

Communicable Diseases Weekly Report

Week 15, 11 to 17 April 2021

In summary, we report:

- [Enterovirus infections – Increases in hand, foot and mouth disease and enterovirus meningitis](#)
- [Novel coronavirus 2019 \(COVID-19\)](#)
- [Summary of notifiable conditions activity in NSW](#)

For further information see NSW Health [infectious diseases page](#). This includes links to other NSW Health [infectious disease surveillance reports](#) and a [diseases data page](#) for a range of notifiable infectious diseases.

Enterovirus infections

NSW Health has been investigating increases in enterovirus infections, including hand, foot and mouth disease (HFMD) and enterovirus meningitis (EV meningitis).

Enteroviruses:

Enteroviruses are a large group of related viruses that includes [polioviruses](#) and coxsackieviruses. Except for polioviruses, enteroviruses are not notifiable in NSW. However, they are monitored by other means including:

- acute flaccid paralysis (AFP) surveillance via the PAEDS network, which incorporates the Sydney Children's Hospital Network
- HFMD and meningitis/encephalitis syndromic surveillance via the Public Health Rapid, Emergency, Disease and Syndromic Surveillance (PHREDSS) system.

Enteroviruses spread easily from person to person through contaminated hands, objects or surfaces. They can also be spread via direct contact with respiratory secretions, saliva and faeces from infected people, and by direct contact with the fluid from blisters.

Enterovirus infection can result in no symptoms, relatively mild disease including HFMD and viral conjunctivitis, or more serious disease including EV meningitis and encephalitis. Certain non-polio enterovirus types are more commonly associated with severe infection and can result in neurological complications. Further information on these types (including clinical management) is available in the NSW Health [Enterovirus and human parechoviruses – information for clinicians factsheet](#). Health Protection NSW and NSW Health Pathology have been investigating circulating enteroviruses during 2021. To date, the identified types are not novel strains or those expected to cause more severe disease, but investigations are ongoing.

Hand, foot and mouth disease

HFMD is a highly contagious and common infection in children and less commonly, adults. It can be caused by several enteroviruses, including coxsackieviruses. HFMD causes a rash and blisters on the hands and feet, and in or around the mouth. While generally considered a mild illness, small children with HFMD can be unwell and uncomfortable with fever, sore throat, tiredness, and discomfort from the characteristic blisters. There is a risk of dehydration if they are too unwell to eat or drink.

The number of presentations for HFMD to NSW Emergency Departments began to increase above historical levels across NSW in late January. Presentations and admissions remained high during February and early March, with significant increases observed throughout April. Public health units in several local health districts (LHDs) reported increases in the number of HFMD enquiries and the number of outbreaks in childcare centres.

Figure 1: Weekly counts of emergency department presentations for hand foot and mouth disease (HFMD), for 2021 (black line), compared with the 5 previous years (coloured lines), persons of all ages, 67 NSW hospitals

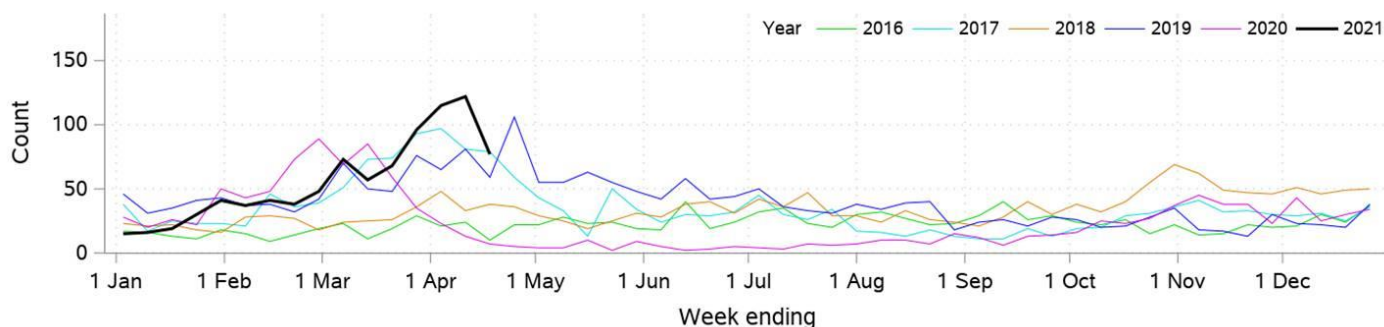


Figure Notes: This surveillance syndrome includes provisional diagnoses of hand, foot and mouth disease. Hand, foot and mouth disease is caused by several types of enterovirus.

