

133 Molesworth Street
PO Box 5013
Wellington 6140
New Zealand
T+64 4 496 2000

Terry Landers

By email: te

terry.landers.1944@gmail.com

Ref:

H202101233

Dear Terry Landers

## Response to your request for official information

Thank you for your request under the Official Information Act 1982 (the Act) to the Ministry of Health (the Ministry) on 14 February 2021 for information related to Covid-19. I have responded to each parts of your requests for official information below:

"[1] The algorithm, assumptions, formula, mathematical equation, or computer code that is used by Governments to "model" cases and deaths related to the virus SARS-CoV-2 (or Covid-19). Also, information on what software is used.

In short, this requests seeks the information that would allow a private citizen to replicate the modelling that is released to the public.

This question is refused under section 18(g) of the Act, as the information requested is not held by the Ministry and there are no grounds for believing it is held by another agency subject to the Act. Some information of use to you may be found here:: <a href="https://www.tepunahamatatini.ac.nz/">www.tepunahamatatini.ac.nz/</a>.

[2] Records relating to the error rate of the RT-PCR, polymerase chain reaction, tests (false positives and false negatives) in detecting current or prior infection of SARS-CoV-2. Also, information on what is considered the "gold standard" of PCR testing.

The Ministry's website contains a section on the accuracy of test results: <a href="https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-health-advice-public/assessment-and-testing-covid-19/covid-19-test-results-and-their-accuracy.">health-advice-public/assessment-and-testing-covid-19/covid-19-test-results-and-their-accuracy.</a>
The following website outlines the accuracy of various RT-PCR tests for the detection of SARS-CoV-2: <a href="https://www.finddx.org/covid-19-old/sarscov2-eval-molecular/molecular-eval-results/">www.finddx.org/covid-19-old/sarscov2-eval-molecular/molecular-eval-results/</a>.

These results indicate that the false positive rate of between 0% to 5% and a false negative rate of between 0% to 10%. In addition, an evidence review of the accuracy of different specimens found for nasopharyngeal swabs using PCR tests a false positive rate of between 0% and 1% and a false negative rate of between 0% and 15%. You may refer to this evidence review attached as Appendix One to this letter.

Real time PCR or RT-qPCR tests are currently the preferred method in COVID-19 testing because of their high sensitivity and specificity.

[3] Records relating to the error rate of the anithody tests (false positives and false negatives) in detecting current or prior infection of SARS-CoV-2. Also, information on what is considered the "gold standard" for antibody testing.

The Ministry's website contains a section about testing for antibodies at: <a href="https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-health-advice-public/about-covid-19/covid-19-what-we-know-about-infection-and-immunity#immunity.">immunity#immunity</a>. This type of test is currently only used in limited cases, as directed by a public health doctor, to support investigation of possible new cases or to support patient management. Antibody tests, like viral tests, can also have false-negative and false-positive results but the actual numbers are not included on the website. However, the Cochrane Collaboration has conducted a review that you may find informative, available online at: <a href="https://www.cochrane.org/CD013652/INFECTN">www.cochrane.org/CD013652/INFECTN</a> what-diagnostic-accuracy-antibody-tests-detection-infection-covid-19-virus.

[4] Records that show what a "confirmed case" is, whether it's testing for a virus, gene, or something else

This information is publicly available online at the Ministry website: <a href="www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-data-and-statistics/covid-19-current-cases">www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-data-and-statistics/covid-19-current-cases</a>.

[5] Records that define what a "Covid death" is, and what standards must be met to label a deceased person as such

This information is publicly available online at the Ministry website: <a href="https://www.health.govt.nz/our-work/regulation-health-and-disability-system/burial-and-cremation-act-1964/completing-death-documents/covid-19-deaths">https://www.health.govt.nz/our-work/regulation-health-and-disability-system/burial-and-cremation-act-1964/completing-death-documents/covid-19-deaths</a>.

- [6] All records in the possession, custody or control of Health Services Authority that:
  describe the isolation of the virus that causes COVID-19, directly from a sample taken from a diseased patient, where the patient sample was not first combined with any other source of genetic material (i.e. monkey kidney cells aka vero cells; fetal bovine serum). Please note that I am using "isolation" in the every-day sense of the word: the act of separating a thing(s) from everything else. I am not requesting records where "isolation" refers instead to:
- ·the culturing of something, or
- ·the performance of an amplification test (i.e. a PCR test), or
- ·the sequencing of something.
- · describe the discovery (not manufacture / fabrication / creation / assembly / alignment / trimming / mapping) of the alleged genome for this coronavirus;
- · include any additional analysis/investigation into virus".

Please note that my request is not limited to records that were authored by agents of Health Services Authority, or to records that pertain to work done by agents of the Health Services Authority; it includes any sort of record, authored by anyone, anywhere, ever.

Peer reviewed scientific literature is publicly available from databases such as Pubmed or Scopus. Please note it is not possible to compile a conclusive list of the number of occasions information relevant to the scope of your request may have been downloaded, accessed or printed to respond, and any information held would likely be incomplete.

There is no obligation on the Ministry to create information to respond to a request. The Act only applies to information that is already held by the Ministry. Therefore, as the information you are seeking is not held by the Ministry, I am refusing this part of your request under section 18(g) of the Act.

[7] This is similar to #6, but refers to any VARIANT of a SARS-CoV-2 (Covid-19) being isolated, be it from the UK, South Africa, or elsewhere.

Please refer to my response above to question six.

I trust this information fulfils your request. Under section 28(3) of the Act you have the right to ask the Ombudsman to review any decisions made under this request. The Ombudsman may be contacted by email at: <a href="mailto:info@ombudsman.parliament.nz">info@ombudsman.parliament.nz</a> or by calling 0800 802 602.

Please note that this response, with your personal details removed, may be published on the Ministry website at: <a href="https://www.health.govt.nz/about-ministry/information-releases/responses-official-information-act-requests">www.health.govt.nz/about-ministry/information-releases/responses-official-information-act-requests</a>.

Yours sincerely

Gill Hall

Group Manager Covid19 – Science & Insights

Covid-19 Health System Response

