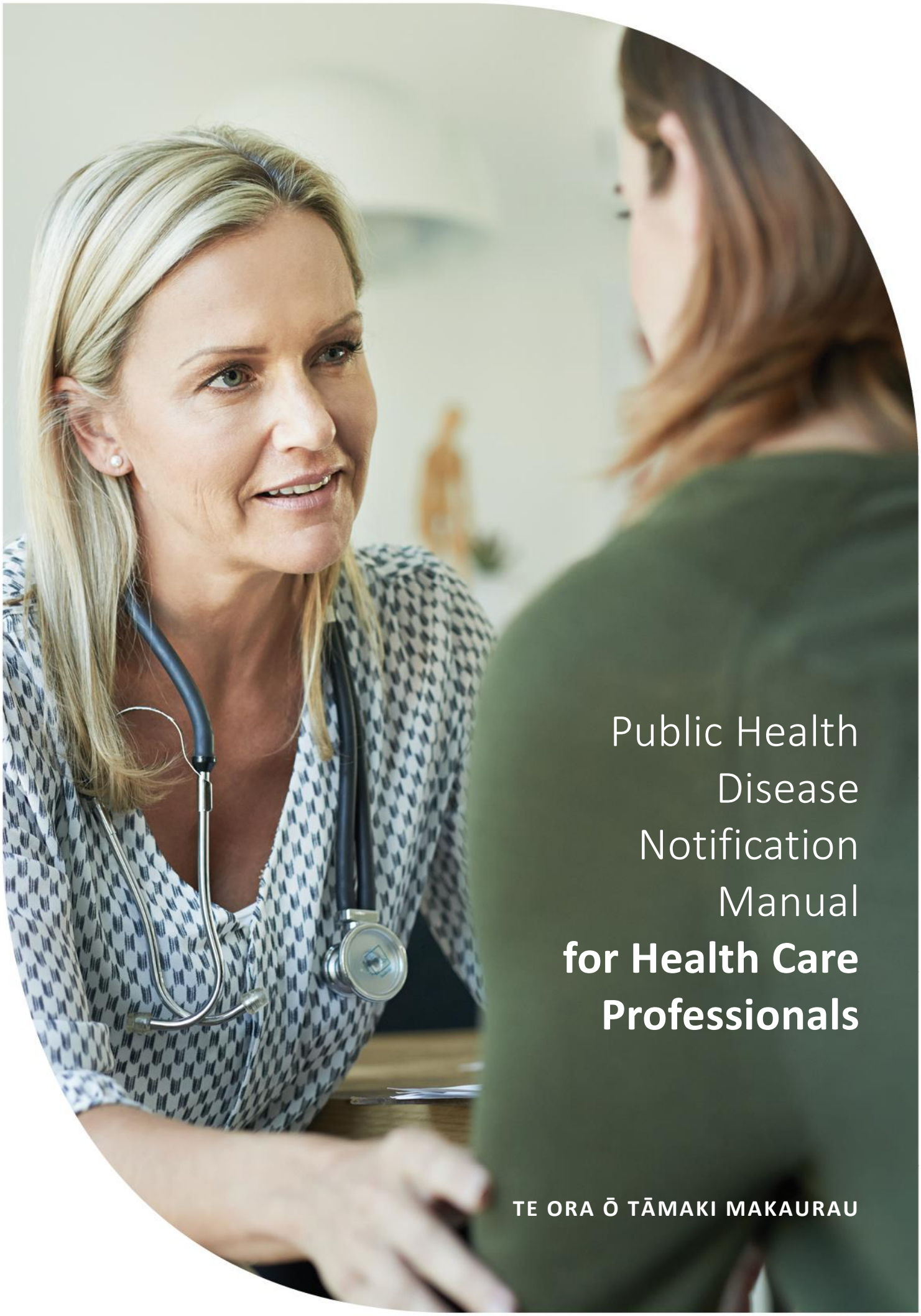


Public Health Disease Notification Manual **for Health Care Professionals**

TE ORA Ō TĀMAKI MAKAURAU

Purpose

This manual is to assist health professionals to meet the legal duty to notify. The ARPHS website also has information on specific diseases; information on the National policy is in the Ministry of Health's Communicable Disease Control Manual.

Introduction

On 4 January 2017 the Health (Protection) Amendment Act 2016 came into force. It updated the Health Act 1956, and repealed the Tuberculosis Act 1948, in order to improve the surveillance and management of notifiable diseases. All health practitioners (not just doctors) now have to notify the medical officer of health upon 'reasonable suspicion' of a notifiable disease, if this is in their scope of practice.

