

Exclusion/Restriction

Cases of most enteric disease should be considered infectious and should remain off work/school until 48 hours after symptoms have ceased. Certain individuals pose a greater risk of spreading infection and additional restriction/exclusion criteria may apply. Microbiological clearance may be required for individuals infected with/exposed to certain pathogens.

The key criteria are:

- the decision to exclude any worker is based on individual risk assessment. As a general rule, any worker with symptoms of gastrointestinal infection (diarrhoea and/or vomiting) should remain off work until clinical recovery and stools have returned to normal (where the causative pathogen has not been identified). Where the pathogen has been identified, specific criteria are summarised in Table 2.4
- the overriding prerequisite for fitness to return to work is strict adherence to personal hygiene, whether symptomatic or not.

The circumstances of each case, carrier or contact should be considered and factors such as their type of employment, availability of toilet and hand washing facilities at work, school or institution and standards of personal hygiene taken into account. For example, a carrier may be relocated temporarily to a role that does not pose an infectious risk.

Pathogen specific exclusion criteria for people at increased risk of transmitting an infection to others

Pathogen specific exclusion (restricting criteria for people from work, school or an early childhood service and for subsequent clearance are summarised in Table 2.4. Additional information is also included in the table for the following groups:

1. people whose work involves preparing or serving unwrapped food to be served raw or not subject to further heating (including visitors or contractors who could potentially affect food safety)
2. staff, inpatients and residents of health care, residential care, social care or early childhood facilities whose activities increase risk of transferring infection via the faecal-oral route
3. children under the age of 5 attending early childhood services/groups
4. other adults or children at higher risk of spreading the infection due to illness or disability.

The Health (Infectious and Notifiable Diseases) Regulations 2016 do not contain any exclusionary powers or incubation periods for infectious children, or for high risk occupational groups such as people who work with children or food handlers. Instead the medical officers of health can resort to broader powers in Part 3A of the Health Act 1956, which include directions to cases and contacts to remain at home until no longer infectious. This Manual contains the recommended exclusion periods for specific diseases (Refer: Table 2.4).

There is guidance published about the 2016 regulations and Part 3A of the Health Act in www.health.govt.nz/our-work/diseases-and-conditions/notifiable-diseases/summary-

infectious-disease-management-under-health-act-1956. The legislation is principles based. In this context this means that medical officer of health must weigh protection of public health (the paramount consideration) with the following principles: trying voluntary means first if likely to be effective, choosing a proportionate, and the least restrictive measure required in the circumstances, fully informing the case or contact of the steps to be taken and clinical implications, treating them with dignity and respect for their bodily integrity and taking account of their special circumstances and vulnerabilities, and applying the measures no longer than is necessary (sections 92A to 92H).

Under Part 3A a medical officer of health can direct a case or a contact to stay home (section 92I(4)(b) or 92J(4)(b)). This is when the officer believes on reasonable grounds that the case or contact poses a public health risk (as defined in the s2 Act). The direction must specify duration.

Alternatively, in the context of attendance at an educational institution, if the officer believes the infection risk is unlikely to be effectively managed by directing the case or contact, he or she can approach the head and direct them to direct the case or contact to remain at home. In serious cases, the medical officer of health can also direct the head to close the institution or part of it (s 92L).

Medical officers of health have no powers to direct closure of premises or places where people congregate, other than educational institutions. If a medical officer of health needs to manage a public health risk by excluding infectious people from certain occupations, public pools, campsites, concerts and other public environments, he or she can use directions to the individuals concerned – to stay away from a certain place, or not to associate with certain people.

The Ministry for Primary Industries has powers to close commercial food premises. In contrast, medical officer of health powers focus on the risk the person poses.

Note that while there are provisions that apply to early childhood service workers, there are no provisions for health care workers – instead, advice should be provided to employers in terms of the Health and Safety at Work Act 2015.

Employers may decide to implement more stringent exclusion/restriction criteria in response to their own or their customers' requirements.

Table 2.4: Pathogen or disease-specific exclusion and clearance criteria for people at increased risk of transmitting an infection to others

Groups at increased risk of transmitting infection to others:

- 1: people whose work involves preparing or serving unwrapped food to be served raw or not subject to further heating (including visitors or contractors who could potentially affect food safety)
- 2: staff, inpatients and residents of health care, residential care, social care or early childhood facilities whose activities increase risk of transferring infection via the faecal-oral route
- 3: children under the age of 5 attending early childhood services/groups
- 4: other adults or children at higher risk of spreading the infection due to illness or disability.

