

14 December 2021

Chris McCashin

By email: fyi-request-17601-44b98024@requests.fyi.org.nz
Ref: H202116268

Tēnā koe Chris

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 16 November 2021 for information relating to multi-inflammatory syndrome in children (MIS-C). You will find a response to each part of your request below.

“Please provide all the number of cases of MIS-C from the years 2005-2020 and the age groups they relate to

Hospitalisations in New Zealand are coded using the International Statistical Classification of Diseases and related Health Problems, Tenth Revision, Australian modification (ICD-10-AM) 11th edition. The World Health Organization has activated an emergency use code to identify MIS with COVID-19: U075. There were no hospitalisations with the diagnostic code U075 in any of the first 15 diagnoses in 2020. The search was repeated from 2005 to 2020 with no cases recorded during this timeframe. The Ministry consulted with the New Zealand Child and Youth Epidemiology Service at the University of Otago to confirm whether there were any cases of MIS-C from 2005 to 2020.

How rare is MIS-C?

MIS-C is considered rare; however, the prevalence estimate is yet to be determined. One issue when determining the prevalence of MIS-C is that diagnosis requires recognition of a constellation of features rather than a unique testable marker. Separating it as a condition from other types of inflammatory responses (e.g. Kawasaki disease) is likely to be problematic for any estimate of prevalence. Information on COVID-19 and MIS-C is available at:

www.uptodate.com/contents/search?search=MIS-C&sp=0&searchType=PLAIN_TEXT&source=USER_INPUT&searchControl=TOP_PULLDOWN&searchOffset=1&autoComplete=false&language=en&max=10&index=&autoCompleteTerm=

UpToDate provides current and ongoing collation of the recent literature on MIS-C and COVID-19 infection.

There are some studies in progress in attempt to establish the prevalence of MIS-C in children, however, due to the issues with diagnosis, it is difficult to provide accurate numbers. *UpToDate* states that while the incidence of MIS-C is uncertain, it appears to be a relatively rare complication, occurring in less than one percent of children with confirmed SARS-CoV-2 infection. Information on COVID-19 and MIS-C is available from www.uptodate.com.

Why do people get MIS-C?

MIS-C is, by definition, a result of COVID-19 infection. COVID-19 causes MIS-C by the dysregulation of the immune system. This can occur after the active viral infection has passed. The usual onset of MIS-C is described as 2 to 6 weeks after infection. MIS-C is considered a

post-infectious process. It is related to the individual immune response to having COVID-19. It is not yet known why certain people develop MIS-C and why it develops in children.

What age groups are normally impacted?

MIS-C occurs in children. Initially, the median age was 8 to 11 years. *UpToDate* summarizes that most cases of MIS-C occurred in previously healthy children between 6 to 13 years of age.

*Can you also provide me what the **treatment** options are for MIS-C”*

The management of MIS-C often requires treatment in an intensive care unit (ICU). Treatment includes the treatment of shock (i.e., replacement of intravenous fluid as there is the loss of fluid from blood system into other body tissue) and careful management, often with ICU care to maintain blood pressure. Additional treatments include intravenous immune globulin and glucocorticoids. Antibiotics and antivirals do not have a direct role in treatment. They are only used if other diagnoses are being considered.

A clinical guideline was recently published in the national paediatric guideline collection maintained by the Starship Children’s Hospital at: www.starship.org.nz/guidelines/covid-19-associated-multi-system-inflammatory-conditions-pims-ts-mis-c/.

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: info@ombudsman.parliament.nz or by calling 0800 802 602.

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

Nāku noa, nā



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