The Act makes three sexually transmitted infections (syphilis, gonorrhoea, HIV/AIDS) notifiable, but without including personally identifying information. Since notification is anonymous, the diagnosing clinician remains responsible for initial contact tracing for these sexually transmitted infections (STIs).

Why notify?

Disease notification enables (1) surveillance to monitor trends, associated risk factors, sources, and enable early identification of potential outbreaks; and (2) prevention of spread by identifying cases and contacts.

Why do I need to notify after laboratory notification?

For most notifiable diseases, a laboratory test provides the initial notifications. But you are still required to notify to provide contact details, context and clinical information for ARPHS follow- up. STIs are the exception: you do not need to notify ARPHS of STI cases. From November 2018 health practitioners that receive results for Section C diseases (see below) are required to notify ESR using NON-IDENTIFIABLE data through forms available on the ESR surveillance website. Notification on clinical suspicion is still needed for the more serious illnesses, and for diseases in which there is no good clinical test.

Which diseases are notifiable?

The MoH website lists the diseases under the three categories of infectious notifiable diseases:

- **Section A diseases:** enteric infections (e.g., campylobacter, giardia), legionellosis and amoebic meningoencephalitis.
- **Section B diseases:** other infectious diseases that are only notified to the MOH. These include vaccine-preventable diseases (e.g., pertussis, measles) and rare diseases (e.g., anthrax, avian influenza, Creutzfeldt-Jakob disease, Middle East Respiratory Syndrome (MERS-CoV), rabies, viral haemorrhagic fevers).
- **Section C diseases:** syphilis, gonorrhoea, HIV and AIDS. These are notified **without** identifying personal information. Anonymity is to prevent people avoiding diagnosis and treatment, due to fear of stigma and discrimination.

There are also some non-infectious notifiable diseases. These include: poisoning from hazardous substances, high blood lead levels, decompression sickness, and parasites (cysticercosis, taeniasis, trichinosis).

NOTE: **Notification of hazardous substances** and high blood lead is through the separate BPAC form (see https://bpac.org.nz/BPJ/2016/May/e-notification.aspx)

Additional notification

At times, the Ministry of Health may request that a specific disease not listed in the schedule be notified for disease control purposes.

Contact tracing: new clinician responsibility for STIs

The purpose of contact tracing is to identify people at risk of getting disease in order to prevent further spread. Treatment or early diagnosis of disease in the contacts, as well as advice to limit contact during risk periods, will limit further spread of infectious disease. Contact tracing can also identify the source of the infection.

For most notifiable diseases, ARPHS will undertake the follow-up, including contact tracing. But the clinician will still need to undertake contact tracing for STIs, since ARPHS is not provided with case details. This role builds on current clinical care, where the patient is advised to tell any sexual partners to seek medical advice and testing. The New Zealand Sexual Health Society guidelines on partner notification (that includes a link to the Australasian Contact Tracing Guidelines) provides evidence-based guidance for clinicians. There is also a British resource.

The Act also establishes 'formal' contact tracing, with additional powers that the medical officer of health can nominate you to undertake. If so, you will need to be trained to comply with the processes and obligations set out in the Act.

Disease notification process

Forms for reporting and investigation are nationally defined for each disease, and are available from ESR. You can phone or fax the notification to ARPHS:

Phone: (09) 623 4600
Fax: (09) 630 7431

What information is needed about the notified cases?

ARPHS needs contact details (phone and email) for follow-up. This is why you still need to notify a case after the laboratory notification, as the test results do not always provide these details.

In addition, it is vital to share any information you have about possible sources/exposures of the case and risks of further transmission based on their occupation or other factors. This information helps ARPHS to identify possible clusters and prioritise follow-up.

Patient consent

Patient consent to notification is not needed, but it is good practice to discuss it with the patient/whanau, and to advise that public health may contact the patient or family member. Public health follow-up can be compromised if the person does not expect this follow-up.

Anonymous notification

For section C diseases (syphilis, gonorrhoea, HIV/AIDS), the notification does not include the person's name, but instead uses code (first two letters of surname followed by first letter of first name). Personal identifying information is not to be included; but the medical officer of health can request it.

Notifications for Section C diseases are made to ESR using forms available on the ESR surveillance website. The health practitioner who requested the test is legally required to complete a notification form.