Pathogen or disease name	Control	Cases		Contacts
		Exclusions	Microbiological clearance	
Acute gastroenteritis, including due to <i>Bacillus</i> species, <i>Clostridium perfringens</i> , <i>Cyclospora</i> , norovirus and rotavirus, <i>Staph. Aureus</i>	Enteric precautions	Until symptom free for 48 hours.	None required	No action
<i>Entamoeba histolytica</i> (amoebic dysentery)	Enteric precautions until treatment complete	Until symptom free for 48 hours.	None required	Screen household
		1,2,3,4 also require clearance.	1,2,3,4: one negative stool, at least one week after end of treatment.	
<i>Campylobacter</i>	Enteric precautions	Until symptom free for 48 hours.	None required	No action
<i>Cryptosporidium</i>	Enteric precautions	Until symptom free for 48 hours. Avoid swimming pools for two weeks after symptom free	None required	No action
<i>E.coli</i> VTEC/STEC	Enteric precautions	Until symptom free for 48 hours.	None required	No action
		1,2,3,4 also require clearance.	1,2,3,4: two consecutive negative stools at least 48 hours apart. If stools remain positive: a risk	1,2,3,4: exclude until one negative stool. If stools remain positive: a risk assessment should be carried out to consider safe arrangements for continuing work, or for

Pathogen or disease name	Control	Cases		Contacts
		Exclusions	Microbiological clearance	
			assessment should be carried out to consider safe arrangements for continuing work, or for alternative work, and for continuing need for strict hygiene both within household and at work.	alternative work, and for continuing need for strict hygiene both within household and at work.
<i>Giardia lamblia</i>	Enteric precautions	Until symptom free for 48 hours.	None required	No action If index case in Group 3 and there are reports of diarrhoeal illness in previous 2 weeks in childcare centre attended by case, screen symptomatic classmates.
Hepatitis A	Enteric precautions ≤1 wk after onset of symptoms	1,2,3,4: seven days after onset of jaundice and/or other symptoms.	None required	Consider vaccination of contacts (especially if index case identified within 1 week of onset or if at continuing risk). Alternatively consider passive immunisation. People who have recently been exposed to food prepared by a case may benefit from active or passive immunisation.
<i>Salmonella</i>	Enteric precautions	Until symptom free for 48 hours.	None required	No action
<i>S. typhi</i> and <i>paratyphi</i>	Enteric precautions	Until symptom free for 48 hours.	None required	If case is <u>not</u> considered to have acquired the infection overseas: 1,2,3,4: exclude until two negative faecal samples have been provided at least 48 hours apart. All household and close contacts other than 1,2,3,4: collect two faecal samples provided at least 48 hours apart. No exclusion is necessary. Note: In an outbreak situation, for potential common-source contacts
		1, 2, 3, 4 and school children also require clearance.	1,2,3,4 and school children*: three consecutive negative stools at least 48 hours apart after completing treatment with effective antibiotics. If not treated with effective antibiotics, no earlier than 1 month after onset of symptoms. * Schoolchildren: until clearance criteria are	

Pathogen or disease name	Control	Cases		Contacts
		Exclusions	Microbiological clearance	
			<p>satisfied or as decided by the medical officer of health.</p> <p>Carriers, including chronic: a risk assessment should be carried out to consider safe arrangements for continuing work, or for alternative work, and for continuing need for strict hygiene both within household and at work.</p>	<p>consider collecting one faecal sample.</p> <p>If case <u>is</u> considered to have acquired the infection overseas:</p> <p>Co-travelling contacts should provide a faecal sample as soon as possible. Exclusion is not necessary.</p> <p>Other contacts who are unlikely to have been exposed to same source: samples or exclusion not necessary.</p> <p>Carriers, including chronic: a risk assessment should be carried out to consider safe arrangements for continuing work, or for alternative work, and for continuing need for strict hygiene both within household and at work.</p>
<i>Shigella sonnei</i>	Enteric precautions	Until symptom free for 48 hours.	None required	No action
<i>Shigella Boydii</i> , <i>Dysenteriae</i> , and <i>Flexneri</i>	Enteric precautions	Until symptom free for 48 hours.	None required	No action
		1,2,3,4 also require clearance.	1,2,3,4: exclude until symptom free for 48 hours and two consecutive negative stools at least 48 hours apart.	1,2,3,4: exclude until one negative faecal specimen has been provided.
<i>Vibrio cholerae</i> O1 or O139	Enteric precautions	Until symptom free for 48 hours.	None required	Clinical surveillance of those who shared food and drink with case for 5 days from shared exposure.
		1,2,3,4 also require clearance.	1,2,3,4: exclude until symptom free for 48 hours and two consecutive negative stools at least 48 hours apart.	

Pathogen or disease name	Control	Cases		Contacts
		Exclusions	Microbiological clearance	
<i>Yersinia</i>	Enteric precautions	1,2,3,4: until symptom free for 48 hours.	None required	Not required

In exceptional circumstances, eg, where workplace hygiene or sanitation is uncertain, a case may need to be excluded until they have submitted appropriate negative stool(s), taken at a suitable interval.

References and further information

ESR. 2012. *Guidelines for Investigating Communicable Disease Outbreaks*. Porirua: Institute of Environmental Science & Research Limited.

Heyman, D.L. 2015. *Control of Communicable Disease Manual, 20th Edition*. Washington: American Public Health Association.

Communicable Disease Network Australia. 2010. *Guidelines for the public health management of gastroenteritis outbreaks due to norovirus or suspected viral agents in Australia*. Canberra: Department of Health and Ageing.