Standard Operating Procedure (SOP) for Public Health Management of Cases and Contacts of Acute Hepatitis B

Version 1.0

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V 1.0	11/06/2024	Draft procedure developed	DNHP

Contents

1.0 Purpose

To provide information and guidance on the Public Health Management of Cases and Contacts of Acute Hepatitis B.

2.0 Scope of this document

This SOP deals specifically with the public health management of cases and contacts of acute hepatitis B infection. This is a sample standard operating procedure (SOP) for the public health management of cases and contacts of acute hepatitis B. This SOP can be adapted for local use in regional departments of Public Health.

3.0 Objectives

The objective of this SOP is to provide a national standardised procedure for public health management of cases and contacts of acute hepatitis B, for use by Area Departments of Public Health.

4.0 Governance Arrangements

This SOP was developed and agreed following national and regional consultation and is based largely on work undertaken in Dublin Midlands Public Health Area. The SOP content was overseen and agreed by the National Health Protection Office National Incident Management Team for acute hepatitis B, established in March 2024. The content will be reviewed in 3 years, or sooner if required.

5.0 Related documentation

National Immunisation Advisory Committee Immunisation guidelines for Ireland on hepatitis B at Royal College of Physicians of Ireland Website > Healthcare Leadership > NIAC > Immunisation Guidelines for Ireland (rcpi.ie)

6.0 Procedure

This SOP should always be used in conjunction with current NIAC guidance. For full details of acute hepatitis B, please refer to chapter 9 of the National Immunisation Advisory Committee (NIAC) guidance. Useful information on hepatitis B can also be found on the HPSC website. Algorithms summarising the Public Health management of a case and contacts of a case of acute hepatitis B are available here. The algorithms **must** be used in the conjunction with this SOP and chapter 9 of the NIAC guidance available here.

6.1 Notification of acute hepatitis B virus (HBV) infection

Notification of acute HBV is usually made to the Area Department of Public Health by the diagnosing clinician via telephone/email or by the laboratories via the Computerised Infectious Disease System (CIDR).

On receipt of notification:

- Confirm that the case is resident in your public health area using Health Atlas, https://www.healthatlasireland.ie/.
- Confirm acute/chronic status of case: Check laboratory report comments and review serology markers in laboratory report. For interpretation of serology results and case definitions, see Appendix 1. If there is uncertainty in case classification, discuss interpretation with virologist.
- Acute cases: the target for the area public health team is to follow up the case **within 24 hours of notification.**
- Chronic cases: proceed as per local chronic hepatitis B SOP.
- Update CIDR with acute/chronic status of case. CIDR must be updated in a timely manner to facilitate national surveillance of incidence of acute and chronic cases.

6.2 Public health management of acute HBV infection

6.2.1 Contact the case's diagnosing clinician (e.g. hospital clinician or GP)

a) Confirm laboratory results and interpretation. Document clinical signs and symptoms and date of symptom onset if possible.
b) Establish whether the case has been informed of the diagnosis. If the case has not been informed, establish who will do so (usually the doctor who requested the test). In some exceptional scenarios public health may have to inform the patient of the result directly (i.e. an acute hep B with multiple close contacts and the responsible physician is uncontactable). Delays should be avoided.
c) Establish if the patient is well enough to undergo public health interview. If not, identify a proxy for the interview, for example the treating clinician and/or next of kin.
d) Inform the diagnosing clinician that once case is aware of diagnosis, you will interview the case and carry out contact tracing and management. If the diagnosing clinician is the patient's GP, consider following up with the letter in Appendix 2. If the diagnosing clinician is not the GP, you will need consent from the case to inform their GP. If the case has no GP, see section 6.2.4: special situations.
e) If an interpreter is required see HSE guidance on working with interpreters or work with a locally contracted translation service
f) Obtain address, telephone number and email address of the case.

