

4 November 2022

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**Te Whatu Ora**  
Health New Zealand

Tēnā koe Chris,

**Your Official Information Act request, reference H2022012156:**

Thank you for your follow up email of 8 September 2022 requesting information relating to myocarditis. I shall quote and respond to each part of your request below.

*Unfortunately you haven't answered anything. The reports you link to do not support the following statement. "Covid-19 infection increases the risk of myocarditis substantially more than COVID-19 vaccination" - what information has been relied on that supports this statement? Can you please have another go at providing the information I have requested. Reports, data, studies all showing that Covid-19 outweighs risks of vaccination versus myocarditis.*

On 7 October 2022, Te Whatu Ora Health New Zealand extended the time limit to respond to your request to 4 November 2022 due to your request necessitating a search through a large quantity of information, and requiring consultations such that a proper response to the request could not reasonably be made within the original time limit.

International data shows that myocarditis is more common after COVID-19 infection compared to vaccination. For example, the following studies which were referenced in the Medsafe alert communication published in December 2021:

[www.medsafe.govt.nz/safety/Alerts/comirnaty-myocarditis-reminder.htm](http://www.medsafe.govt.nz/safety/Alerts/comirnaty-myocarditis-reminder.htm):

- Boehmer TK, Kompaniyets L, Lavery AM, Hsu J, Ko JY, Yusuf H, Romano SD, Gundlapalli AV, Oster ME, Harris AM. Association Between COVID-19 and Myocarditis Using Hospital-Based Administrative Data - United States, March 2020-January 2021. *MMWR Morb Mortal Wkly Rep.* 2021 Sep 3;70(35):1228-1232. doi: 10.15585/mmwr.mm7035e5.
- Barda N, Dagan N, Ben-Shlomo Y, Kepten E, Waxman J, Ohana R, Hernán MA, Lipsitch M, Kohane I, Netzer D, Reis BY, Balicer RD. Safety of the BNT162b2 mRNA Covid-19 Vaccine in a Nationwide Setting. *N Engl J Med.* 2021 Sep 16;385(12):1078-1090. doi: 10.1056/NEJMoa2110475.

Further relevant published studies include:

- Priyadarshni S, Westra J, Kuo YF, Baillargeon JG, Khalife W, Raji M. COVID-19 Infection and Incidence of Myocarditis: A Multi-Site Population-Based Propensity Score-Matched Analysis. *Cureus.* 2022 Feb 3;14(2):e21879. doi: 10.7759/cureus.21879.
- Mirò Ò, Sabaté M, Jiménez S, Mebazaa A, Martínez-Nadal G, Piñera P, Burillo-Putze G, Martín A, Martín-Sánchez FJ, Jacob J, Alquézar-Arbé A, García-Lamberechts EJ, Llorens P, González Del Castillo J; Spanish Investigators on Emergency Situations TeAm (SIESTA) network; SIESTA network. A case-control, multicentre study of consecutive patients with COVID-19 and acute (myo)pericarditis: incidence, risk factors, clinical characteristics and outcomes. *Emerg Med J.* 2022 May;39(5):402-410. doi: 10.1136/emered-2020-210977.
- Buckley BJR, Harrison SL, Fazio-Eynullayeva E, Underhill P, Lane DA, Lip GYH. Prevalence and clinical outcomes of myocarditis and pericarditis in 718,365 COVID-19 patients. *Eur J Clin Invest.* 2021 Nov;51(11):e13679. doi: 10.1111/eci.13679.
- Singer ME, Taub IB, Kaelber DC. Risk of Myocarditis from COVID-19 Infection in People Under Age 20: A Population-Based Analysis. *medRxiv [Preprint].* 2022 Mar 21:2021.07.23.21260998. doi: 10.1101/2021.07.23.21260998.

- Block JP, Boehmer TK, Forrest CB, Carton TW, Lee GM, Ajani UA, Christakis DA, Cowell LG, Draper C, Ghildayal N, Harris AM, Kappelman MD, Ko JY, Mayer KH, Nagavedu K, Oster ME, Paranjape A, Puro J, Ritchey MD, Shay DK, Thacker D, Gundlapalli AV. Cardiac Complications After SARS-CoV-2 Infection and mRNA COVID-19 Vaccination - PCORnet, United States, January 2021-January 2022. MMWR Morb Mortal Wkly Rep. 2022 Apr 8;71(14):517-523. doi: 10.15585/mmwr.mm7114e1.
- Patel T, Kelleman M, West Z, Peter A, Dove M, Butto A, Oster ME. Comparison of Multisystem Inflammatory Syndrome in Children-Related Myocarditis, Classic Viral Myocarditis, and COVID-19 Vaccine-Related Myocarditis in Children. J Am Heart Assoc. 2022 May 3;11(9):e024393. doi: 10.1161/JAHA.121.024393.
- Patone M, Mei XW, Handunnetthi L, Dixon S, Zaccardi F, Shankar-Hari M, Watkinson P, Khunti K, Harnden A, Coupland CAC, Channon KM, Mills NL, Sheikh A, Hippisley-Cox J. Risks of myocarditis, pericarditis, and cardiac arrhythmias associated with COVID-19 vaccination or SARS-CoV-2 infection. Nat Med. 2022 Feb;28(2):410-422. doi: 10.1038/s41591-021-01630-0.

*Basic question - how many people have developed myocarditis after Covid-19 in NZ? Because there is a 500% increase in the vaccinated only based on NZ stats. And how does MOH determine Covid-19 myocarditis stats if any?*

From 26 February 2020 to 5 October 2022, 132 people in New Zealand have been discharged from hospital with diagnosis of myocarditis after testing positive for COVID-19. Information on hospital discharge diagnosis is obtained from the National Minimum Dataset (NMDS), and COVID-19 test results are obtained from all recorded COVID-19 PCR and RAT results.

Please note the following limitations on this data:

- This data is preliminary and subject to change. Due to several factors relating to the reporting of data from healthcare facilities to the Ministry of Health, data for the period stated above will not be considered complete for up to 6 months.
- COVID-19 positivity in this context refers to people with a registered COVID-19 positive test result (either RAT or PCR) and does not include people who were infected with COVID-19 but did not have a test or did not register a positive test result. This may result in an underestimation of the number of people who experienced myocarditis after COVID-19 infection.
- Diagnosis data is not available for people who were not admitted to hospital (for example if someone was diagnosed with myocarditis by their GP and was not admitted to hospital). This may result in an underestimation of the number of people who experienced myocarditis after COVID-19 infection.
- This data should not be compared with spontaneous reporting data for vaccination such as reports of myocarditis after COVID-19 vaccination submitted to the Centre for Adverse Reactions Monitoring (CARM). The data sources are different (hospitalisation data versus spontaneous reporting data), and comparison would not be valid.

I trust the information provided is of assistance. You are advised of your right to also raise any concerns with the Office of the Ombudsman. Information about how to do this is available at: [www.ombudsman.parliament.nz](http://www.ombudsman.parliament.nz) or by phoning 0800 802 602.

Nāku iti noa, nā



Astrid Koornneef

**Kaitohu | Director**

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**Te Kāwanatanga o Aotearoa**  
New Zealand Government