Relevant legislation

- Health Act 1956, Sections 70 – 87 A and associated regulations
- Health (Infectious and Notifiable Diseases) Regulations 2016
- Hazardous Substances and New Organisms Act 1996, Section 143

In addition, the International Health Regulations 2005 requires notification of some diseases (e.g., cholera and polio) to the World Health Organization. For some infections that are acquired overseas, the relevant national health authorities may be notified via the Ministry of Health. Both of these functions are carried out by ARPHS.

Annex A: Exclusion criteria for cases and contacts

Exclusion and clearance aims to prevent the spread of infection, by limiting exposures from cases and/or contacts. The periods of exclusion and clearance are detailed below. In most situations ARPHS organises the clearance testing for both cases and contacts. ARPHS will advise you when a person with a high-risk occupation, or a child, has been cleared to return to work or early childhood education centre (ECEC)/school. Occasionally ARPHS may ask primary care for support to undertake this, or if special circumstances exist.

The medical officer of health can also consider whether it is necessary to use exclusion provisions in s92I (for cases) or s92J (for high risk contacts) of the Health Act and from early childhood centres using the Education (Early Childhood Centres) Regulations 1998.

Enteric infections

Exclusion from work, school or an early childhood service is advised for **all** enteric infections until 48 hours have passed without any further symptoms. For specific enteric infections, additional microbiological clearance is needed for cases or contacts. Tables 1, 2 and 3 on page 6 show clearance for cases and close contacts in each of these groups. See Annex B.

Hepatitis A

School children and other high risk cases (see table A1 below), should stay away from school or work for at least one week after the onset of jaundice or other symptoms. There is no restriction on contacts who are well; those with symptoms of hepatitis should be investigated.

Hepatitis B

Cases who may infect others during their work (e.g., health care workers) need to avoid exposure-prone procedures and adopt universal precautions. Contacts have similar restrictions until the test results are shown to be normal.

Meningococcal invasive disease

Droplet precautions are needed for cases until 24 hours after the start of ceftriaxone, rifampicin or ciprofloxacin. Contacts are those exposed to the case's respiratory droplets from the case during the 7 days before the onset of illness to 24 hours after the onset of effective treatment. Close contacts may require both chemoprophylaxis and immunisation if the strain is vaccine-preventable (A, C, Y, W).

Measles, mumps, rubella

Cases need to avoid contact with other people during their infectious period:

- measles; until 5 days after rash onset
- mumps; until 5 days from the onset of glandular swelling
- rubella; until fully recovered, or 7 days after the rash onset.

This means not going to work, school or ECEC, and not having visitors from outside the family who are not proven to be immune to the illness in question. For rubella, cases should avoid contact with women of childbearing age.

Measles contacts born after 1st January 1969, and without documented immunity (from infection or two doses of vaccine) are advised to avoid attending school, ECEC, and community gatherings; and to avoid contact with susceptible individuals until 14 days after their last exposure to the infectious case.

Susceptible contacts that get a first dose of measles vaccine within 72 hours of exposure are still subject to these restrictions – unless they can demonstrate immunity.

For mumps contacts born after 1st January 1981 who have not had lab-documented mumps or full immunisation for their age, exclusion for days 12 - 25 after the last exposure is advised for those in health care, school or ECEC settings.

For rubella contacts, there are no restrictions; the focus is on pregnant women to identify infection, and to offer protection through vaccine prior to pregnancy.

Pertussis

Cases should be excluded from work, education, or other institutions for:

- 3 weeks since onset of cough if no antibiotics given;
- 5 days if given appropriate antibiotics; or
- 2 days if azithromycin used as antibiotic.

All contacts should be advised to avoid work, school or other institution if they become symptomatic. In some cases, the medical officer of health could place additional restrictions to prevent spread.

Chemoprophylaxis is of uncertain benefit, and only recommended for high priority contacts: children aged under one year; those who have contact with them (such as close family), pregnant women, and those at high risk of severe illness or complications (for example chronic respiratory conditions, congenital heart disease or immunodeficiency). Offer vaccine to any high priority contacts who are not fully immunised.

Tuberculosis

Cases with active pulmonary or laryngeal TB in a health facility need isolation and airborne precautions until non-infectious. Cases who do not warrant hospitalisation and who will comply with infection control precautions may be isolated at home, after discussion with the medical officer of health. Contacts have no restrictions unless they have symptoms of pulmonary TB, when they should restrict social interaction until an urgent chest x-ray is available.