6.2.2 Contact the case

The case should be contacted by a member of the health protection team as soon as possible after notification. The priority is to identify the most likely source of infection (complete ESF) and to identify the sexual and household contacts of the case (including establishing if any contacts require urgent assessment for HBIG). The case should be counselled on precautions to reduce the risk of onward transmission. In terms of exclusion, cases who develop symptoms of acute hepatitis B will be too ill to be at school/work. Cases will be given specific advice by their treating doctor about when they are well enough to return.

a) Prepare for contacting the case. See Appendix 3 for factsheet on hepatitis B.

b) Contact case by telephone – See Appendix 4a for an example introductory script. Check understanding of hepatitis B with case. Explain contact tracing process.

c) Complete enhanced surveillance form ESF and identify the most likely source of HBV infection.

   i. if case is part of cluster or an outbreak, check with lead investigator regarding the need for additional questions, and use any outbreak specific form that has been developed to record them

   ii. Outbreak control team (OCT) to be convened in event of a suspected cluster/outbreak.

d) If the case is pregnant or delivered within the last year and the infant is unimmunised – obtain the patient's consent to ensure the relevant obstetrician/paediatrician is aware and appropriate follow-up protocols are activated for the case and the infant. Refer to NIAC guidance, Chapter 9 re: post exposure prophylaxis for babies born to mothers who are HBsAg positive, and PEP for unimmunised infants aged less than 12 months.

e) If the case is a healthcare worker, undertake a risk assessment to determine if the healthcare worker is involved in exposure prone procedures. If yes, and there may be a risk of transmission, ask for consent to discuss with their occupational health team. If they don't consent, and there may be a risk of transmission, MOH legislation may be required as the basis to inform occupational health.

f) Establish the close contacts of case – close contacts include sexual contacts and household contacts.

   i. A sexual contact is defined as anyone who has had any type of sexual contact with the case in the last 6 months.

   ii. A household contact is defined as a person living in the same household as the case and who ordinarily shares a kitchen and/or bathroom, from 6 months before the date of symptom onset of the case (or date of diagnosis if case is asymptomatic).

g) Establish if unprotected sex has occurred with any sexual partner(s) in the past seven days. These contacts should be prioritised for interview.

h) Ascertain if the case is in a position to inform close contacts of their diagnosis in a timely manner. Encourage and support them where possible to disclose their diagnosis to close contacts. If they are unable to disclose to their contacts, offer to inform the contacts while protecting the case's confidentiality.

i) Request contact details of sexual and household contacts: name, address, email address and telephone numbers, if known. Complete line list of close contacts: Appendix 5

j) Check understanding of hepatitis B with case. In cases of suspected/confirmed acute hepatitis B infection, advise the patient that it is safer not to have sex. The treating clinician will advise the patient when they are no longer infectious. If the patient does decide to have sex, advise them to use condoms for all sexual activities including oral sex, not to share sex toys, and not to engage in group sex. Advise them to use condoms until partners have been fully vaccinated and are known to have responded adequately to the vaccine (i.e. are immune). The case should also be advised not to share needles or drug paraphernalia including tooters. Household hygiene should also be discussed such as not sharing razors, toothbrushes, and towels. For full list of precautions to minimise spread of infection, see Appendix 6.

   i. *Infectious period: a person is infectious for the duration of illness whilst HBsAg (the surface antigen) remains present – appropriate infection prevention methods should be employed whilst the patient remains infectious.*

k) Send 'Hepatitis B and You' leaflet to the case via email or post. Information leaflets are available in multiple languages on the HPSC website.

l) Recommend all cases to attend for STI screening. If the case is a child with an unknown mode of transmission, consider a safeguarding referral.

m) Ensure case has the department of public health email/phone number for further reference.

n) Carefully document a record of the interaction with case as per local procedures.

6.2.3 Contact the household and sexual contacts.

Close contacts may be divided into household contacts and sexual contacts. All close contacts should be given the first dose of vaccine as soon as possible and tested for hepatitis B at the same time. As per the NIAC guidance, the accelerated vaccination schedule should be followed (i.e. 0, 1, 2, 12 months), however further doses may not be required after the initial dose in those with evidence of past exposure on serology testing.

Hepatitis B vaccine is highly effective in preventing acute infection after an exposure if given within 7 days and preferably within 48 hours. Even after this 7-day time period, vaccination should still be arranged as soon as possible. If HBV infection has already occurred at the time of immunisation, virus multiplication may not be inhibited completely but development of chronic hepatitis B may be prevented.