Most presentations for HFMD are in children. In the week ending 18 April 2021, 92% of HFMD presentations were in children aged less than 5 years.

Source: NSW Health Public Health Rapid, Emergency, Disease and Syndromic Surveillance (PHREDSS) system, Centre for Epidemiology and Evidence, NSW Ministry of Health

Enterovirus meningitis

Enterovirus meningitis is an uncommon, serious complication of enterovirus infection. Some of the coxsackieviruses that cause HFMD have also been associated with outbreaks of meningitis. Increases in enterovirus meningitis or encephalitis often follow observed increases in HFMD within a population.

Increases in the meningitis/encephalitis syndrome were noted within certain LHDs and then across the state from early February and into March, with a significant increase occurring in mid-March. A higher than expected number of presentations and admissions with a diagnosis of viral meningitis were found to be caused by enteroviruses. Laboratories and clinicians in several LHDs also reported increases in the number of cases and specimens related to enterovirus meningitis.

Figure 2: Weekly counts of emergency department presentations for meningitis or encephalitis, for 2021 (black line), compared with the 5 previous years (coloured lines), persons of all ages, 67 NSW hospitals

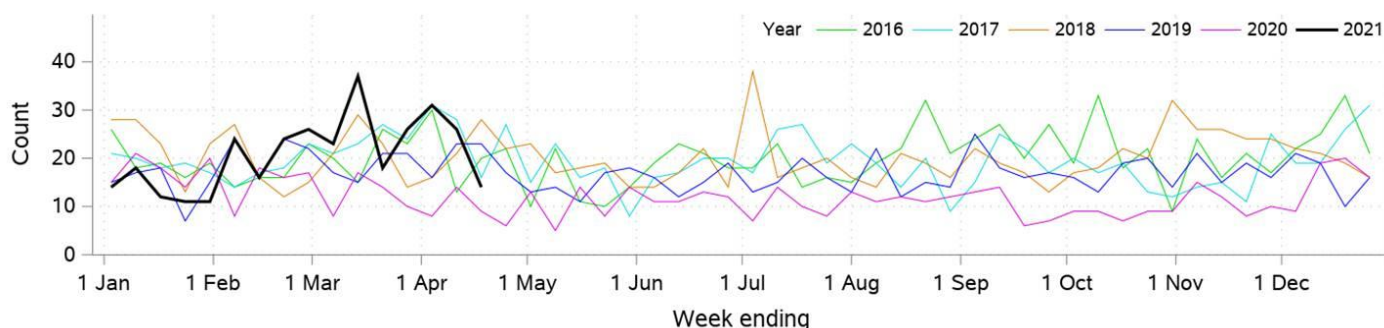


Figure Notes: This surveillance syndrome includes provisional diagnoses of encephalitis, meningitis due to any organism or cause.

Source: NSW Health Public Health Rapid, Emergency, Disease and Syndromic Surveillance (PHREDSS) system, Centre for Epidemiology and Evidence, NSW Ministry of Health

Prevention and clinical implications

Prevention

Transmission of HFMD and other enteroviruses can be prevented by:

- Hand hygiene - Washing hands with soap and water, and thoroughly drying before eating and after toileting, changing nappies and soiled clothing, coughing, sneezing or wiping noses.
- Respiratory hygiene – covering coughs and sneezes with a tissue or coughing or sneezing into your elbow.
- Not sharing cups, utensils, towels, washers, toothbrushes and clothing (particularly shoes and socks).
- Thoroughly cleaning items, objects or surfaces that may have been contaminated (including bedding and clothing).
- Keeping sick children home from school, childcare and other social activities while they are unwell. Children are considered non-contagious once the fluid in all blisters has dried.