Annex B: Clearance criteria for enteric diseases

Once a notified enteric disease has been confirmed (Table 1), it is ARPHS responsibility to give advice and manage high risk cases and their contacts. See the list of high risk cases or contacts below (Table 2).

Where the case is high risk, ARPHS will contact the medical provider(s) concerned and initiate an appropriate public health response dependent on the disease notified (Table 3).

Where the pathogen is unknown, the case is not high risk, or notification is not required we advise isolation at home until at least 48 hours after last symptoms.

Table A1

Notifiable enteric diseases:	
Campylobacter	Outbreaks of acute gastroenteritis
Cholera	Salmonella
Cryptosporidium	Shigella
Giardia	Typhoid and paratyphoid
Hepatitis A & E	VTEC/STEC (verocytoxin/shiga toxin-producing E coli)
Listeria	Yersinia

Table A2

High risk cases or contacts
1. **Food handlers** whose work involves touching unwrapped foods to be eaten raw or without further cooking. 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 5 years of age** attending early childhood services/groups. 4. Other adults or children at higher risk of spreading infection due to **illness or disability**.

Table A3

Exclusion criteria for cases and their contacts for each notifiable disease (for use by public health officials).

Pathogen	Cases		Close contacts (usually household)	
	Category	Restriction	Category	Restriction
Campylobacter	**All**	Exclude until symptom free for 48 hours	**All contacts**	**No restriction**
Cryptosporidium	**All**	Exclude until symptom free for 48 hours	**All contacts**	**No restriction**
	All	Advise against using public swimming pools for two weeks after symptoms have resolved		
Giardia	**All**	Exclude until symptom free for 48 hours	**All contacts**	**No restriction**
	All	Advise against using public swimming pools for two weeks after symptoms have resolved		
Hepatitis E Virus	**1234**	Confirmed and probable cases should not attend work or attend child care facilities during the infectious period (i.e. 14 days after onset of symptoms)	**All contacts**	**No restriction**
Salmonella	**All**	Exclude until symptom free for 48 hours	**All contacts**	**No restriction**
Shigella *sonnei*	**All**	Exclude until symptom free for 48 hours	**All contacts**	**No restriction**
Shigella *boydi, dysenteriae and flexneri*	**All**	Exclude until symptom free for 48 hours	**1234**	**Exclude until one negative faecal specimen provided**
	1234	Exclude until cleared: two consecutive negative faecal specimens taken at least 48 hours apart, and if receiving antibiotics at least 48 hours after course completed		

Table A3 continued

<table>
<tr><th rowspan="2">Pathogen</th><th colspan="2">Cases</th><th colspan="2">Close contacts (usually household)</th></tr>
<tr><th>Category</th><th>Restriction</th><th>Category</th><th>Restriction</th></tr>
<tr><td rowspan="6">Typhoid and paratyphoid†</td><td rowspan="2">All</td><td rowspan="2">Exclude until symptom free for 48 hours

NB Clearance criteria below (but without exclusion) should be completed for low risk cases</td><td colspan="2">Contacts of locally acquired case*</td></tr>
<tr><td>1234</td><td>Exclude until two negative faecal specimens taken at least 48 hours apart</td></tr>
<tr><td rowspan="3">1234</td><td rowspan="3">Exclude until cleared. This requires two consecutive negative faecal specimens taken at least 48 hours apart, either:
at least 48 hours after appropriate antibiotics finished, or
no earlier than a month after onset of symptoms</td><td>All household and close contacts (other than 1234)</td><td>Collect two faecal samples at least 48 hours apart; no exclusion required</td></tr>
<tr><td colspan="2">Contacts of overseas acquired case</td></tr>
<tr><td>Co-travelling contacts</td><td>Collect one faecal specimen as soon as possible; no exclusion required</td></tr>
<tr><td>School children</td><td>Discuss case with SMO and, if required, exclude until above clearance criteria satisfied</td><td rowspan="2">Other contacts</td><td rowspan="2">No restriction</td></tr>
<tr><td>Norovirus, rotavirus</td><td>All</td><td>Exclude until symptom free for 48 hours</td></tr>
<tr><td>VTEC</td><td>All</td><td>Exclude until symptom free for 48 hours</td><td>All contacts</td><td>If symptoms present test and exclude until symptom free for 48 hours</td></tr>
<tr><td>Yersinia</td><td>All</td><td>Exclude until symptom free for 48 hours</td><td>All contacts</td><td>No restriction</td></tr>
</table>