Any sexual contact of the case should also be offered HBIG within one week of last unprotected sexual contact (unless they have proven immunity). See NIAC guidance chapter 9 for full list of indications for post-exposure prophylaxis with HBIG. Other possible significant exposures which may require HBIG for recipients include needle stick injuries, a bite with breach of skin, and mucosal exposure to blood or body fluids containing blood. Please refer Guidelines for the Emergency Management of injuries (EMI) and Post exposure prophylaxis (PEP). Depending on hepatitis B vaccination status of the recipient, HBIG may need to be urgently arranged, alongside commencing vaccination. HBIG should ideally be given within 48 hours of exposure, but not later than one week after exposure.

GPs can order hepatitis B vaccines for close contacts directly from the cold chain free of charge at udd@hse.ie.

GPs may be able to claim reimbursement for administration to all contacts (GMS patients, doctor visit card holders, and private patients) via PCRS using an outbreak code, supplied by Public Health.

a) Prepare for contacting the sexual/household contacts. Be aware of whether the case has disclosed their diagnosis to contacts. The confidentiality of the case must be protected at all times.
b) Telephone the identified contacts. See Appendix 4b for an example introductory script.
c) Check understanding of hepatitis B. Inform the close contact about how they can reduce their risk of acquiring hepatitis B. Household/sexual contacts should be advised as to how they can reduce their risk of acquiring hepatitis B. Provide close contact with the leaflets 'Someone you know has hepatitis B' and 'Hepatitis B vaccine what you need to know'. Translated leaflets are available here.

d) Explain the testing and vaccination schedule.

e) Clarify immune status of contact. Presume the contact is non-immune unless proven otherwise e.g. complete vaccination record or laboratory results showing resolved infection. If you are not satisfied that the close contact is immune – proceed to step (f)

f) Obtain details of the close contact's GP. If no GP – see section 6.2.4 'special situations'.

g) Contact the GP via telephone to inform them that their patient is a close contact of a hepatitis B case and will attend for serology and to commence the accelerated vaccination schedule. Send the GP a letter Appendix 8

h) Ask the close contact to make an appointment without delay with their GP for serology/vaccination. Provide the close contact with a letter for their GP - Appendix 9.

i) If unprotected sexual intercourse occurred in the last 7 days with the case, in addition to vaccination any (non-immune) contacts should be referred for HBIG as post-exposure prophylaxis. See chapter 9, NIAC Guidance. Arrange for administration of HBIG by the local Consultant Microbiologist and ED/AMU/STI Clinic Consultant. Ordering of HBIG is usually arranged by the hospital. There is no national framework for administration of immunoglobulin, but Areas may have existing local arrangements in place. Areas may also find that procedures agreed for administration of HNIG for measles may be helpful to adapt for use for HBIG administration.

j) Follow-up serology samples for checking immunity of immunised contacts are only required in specific circumstances, please refer to NIAC Guidance chapter 9, for details.

k) Carefully document a record of the interaction with any close contacts as per local procedures.

6.2.4 Special situations:

- **A case lives in a multi-occupancy house and is uncomfortable disclosing diagnosis to fellow occupants**. In this case, consider sending a generic contact letter by post to all household occupants (including the case to protect their confidentiality), Appendix 10. Where possible, include the names of the household occupants. Include the leaflets 'Someone you know has hepatitis B' and 'Hepatitis B vaccine – what you need to know', available on the HPSC website.
- **If a case is not registered with a GP**, encourage them to do so. If a PH department is aware of GP(s) in their area who have availability for new patients, encourage the case to register with them. https://www2.hse.ie/services/find-a-gp/

- **If a close contact is not registered with a GP**, encourage them to register with a GP. As vaccination is time sensitive, consider local pathways to achieve serological testing and vaccination while GP registration is in progress e.g. an SMO led clinic/local sexual health service etc.

6.2.5 Closing actions: documentation and surveillance

- Surveillance
    - Once a notification is received, an event of acute hepatitis B should be created on CIDR by Public Health
    - The acute or chronic status of all cases of hepatitis B notified by the laboratory should be updated promptly on CIDR.
    - For all acute cases, the nationally agreed ESF should be completed. This is generally completed by Public Health.
    - Send completed ESF to the local surveillance team for entry to CIDR.
    - Public Health to send additional enhanced questionnaire (if completed in the setting of a national outbreak/cluster) to the HPSC by email to hpsc-data@hpsc.ie
    - As part of national outbreak management, HPSC will follow up on a regular basis with areas on cases of hepatitis, to ascertain whether they are acute or chronic status.
    - For acute cases, HPSC will follow up with the area if the additional enhanced form has not been received.
- Ensure all relevant actions are complete using the checklist in Appendix 6.
- Ensure documentation of clinical actions for the case and contacts is complete and up to date as per local procedures.