Clinical implications

Clinicians should include enterovirus in their differential diagnosis for people of all ages presenting with symptoms of viral meningitis, and young children presenting with unspecified febrile illness. Enterovirus PCR testing can be performed on CSF, stool specimens (or rectal swabs) and nasopharyngeal swab (Enterovirus PCR should be specifically requested). Always consider the diagnosis of invasive meningococcal disease or bacterial meningitis in patients presenting with fever and rash, and consider treating empirically with antibiotics. Confirmed enterovirus infections are managed with supportive treatment and antibiotics are not necessary for this viral illness.

Further information on enterovirus infections:

- [NSW Health Hand, foot and mouth disease factsheet](#)
- [NSW Health enterovirus factsheet](#)
- [NSW Health enteroviruses and parechoviruses – information for clinicians](#)

Novel coronavirus 2019 (COVID-19)

For up-to-date information regarding the COVID-19 outbreak and the NSW response, please visit the [NSW Health COVID-19 page](#).

Summary of notifiable conditions activity in NSW

The following table summarises notifiable conditions activity over the reporting period (Table 1).

Table 1. NSW Notifiable conditions from 11 April to 17 April 2021, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2021	2020	2019	2020	2019
Enteric Diseases	Cryptosporidiosis	6	2	213	329	334	550	669
	Giardiasis	35	29	569	812	1382	1791	3271
	Rotavirus	3	8	74	297	200	463	1755
	STEC/VTEC	3	2	42	37	25	114	80
	Salmonellosis	67	49	1318	1497	1488	2888	3556
	Shigellosis	2	2	29	346	262	495	867
Respiratory Diseases	Influenza	1	1	18	7155	9049	7488	116442
	Legionellosis	4	1	71	44	62	168	153
	Tuberculosis	17	9	171	144	163	627	590
Sexually Transmissible Infections	Chlamydia	567	438	8953	9218	9633	27279	32496
	Gonorrhoea	187	163	2793	3324	3513	9906	11702
	LGV	3	0	13	31	18	44	69
Vaccine Preventable Diseases	Pneumococcal Disease (Invasive)	9	9	105	122	103	360	691
Vector Borne Diseases	Barmah Forest	2	3	42	40	23	271	63
	Ross River	23	23	338	191	223	1986	593
Zoonotic Diseases	Leptospirosis	4	1	19	5	3	12	9
	Q fever	2	3	59	68	107	206	248

* Notes on Table 1: NSW Notifiable Conditions activity

- Only conditions which had one or more case reports received during the reporting week appear in the table.
- Due to the rapidly evolving nature of the situation, data on COVID-19 notifications can be found separately on the NSW Health [Latest Updates on COVID-19](#) page.
- Data cells represent the number of case reports received by NSW public health units and recorded on the NSW Notifiable Conditions Information Management System (NCIMS) in the relevant period (i.e. by report date).
- Note that [notifiable disease data](#) available on the NSW Health website are reported by onset date so case totals are likely to vary from those shown here.

Cases involving interstate residents are not included.

- The shigellosis case definition changed on 1 July 2018 to include probable cases (PCR positive only), hence case counts cannot be validly compared to previous years.
- Data cells in the 'Adverse Event Following Immunisation' category refer to suspected cases only. These reports are referred to the Therapeutic Goods Administration (TGA) for assessment. Data on adverse events following immunisation is available online from the TGA [Database of Adverse Event Notifications](#).
- Chronic blood-borne virus conditions (such as HIV, hepatitis B and C) are not included here. Related data are available from the [Infectious Diseases Data](#), the [HIV Surveillance Data Reports](#) and the [Hepatitis B and C Strategies Data Reports](#) webpages.
- Notification is dependent on a diagnosis being made by a doctor, hospital or laboratory. Changes in awareness and testing patterns influence the proportion of patients with a particular infection that is diagnosed and notified over time, especially if the infection causes non-specific symptoms.