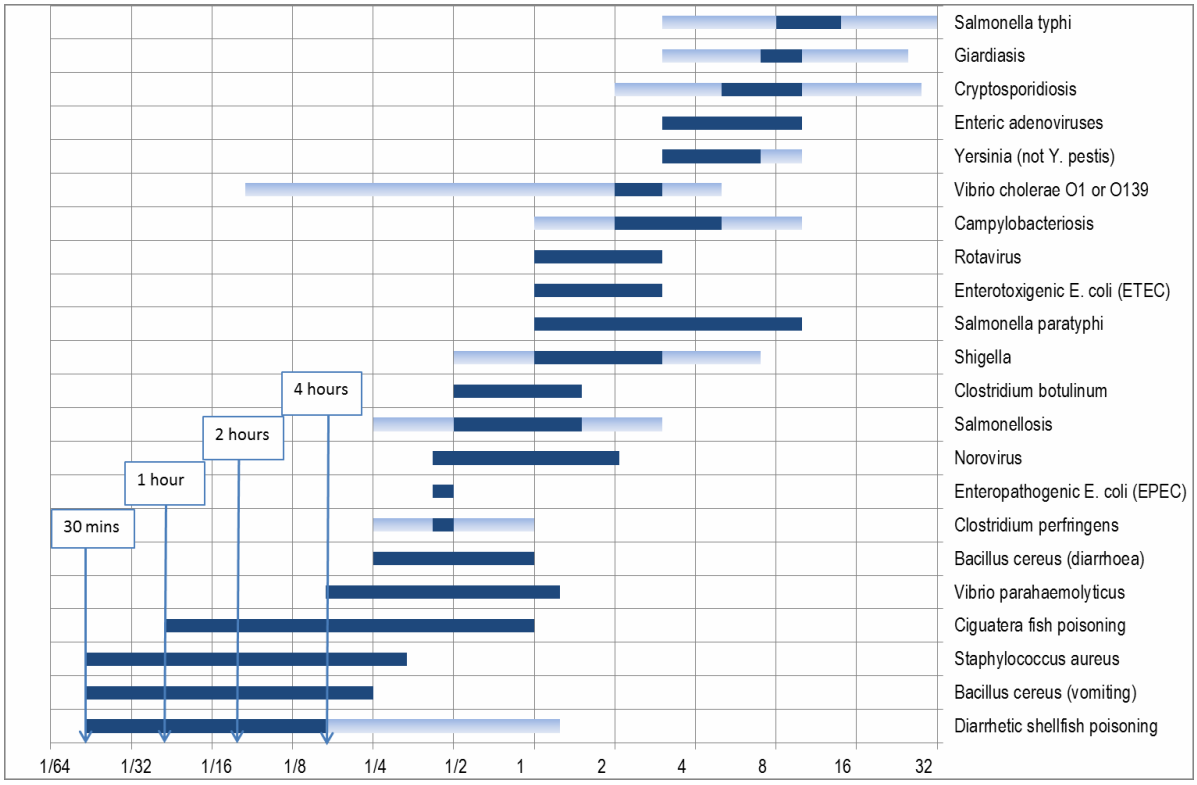
Under Part 3A of the Health Act, the MOH may issue a direction to health care workers considered at risk of transmission.

* Note: In an outbreak situation consider collecting one faecal sample from potential common-source contacts.
† Excludes *Salmonella* Paratyphi B var Java. Manage infections due to this pathogen as for *salmonella*.

Incubation and infectious periods for enteric infections

Figure B1: Incubation period (in days, in log scale) for enteric infections

(Darker shade shows usual range, light shade possible range)