6.2.6 Abbreviations

- CIDR - Computerised Infectious Disease Reporting
- DPH - Department of Public Health
- ESF - Enhanced Surveillance Form
- HBIG - Hepatitis B Immunoglobulin

- HBV - Hepatitis B Virus
- HPSC - Health Protection Surveillance Centre
- PEP - Post-Exposure Prophylaxis

Appendices

Appendix 1: Interpretation of hepatitis B Serology and case definitions

Source: Chapter 9 of Immunisation Guidelines for Ireland (NIAC)

HBsAG	HBeAg	Anti-HBe	Anti-HBc IgM	Anti-HBc total	Anti-HBs	Interpretation
Neg	Neg	Neg	Neg	Neg	Neg	Susceptible to HBV
Pos	Pos	Neg	Pos/Neg	Pos/Neg	Neg	Acute HBV infection
Neg	Neg	Neg	Pos	Pos[1]	Neg	Recent HBV infection
Pos	Pos	Neg	Weak Pos/Neg	Pos	Neg	HBeAg positive chronic HBV infection[2]
Pos	Neg	Pos/Neg	Weak Pos/Neg	Pos	Neg	HBeAg negative chronic HBV infection[3]
Neg	Neg	Pos/Neg	Neg	Pos[3]	Pos/Neg	Resolved HBV infection
Neg	Neg	Neg	Neg	Neg	Pos	Response to hepatitis B vaccine

[1] Anti-HBc detected in two assays.

[2] Follow-up serology required to confirm chronic HBV infection.

[3] Follow-up serology required; HBV DNA viral investigations maybe required.

In cases of uncertainty regarding markers, please follow up with the clinician and the virology laboratory regarding interpretation.

Case definitions: See HPSC website for case definitions: https://www.hpsc.ie/a-z/hepatitis/hepatitisb/casedefinition/

Appendix 2: Letter to send to case's GP

PRIVATE and CONFIDENTIAL

Date: DD/MM/YYYY

Re: PATIENT NAME, ADDRESS, DOB

Dear Dr _____,

The above-named patient of your practice has been notified to the Public Health Department as a case of acute hepatitis B infection, as per the Infectious Disease Regulations, 1981.

We have provided your patient with information about acute hepatitis B, advised them on preventing onward spread and conducted enhanced surveillance to establish a possible source of infection. If not already done the following actions are recommended:

- If this is the first result the NVRL advises a *second confirmatory positive test* to confirm diagnosis and to include viral load (HBV-DNA).
- It is advised that cases are referred to specialist services.
- A complete STI screen should be offered to the case.
- Vaccination against hepatitis A should also be considered for the case once well enough.
- Six months after the first notification request, a blood sample is taken to establish status i.e. chronic, resolved.

Regarding your patient's contacts (family, household and sexual), they will be identified by our public health team and advised to have hepatitis B serology and vaccination. If these contacts are patients of your practice, they may present to you for serology and vaccination with a referral letter provided by us. Vaccines can be ordered for free for close contacts via the cold chain (email udd@hse.ie).

During an outbreak add this sentence: Reimbursement for administration of HBV vaccinations to contacts in an outbreak situation (public and private patients) is available via the PCRS browser.

For single cases not part of an outbreak, add this sentence: Reimbursement is available for administration of HBV vaccinations to contacts who have a medical card or doctor visit card. For other patients, reimbursement is not provided, so you may wish to apply an administration fee.

Please do not hesitate to contact me to discuss further, as necessary.

Yours sincerely,

_____

Appendix 3: Explaining hepatitis B

Hepatitis B is a viral infection, which causes inflammation of the liver. It is a major cause of serious liver disease such as cirrhosis and liver cancer and affects millions of people worldwide. Over 90% of adults clear the hepatitis B virus within six months of infection. However, most babies who become infected develop chronic (long-term) infection. This can cause them to develop serious liver disease, such as cirrhosis (scarring of the liver) and liver cancer as adults. Liver damage usually occurs gradually over 20-30 years in people with chronic infection.

How is hepatitis B spread?

