TESTING

What's the difference between laboratory tests and rapid tests?

(from media lines – Sept 16)

Molecular tests (known as PCR or Nucleic acid-based testing) detect the presence of the SARS-COV-2 virus and are used to diagnose COVID-19 infection. Samples are taken from the nose or throat with swabs and sent to a laboratory for analysis. Many samples can be tested together in a laboratory with the appropriate equipment, with results ready in 1 to 3 days depending on lab testing capacity (it varies by PT). This diagnostic technology is considered the most effective ("gold standard") and efficient way to most accurately test a large number of submitted samples.

Limitations of molecular tests include sensitivity varying throughout the disease course: the accuracy of the test is directly related to the presence of viral material. Some studies suggest that the peak viral load occurs just before onset of symptoms or on the first day of symptoms, while other studies demonstrate some patients with a climbing viral load that peaks on day two or three of illness. Testing too early or later on, during the recovery phase, may affect the sensitivity of the test.

The overall effectiveness of using testing to identify COVID-19 infection depends on testing the right people, at the right time, in the right place.

The percentage of tests that come back positive is a helpful indicator of whether we are testing the right people, or casting the net too wide. Canada's overall test positivity rate has stayed within a good range for accurate detection.

(Dr. Tam and Dr. Njoo's remarks on Sept 15)

There's a lot of interest, including in the public health sector, for the more easy to use **rapid tests**. As we move forward, there's a whole regulatory process that needs to be respected for their approval and then clinical validation with clinical samples from patients.

For [these] other types of testing technologies, it may well be that they don't perform as well as PCR but that doesn't mean they should be discounted. For example, screening populations or asymptomatic individuals on a regular basis, potentially in the workplace such as health care workers. That might be the kind of situation in which other types of testing modalities could be used.

And as new tests become available for use in the general population, one of the other things that our experts are also working on is developing guidance so that public health authorities, laboratory specialists and clinicians know exactly what kind of test could or should be used in the best available way depending on the context.

New tests are actively discussed at the Special Advisory Committee meetings and by the Canadian Public Health Laboratory Network.

BORDER MEASURES

(from CBSA website)

What's the Government's position on essential travel? What is considered essential?

To protect Canadians and to ease the potential burden non-essential travellers could place on our health care system and its frontline workers, the CBSA has implemented travel restrictions across all ports of entry in all modes of transportation – land, sea, air and rail.

"Essential" refers to travel for reasons that are non-discretionary and non-optional. The emergency orders under the Federal Quarantine Act do not allow people to travel to Canada for optional or discretionary reasons, such as for tourism, recreation or entertainment.

Emergency Orders implemented under the Quarantine Act require all individuals who enter Canada to quarantine (self-isolate) or isolate themselves for 14 days.

(From PHAC approved correspondence on Borders)

The Government of Canada will take a cautious approach to reducing measures related to international travel, including travel across the Canada-United States border.

The Government of Canada is committed to ensuring that the easing of border restrictions is safe, gradual, and supported by current federal and provincial/territorial public health measures, including:

- the rapid identification of cases;
- the meticulous tracing of contacts; and
- the promotion of tried and true public health measures, such as isolation, hand hygiene, physical distancing, and others as can be found at https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/prevention-risks/measures-reduce-community.html.

Any decisions on easing of current border restrictions will be based on (First Ministers Meeting principles April 2020):

- Science and evidence:
- Coordination and collaboration across jurisdictions;
- Accountability and transparency;
- Flexibility and proportionality in relaxing public health measures based on the level of threat, in a controlled and phased manner, based on information updates over time;
- Ensuring that COVID-19 transmission is controlled and maintained at a level that healthcare systems can manage;
- Ongoing assessment of domestic and international transmission of the virus and respective public health measures, with rigorous analysis of the specific risks posed by partner countries; and

 Ensuring sufficient public health capacity is in place to test, trace, isolate cases and quarantine contacts with appropriate monitoring in place;

FALL FOCUS

What will the Special Advisory Committee on COVID-19 be focusing on this fall?

(from LMOH and HP Forum annotated agenda)

Federal, Provincial and Territorial Governments have been working very closely over the summer to prepare for the fall, including the development and publication of the FPT Public Health Response Plan for Ongoing Management of COVID-19. Based on this plan, there are several key areas for continued coordination and collaboration across levels of government:

- Surveillance/data: expand our data, collect new data to address gaps (e.g., race/ethnicity and outbreak reporting).
- Capacity: ensuring sufficient public health and health human resources and sufficient supplies for PPE, testing, etc.
- Communication: common messages and sharing to support more effective public messaging at a time when there is information overload, mis-information, and fatigue with COVID information and measures.
- Supporting vulnerable populations: building in strong measures to protect those at higher risk and shore up capacity, and address inequities.

VACCINES

• What's the status of vaccines in Canada?

(Canada also has a Vaccine Task Force (established in June) that brings together those with knowledge and expertise in the area of vaccines and biomanufacturing with a mandate to provide informed advice to the Government of Canada on a strategic approach to developing, procuring and manufacturing vaccines for Canadians.

The Task Force has been asked to look at a broad suite of domestic and international vaccine candidates to find the most promising and timely options, while also considering Canada's domestic biomanufacturing capacity gaps, critical supply needs, partnership opportunities and time sensitivities.

Other players in the process include: PHAC's National Microbiology Lab (works on vaccine related research) and the National Advisory Committee on Immunization, which publishes guidance on vaccine prioritization and research priorities.

SEROLOGY AND IMMUNITY PASSPORTS

• Do you support immunity passports?

(from media lines – Sept 16)

Canada's Chief Medical Officers of Health do not support immunity passport programs. We do not yet know enough about the immune response to infection with SARS-CoV-2, the virus that causes COVID-19.

Research is underway to find out whether people who have recovered from COVID-19 have protective immunity, and how long that immunity may last.