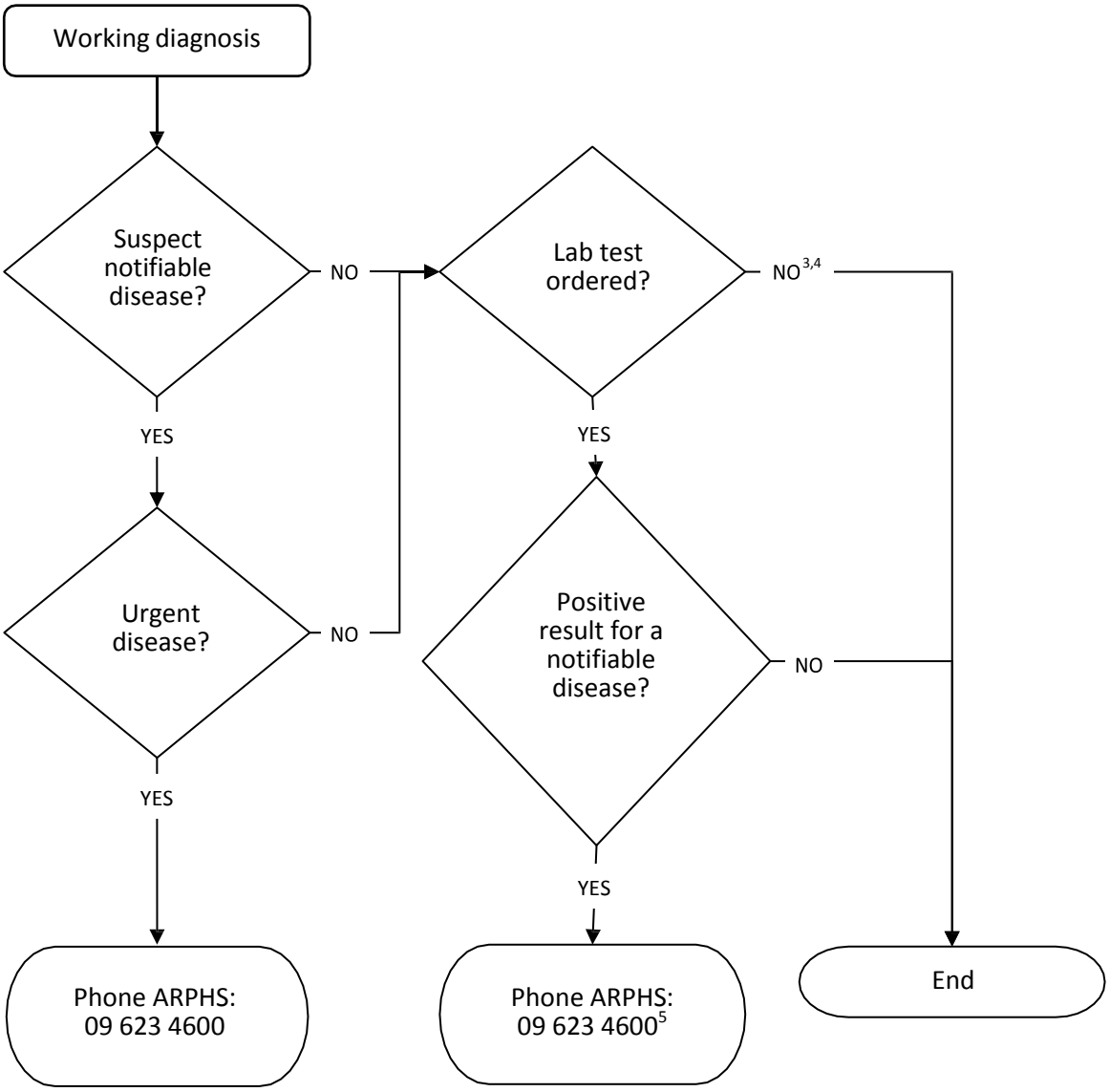


Source: Table 2.2 of Ministry's Communicable Disease Control Manual. Data for crypto, DSP, and Yersinia adjusted based on other sources.

Table B1: Communicable period for enteric disease with person-to-person transmission

Infection	Period of communicability
Enteric adenoviruses	Highest risk in the first few days of symptoms; up to months
Giardiasis	Up to months
Norovirus	During symptoms and until 48 hours after diarrhoea ceases
Rotavirus	During symptoms and until approximately 8 days after onset of symptoms.
	Up to 30 days after onset of symptoms in immunocompromised patients
Shigellosis	Up to 4 weeks after infection. Asymptomatic carriage may also occur. Rarely, faecal shedding may persist for months

Annex C: Notifiable disease report process



Notes:

1. Advise patient of notification and that ARPHS will contact them for follow-up, if needed.
2. Advise patient of any exclusion advice
3. Not all notifiable diseases have confirmatory lab test e.g. tetanus, botulism, clinical syphilis - please notify upon clinical diagnosis.
4. A lab test is not need always needed to confirm the diagnosis, when there is a link to a confirmed case.
5. For Section C diseases (syphilis, gonorrhoea, HIV/AIDS), treating clinicians have a legal requirement to notify with NON-IDENTIFIABLE data; this is done to ESR not ARPHS using forms available at the ESR surveillance website.
6. The 'End' box is only for the notification process; normal case management continues.