

Senate Committee: Community Affairs Committee

QUESTION ON NOTICE

Supplementary Budget Estimates 2021 - 2022

Outcome: 1 - Health Policy, Access and Support

PDR Number: SQ21-001198

Question Subject: Detection of live and dead virus in PCR tests

Type of Question: Written

Senator: Gerard Rennick

Question:

85. Does the PCR test detect the difference between live and dead virus?

Answer:

PCR remains the benchmark test for diagnosis of COVID-19 infection.

While PCR tests are highly sensitive and detect the genetic material of the SARs-CoV-2 virus, they cannot differentiate between live and dead virus.

The amount of virus in a SARS-CoV-2 infected patient's upper respiratory tract increases over several days before symptom onset to peak around the time of COVID-19 illness onset, and then reduces through the first week of illness. People with the virus often become PCR negative toward the end of the first week of COVID-19 illness, but some remain PCR positive for several more weeks. Sometimes, when the virus is no longer alive and replicating, viral genetic fragments can be detected by PCR and produce weak positive results. Dead virus is also rapidly cleared from the body and excreted in faeces.