# Cryptosporidiosis

# What is cryptosporidiosis?

Cryptosporidiosis is a diarrhoeal disease caused by the parasite, Cryptosporidium, which infects the intestine. Cryptosporidium infections have been reported in humans and in a variety of farm, pet and native animals. Although there are several species of Cryptosporidium, only two species, Cryptosporidium parvum and Cryptosporidium hominis, are thought to cause infection in humans.

Cryptosporidiosis has been notifiable to the NSW Health Department since 1996, and is a common cause of waterborne disease in NSW. Several hundred cases are usually reported in NSW each year and the number of cases tends to increase in the warmer months.

# What are the symptoms?

The most common symptom of cryptosporidiosis is watery diarrhoea. Other symptoms include stomach cramps, fever, nausea, vomiting and loss of appetite. Some people with the infection have no symptoms at all.

The first signs of illness appear between 1–12 days (average 7 days) after a person becomes infected. Symptoms may come and go, but they usually disappear in less than 30 days for people with healthy immune symptoms. People with a weak immune system may have more severe symptoms that can last for many weeks.

#### How is it spread?

The cryptosporidiosis parasite is present in the faecal matter of infected humans and animals. The disease is passed on when the parasite is ingested. Transmission most often occurs through:

- person-to-person contact, particularly in families and among small children (for example, in child care centres)
- · drinking contaminated water
- swimming in contaminated pools
- · handling infected animals or their manure
- food (in rare cases)

A person is most infectious when they have diarrhoea, but the parasite may be excreted for several weeks after symptoms disappear.

#### Who is at risk?

People who are most likely to become infected with Cryptosporidium include:

• people in close contact with others who have cryptosporidiosis

- children who attend day care, including children in nappies
- parents of infected children
- child care workers
- swimmers who accidentally swallow swimming pool
- people who drink untreated water (for example, from contaminated rivers, lakes, dams, wells or streams).
- travellers to developing countries
- people who work with animals
- men who have sex with men.

People with weakened immune systems are at risk for more serious disease and should see their doctor if symptoms develop.

#### How is it prevented?

To avoid catching cryptosporidiosis people should:

- always wash hands thoroughly with soap and water after using the toilet, handling animals or their manure, contact with faeces, changing nappies, working in the garden and before preparing food or
- avoid drinking untreated water (e.g. from rivers, lakes, streams or dams – boiling water from these sources for one minute will kill germs, including cryptosporidiosis)
- · avoid swallowing water when swimming
- avoid swimming in natural waters (e.g. rivers, creeks, dams, surf) within a week after heavy rain events
- in developing countries avoid food or drinks that may be contaminated (e.g. raw vegetables, tap water or ice made from tap water)

To avoid spreading cryptosporidiosis, people with cryptosporidiosis should:

- not swim for at least two weeks after the diarrhoea has stopped
- not share towels or linen for at least 2 weeks after the diarrhoea has stopped
- keep small children who have diarrhoea home from school, preschool, childcare or playgroup until 24 h after the diarrhoea has completely stopped
- do not handle food for at least 48 h after the diarrhoea has stopped

#### How is it diagnosed?

If you have diarrhoea the only way to tell if it is cryptosporidiosis is by going to a doctor and having a stool specimen taken.

#### How is it treated?

There is no specific treatment for cryptosporidiosis. Drink plenty of fluids to avoid dehydration.

# What is the public health response?

Laboratories are required to notify cases of cryptosporidiosis to the local Public Health Unit under the Public Health Act, 1991. Public Health Units investigate cases,

and review possible sources of infection to prevent further

#### For more information

Please contact your doctor, local public health unit or community health centre.



# **BUG BREAKFAST IN THE BULLETIN**

# Bug Breakfast\* in the Bulletin: refugee health

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Refugees are people living outside of their country of nationality because of a well-founded fear of persecution for reasons of race, religion, nationality, membership of a certain social group or political opinion. 1 Asylum seekers are people who have applied for recognition as refugees and are awaiting a decision on their application.<sup>2</sup> If their application is successful they receive refugee status.

#### Australia's humanitarian program

There are two components to Australia's humanitarian migration program: the first and largest component is the resettlement in Australia of people who have been given refugee status elsewhere ('offshore resettlement' of refugees); the second component is for people applying for refugee status while already in Australia ('onshore protection' of asylum seekers).3 Asylum seekers are either 'authorised arrivals' who enter Australia on a valid visa such as a visitor's or student visa or 'unauthorised arrivals' who enter Australia by boat or plane without a visa.4 Unauthorised arrivals are detained in various immigration

detention centres across Australia while their refugee claims are processed.

#### Screening for infectious diseases in NSW

Asylum seekers who arrive in an unauthorised manner receive health screening in the detention centres. Authorised asylum seekers, who are generally allowed to remain in the community while their applications are processed, may have received health screening in their country of origin as part of their visa requirements, and will undergo further checks.

Refugees, on which the remainder of this article will focus, have to undergo the same health checks as other migrants before receiving humanitarian visas to travel to Australia, including tests for tuberculosis and, depending on age, HIV. Since mid-2005, a proportion also undergo health checks immediately predeparture, organised by the Australian Government. These include an assessment of their fitness to fly and rapid malaria testing when appropriate. They are given antiparasitic treatment and, for those under 30 years of age, measles, mumps and rubella vaccination.

Refugees normally arrive in Australia in family groups. Health screening processes after arrival differ between and within the States and Territories. In NSW, screening varies depending on where in NSW the refugees are settled by the Department of Immigration and Citizenship. The NSW Refugee Health Service, funded by NSW Health,

<sup>\*</sup>Bug Breakfast is the name given to a monthly series of hour-long seminars on communicable diseases delivered by the NSW Department of Health's Division of Population Health.