assay used (i.e. vector and cell line).

Please provide reference or details for other methods you may have used

8. Did you perform a validation/verification of the assay prior the use on clinical samples?

- Yes
 No
 Not applicable as our testing is performed elsewhere

8.a Why did you not perform a validation for your serological assay?

9. How many known positive and negative samples were included in validation/verification?

10. Did you do any further work on seropositive samples (i.e. confirmation of result by another assay/ neutralising antibody testing etc...)?

11. Why did your institute perform the SARS-CoV-2 serology? Please estimates the number of samples tested.

	Yes/Number of sample tested	No
For seroprevalance studies	<input type="checkbox"/>	<input type="checkbox"/>
For diagnostic purpose	<input type="checkbox"/>	<input type="checkbox"/>
To support convalescent plasma studies	<input type="checkbox"/>	<input type="checkbox"/>
To support larger studies	<input type="checkbox"/>	<input type="checkbox"/>
Other, please specify	<input type="checkbox"/>	<input type="checkbox"/>

Number of sample tested in serology studies:

Number of sample tested for diagnostic purpose:

Number of sample tested for convalescent plasma studies:

Please specify which studies and estimate the number of samples tested:

Please, specify for which other reasons you performed SARS-CoV-2 serology and estimate the number of samples tested:

12. When do you perform SARS-CoV-2 serology? (multiple choice possible)

- To confirm past infection in those without SARS-CoV-2 PCR diagnosis
- To confirm past infection in those with negative SARS-CoV-2 PCR diagnosis
- To estimate the number of asymptomatic infections in outbreak situations
- To look for antibody response in immunocompromised individuals
- To prove immunity to SARS-CoV-2 infection
- Other, please specify

Other, please specify

13. What sample types are used for serological testing in your laboratory? (multiple choice applicable)

- Serum
- Plasma
- Saliva
- Other, please specify

Other, please specify

SPECIFIC QUESTIONS RELATING TO YOUR SEROPREVALENCE STUDIES

14. Did you perform **seroprevalence** studies?

- Yes

No

15. Please specify your study details filling the following table

	February	March	April	May	June	Still ongoing (Sep 2020)	Cohort study	Case-control study	Descriptive cross-sectional study	Convenient sampling
Population attending work /school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Population attending hospitals /GP/ emergency room	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blood donors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Health care workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
General population	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other, please specify

15b. If the study was conducted on healthcare worker, please specify the criteria of inclusion:

- We included all healthcare workers working in the hospital
- We included only healthcare workers presenting symptoms
- We included healthcare workers with a close contact with a SARS-CoV-2 positive case
- We included healthcare workers actively working in a specific ward
- Other, please specify

Please, specify which ward:

Other, please specify

16. Did you collect the following general information with serological testing /studies?

	Yes	No
Whether it was a laboratory confirmed infection	<input type="checkbox"/>	<input type="checkbox"/>
Asymptomatic/symptomatic infection	<input type="checkbox"/>	<input type="checkbox"/>
Data on severity of the infection	<input type="checkbox"/>	<input type="checkbox"/>
Outcome data	<input type="checkbox"/>	<input type="checkbox"/>
Presence of underlying disease	<input type="checkbox"/>	<input type="checkbox"/>
Date of symptoms onset	<input type="checkbox"/>	<input type="checkbox"/>
Date of sample collection	<input type="checkbox"/>	<input type="checkbox"/>
Date of diagnosis	<input type="checkbox"/>	<input type="checkbox"/>
Age	<input type="checkbox"/>	<input type="checkbox"/>
Other, please specify	<input type="checkbox"/>	<input type="checkbox"/>

Other, please specify

16a. What outcome data you collected for SARS-CoV-2 infection in your seroprevalence studies? (multiple choice applicable)

- Fully recovered
- Recovered but SARS-CoV-2 RNA still detected by PCR
- Death
- Long-term respiratory issues
- Long-term cardiac issues
- Long-term tiredness
- Long-term neurological issues
- Other, please specify

Other, please specify

16b. What information on severity of SARS-CoV-2 infection you collected? (multiple choice applicable)

- Not hospitalised
- Hospitalised but not in intensive care
- Intensive care
- Not known
- Length of hospitalisation
- Other, please specify

Other, please specify

16c. What risk groups you have considered in your studies?

- Hypertension
- Diabetes
- Cardiovascular disease
- Chronic respiratory disease
- Chronic kidney disease (i.e. haemodialysis patients)
- Immune compromised
- Cancer
- Obesity
- Other, please specify

Other, please specify

16d. What age groups you have included in your work? (more than one choice applicable)

- 0-4 years
- 5-9 years
- 10-19 years
- 20-59 years
- 60-74 years
- 75-90 years
- >90 years

17. Would you be willing to share your data?

- Yes
- No

Thank you for participating to the questionnaire. Please, feel free to share your comments and suggestions. Please complete also the second shorter questionnaire on **prolonged SARS-CoV-2 infection** and let us know whether you would be interested participating to our planned hospital-based pilot surveillance on prolonged SARS-CoV-2 infection.

Thank you, 5.1.2e on the behalf of of ENPEN and ESCV.