

MEMO

To: Physicians, Nurse Practitioners, CDC nurses, IPC practitioners, Emergency Departments, Urgent care units

From: Janice Fitzgerald, Chief Medical Officer of Health

Re: **Multisystem Inflammatory Syndrome in Children and Adolescents (MIS-C)**

Date: September 30, 2020

The World Health Organization (WHO) has recently updated the International Health Regulations (IHR) to include the reporting of Multisystem Inflammatory Syndrome in Children and Adolescents (MIS-C) cases. As such, provinces and territories are to report cases to the Public Health Agency of Canada.

The causes of MIS-C are not yet known. However, it is known that many children with MIS-C had the virus that causes COVID-19, or had been in contact with someone who had COVID-19.

Children with this condition present with symptoms of systemic inflammation, and can have clinical similarities to Kawasaki Disease, toxic shock syndrome and macrophage activation syndrome. Prominent features include fever, abdominal pain, cardiac involvement and rash, among others. There may be a spectrum of disease severity in children affected by COVID-19-associated inflammation.

Reporting requirements

Under the *Public Health Prevention and Promotion Regulations*, health care practitioners are required to **report in writing within 24 hours** of diagnosis of Multisystem Inflammatory Syndrome – Children and Adolescents (MIS-C).

The reporting form, with contact information for each Regional Health Authority, is attached and can be found here: www.gov.nl.ca/covid-19/files/Notifiable-Disease-Notification-Form-August-2020.pdf

Please visit our website www.gov.nl.ca/covid-19 for the most up to date information on COVID-19.

MIS-C Case definition

A MIS-C case must meet all four criteria as follows:

- Is a child or adolescent between 0–19 years of age with fever lasting 3 days or longer.
- **AND**
- Has at least two of the following symptoms/manifestations:
 1. Rash or bilateral non-purulent conjunctivitis or muco-cutaneous inflammation signs (oral, hands or feet).
 2. Hypotension or shock.
 3. Features of myocardial dysfunction, pericarditis, valvulitis, or coronary abnormalities (including ECHO findings or elevated Troponin/NT-proBNP),
 4. Evidence of coagulopathy (by PT, PTT, elevated d-Dimers).
 5. Acute gastrointestinal problems (diarrhoea, vomiting, or abdominal pain).
- **AND**
- Has elevated markers of inflammation such as ESR, C-reactive protein, or procalcitonin.
- **AND**
- Has no other obvious microbial cause of inflammation, including bacterial sepsis, staphylococcal or streptococcal shock syndromes, or no alternative plausible obvious diagnoses.

Note: This case definition includes individuals with the four criteria listed above **regardless of the case's COVID-19 diagnostic or serology test findings.**

Further information about Multisystem Inflammatory Syndrome in Children (MIS-C) Associated with Coronavirus Disease 2019 (COVID-19) can be found at <https://www.who.int/news-room/commentaries/detail/multisystem-inflammatory-syndrome-in-children-and-adolescents-with-covid-19>



