

FW: Sero information

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Date:

Wed, 22 Apr 2020 12:37:11 -0400

Attachments:

Serological Testing for COVID 2020-04-21_12h00.docx (29.16 kB); Serological Testing Update April 22 11am.docx (28.34 kB)

fyi

From: Pham, Thao

Sent: Wednesday, April 22, 2020 12:35 PM

To: Freeland, Honourable/Honorable Chrystia <Chrystia.Freeland2@dpmo-cvpm.gc.ca>

Cc: Grech, Adam <Adam.Grech@dpmo-cvpm.gc.ca>; Sambasivam, Bud <Bud.Sambasivam@dpmo-cvpm.gc.ca>

Subject: Sero information

Deputy Prime Minister,

To your questions:

- 1) Has Canada approved any serological tests to date:
No. HC are looking at 8 "promising" tests, including 4 FDA approved antibody diagnostic tests. (Attached)
- 2) Number of approved sero tests worldwide?
The sero tests are either used for 1) diagnostic testing of antibodies; 2) for research and surveillance purposes. (attached)
 - a. Diagnostic testing: 13 tests have approved internationally to-date for diagnostic testing of antibodies, including four tests approved by the FDA in the US, as well as Singapore and China.
 - b. Research and surveillance purpose : 29 tests that have been approved, including by Germany (2), US (12), UK (2)
- 3) How many countries have used sero testing for immunopassports?

Although many jurisdictions have raised the idea, efforts to introduce immunopassports have been hindered by limitations with the sero tests to date (such as inaccuracy of testing have hindered progress (e.g., UK)).

Two main approaches have emerged:

- 1) Large-scale serosurveys designed to attempt to develop a better understanding of the how prevalent COVID-19 has been in a jurisdiction;
 - The most recent example of this is Governor Cuomo announcing that starting this week New York state will randomly sample 3,000 New Yorkers to estimate the percentage of the population (19

million) that has already had COVID-19. He called the exercise “the most aggressive statewide antibody testing survey in the nation.”

- 2) Consideration of “immunopassports” or other similar approaches where individuals who have antibodies and are assumed to be immune to further infection could be cleared to start to return to work, etc. Although many jurisdictions have raised the idea, efforts to introduce immunopassports have been hindered by limitations with the sero tests to date (such as inaccuracy of testing have hindered progress (e.g., UK)).

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- Germany is among the jurisdictions that has gone the furthest with serological, having developed two tests that are approved for research purposes.
 - o Germany utilized serological testing intensely in one German town – Gangelt – after a concentrated outbreak of the virus. Results of testing indicated that about 14% of the town had been infected and had the antibodies (much lower than required for “herd immunity”).
 - o University Hospital in Bonn led the study and approached about 1,000 residents of Gangelt to give blood, have their throats swabbed, and fill out a survey.
 - o Germany plans to conduct mass serological testing on about 100,000 people to determine scope and scale of potential relative immunity.
 - o One report suggested that the Germans believe they are still three months away from getting their own sensitive kits available and validated.