Notifiable Disease Notification Form

Report by telephone as soon as an occurrence is SUSPECTED Report in writing within 24 hours of the initial communication MOH on Call: 1-866-270-7437	Client Information														
<input type="checkbox"/> Anthrax <input type="checkbox"/> Botulism <input type="checkbox"/> Creutzfeldt-Jakob Disease (CJD) <input type="checkbox"/> Diphtheria <input type="checkbox"/> Group A Streptococcal Disease, Invasive (IGAS) <input type="checkbox"/> Haemophilus Influenza type B Disease, Invasive (HIB) <input type="checkbox"/> Measles <input type="checkbox"/> Meningococcal Disease, Invasive <input type="checkbox"/> Plague <input type="checkbox"/> Rabies (includes animal bites from species known to carry Rabies e.g. bats, cats, dogs, farm and wild animals) <input type="checkbox"/> Severe Acute Respiratory Illness (SARI) <input type="checkbox"/> Smallpox <input type="checkbox"/> Tetanus <input type="checkbox"/> Tularemia <input type="checkbox"/> Viral Hemorrhagic Fevers (e.g. Ebola, Lassa, Marburg, Yellow Fever) <input type="checkbox"/> All disease outbreaks, unusual disease clusters and unusual disease occurrences or features	<table border="1"> <tr><td>Name</td><td></td></tr> <tr><td>Address</td><td></td></tr> <tr><td>MCP/HCN</td><td></td></tr> <tr><td>Phone Number</td><td>Phone (Home): Phone (Cell):</td></tr> <tr><td>DOB (dd/mm/yyyy)</td><td></td></tr> <tr><td>Gender</td><td><input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Gender Diverse <input type="checkbox"/> Unknown</td></tr> <tr><td>Pregnancy Status</td><td><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable</td></tr> </table>	Name		Address		MCP/HCN		Phone Number	Phone (Home): Phone (Cell):	DOB (dd/mm/yyyy)		Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Gender Diverse <input type="checkbox"/> Unknown	Pregnancy Status	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable
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	Report in writing within 24 hours of diagnosis	Disease Details													
		<table border="1"> <tr><td>How was the disease identified?</td><td><input type="checkbox"/> Clinical presentation <input type="checkbox"/> Contact Tracing Follow-up <input type="checkbox"/> Screening</td></tr> <tr><td>Is the client hospitalized?</td><td><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown</td></tr> <tr><td>If yes, specify hospital and unit</td><td></td></tr> </table>	How was the disease identified?	<input type="checkbox"/> Clinical presentation <input type="checkbox"/> Contact Tracing Follow-up <input type="checkbox"/> Screening	Is the client hospitalized?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	If yes, specify hospital and unit								
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Is the client hospitalized?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown														
If yes, specify hospital and unit															
Report in writing within 7 days of diagnosis	Reporting Health Care Provider Details														
	<table border="1"> <tr><td>Name</td><td></td></tr> <tr><td>Clinic Name</td><td></td></tr> <tr><td>Phone Number</td><td></td></tr> <tr><td>Date (dd/mm/yyyy)</td><td></td></tr> </table>	Name		Clinic Name		Phone Number		Date (dd/mm/yyyy)							
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<input type="checkbox"/> Acute Flaccid Paralysis <input type="checkbox"/> Antimicrobial Resistant Organisms <input type="checkbox"/> Arbovirus* (e.g. La Crosse, West Nile, Zika virus) <input type="checkbox"/> Brucellosis <input type="checkbox"/> Clostridium Difficile <input type="checkbox"/> Chlamydia <input type="checkbox"/> COVID-19 <input type="checkbox"/> Food and Waterborne Illness* (e.g. Amoebiasis, Campylobacter, Cryptosporidium, E. coli, Giardia, Listeria, Salmonella) <input type="checkbox"/> Gonorrhoea <input type="checkbox"/> Group B Streptococcal Disease of the Newborn <input type="checkbox"/> Haemophilus Influenza Non-B Disease, Invasive <input type="checkbox"/> Hantavirus Pulmonary Syndrome <input type="checkbox"/> Hepatitis A, B, C, and Unspecified Hepatitis <input type="checkbox"/> Human Immunodeficiency Virus (HIV) <input type="checkbox"/> Influenza (laboratory-confirmed only) <input type="checkbox"/> Legionellosis <input type="checkbox"/> Leprosy <input type="checkbox"/> Louse or Tickborne Diseases* (e.g. Babesiosis, Lyme, Powassan) <input type="checkbox"/> Malaria <input type="checkbox"/> Multisystem Inflammatory Syndrome in Children (MIS-C) <input type="checkbox"/> Mumps <input type="checkbox"/> Pertussis <input type="checkbox"/> Poliomyelitis <input type="checkbox"/> Q fever <input type="checkbox"/> Rubella (including Congenital Rubella Syndrome) <input type="checkbox"/> Syphilis (including Congenital Syphilis) <input type="checkbox"/> Tuberculosis	Additional Comments														
	Regional Contacts Notifiable diseases re to be reported to the Regional Medical Officer of Health (MOH) or regional Communicable Disease Control Nurse or in acute care and long-term care institutions, Infection Control Practitioner.														
<table border="1"> <tr> <td> Eastern Health Mount Pearl Square 760 Topsail Road Mount Pearl, NL, A1N 3J5 (P) 709-752-4358 (F) 709-752-4873 </td> <td> Central Health Health Protection Division 125 TransCanada Hwy Gander, NL A1V 1P7 (P) 709-651-6238 (F) 709-651-3488 </td> <td> Western Health 1 Brookfield Road P.O. Box 2005 Corner Brook, NL A2H 6J7 (P) 709-637-5417 (F) 709-637-5160 </td> </tr> <tr> <td> Labrador-Grenfell Health (North) P.O. Box 7000, Station A Happy Valley Goose Bay, NL A0P 1C0 (P) 709-897-3110 (F) 709-896-4393 </td> <td colspan="2"> Labrador-Grenfell Health (South) Mission Store 178-200 West Street St. Anthony, NL, A0K 4S0 (P) 709-454-0375 (F) 709-454-4978 </td> </tr> </table>		Eastern Health Mount Pearl Square 760 Topsail Road Mount Pearl, NL, A1N 3J5 (P) 709-752-4358 (F) 709-752-4873	Central Health Health Protection Division 125 TransCanada Hwy Gander, NL A1V 1P7 (P) 709-651-6238 (F) 709-651-3488	Western Health 1 Brookfield Road P.O. Box 2005 Corner Brook, NL A2H 6J7 (P) 709-637-5417 (F) 709-637-5160	Labrador-Grenfell Health (North) P.O. Box 7000, Station A Happy Valley Goose Bay, NL A0P 1C0 (P) 709-897-3110 (F) 709-896-4393	Labrador-Grenfell Health (South) Mission Store 178-200 West Street St. Anthony, NL, A0K 4S0 (P) 709-454-0375 (F) 709-454-4978									
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