Hepatitis B is spread when blood, semen or other body fluids from an infected person enter the body of a person who is not immune. This occurs in a variety of ways, including sexual contact with an infected person, transmission from an infected mother to her baby around the time of birth, sharing of needles and other drug paraphernalia by people who inject drugs, and exposure to blood through accidental needle stick injuries or through sharing razors or toothbrushes with an infected person.

What is the incubation period for hepatitis B?

The incubation period (time from infection to onset of symptoms) is 6 weeks to 6 months, the average being 2 to 3 months.

What are the symptoms of hepatitis B?

- Less than 10% of children and 30-50% of adults develop symptoms when they are first infected.
- The most common symptoms are loss of appetite, nausea, vomiting, discomfort in the abdomen, joint pain, fever, fatigue, dark urine, and pale coloured stools, often followed by jaundice.
- For some people, hepatitis B is a short-term illness only, with symptoms lasting from a few weeks to several months.
- However, about 80-90% of infants infected in their first year of life, 30-50% of children infected before the age of 6 years and <5 % of people infected as adults develop chronic (long term) infection.
- People who develop chronic infection are at increased risk of developing chronic hepatitis (inflammation of the liver), cirrhosis (scarring of the liver) and primary hepatocellular carcinoma (liver cancer).
- This liver damage usually occurs gradually over 20-30 years and people with chronic infection may have mild symptoms or no symptoms for a long time.
- Premature death from chronic liver disease occurs in 15-25% of chronically infected people.

Where is hepatitis B a problem?

Countries are classified as having low, intermediate, or high hepatitis B prevalence based on the percentage of the population positive for infection (shown by being positive for hepatitis B surface antigen (HBsAg) on a blood test). Ireland is considered a low prevalence country (<2% HBsAg prevalence). The United States, Canada, Australia, and most countries in Western Europe also have low hepatitis B prevalence. Most countries in the Caribbean, South America, Central Europe, North Africa, and the Middle East have intermediate levels of hepatitis B (2-7% HBsAg). Almost all countries in Sub-Saharan Africa, and many countries in East and South-East Asia and Eastern Europe, have high levels of hepatitis B (≥8% HBsAg).

In low prevalence countries like Ireland, most infections are acquired sexually or through drug use. In high prevalence countries, hepatitis B is commonly spread from mother to child at birth or is acquired through exposure to infected blood from another child or family member in early childhood. Transmission in healthcare settings may also be important.

How is an infection diagnosed?

Hepatitis B is diagnosed by testing the patient's blood for the presence of specific viral antigens or antibodies against the virus or by nucleic acid testing.

Can hepatitis B be treated?

There is no specific treatment for the early stages of hepatitis B infection. Therapy should be supportive and aimed at maintaining comfort and adequate nutritional balance. Long-term antiviral therapy can reduce the severity of liver disease, cirrhosis, and the incidence of liver cancer, but the eradication of hepatitis B virus is rare. People with chronic hepatitis B infection should avoid alcohol and should ensure they are immunised against hepatitis A infection.

People with chronic infection, who have low virus levels and no evidence of liver damage are unlikely to get seriously ill, and generally do not require treatment. Treatment is more likely to be offered for chronic hepatitis B if the patient has one or more of high viral load (>=20,000), high ALT levels over 3 months, cirrhosis, or is pregnant and has a high viral load.

See Treatment for hepatitis B - British Liver Trust for further information

Resources: Useful information on hepatitis B can be found at: https://www.hpsc.ie/a-z/hepatitis/hepatitisb/

Appendix 4a: Introductory script for initial contact with cases

Hello, My name is ***(name)***, is this ***(name of case)***? I am a ***(nurse/doctor)*** in the Department of Public Health.

I was speaking with your doctor ***(name)*** who told me you have recently been made aware you have hepatitis B. I am calling about this. This is routine. People who are diagnosed with certain infections, such as hepatitis B, are notified to our local Department of Public Health for follow-up. Your GP or doctor will refer you to a hepatitis Specialist for follow up and care.

My job is to try and determine where you might have gotten the infection and to give you advice to protect you and the people around you, primarily your household and sexual contacts. Everything we discuss is confidential.

This call should take 10-20 minutes, does that suit you now? ***Proceed to check understanding of hepatitis B and interview/counsel case as per protocol.***

<u>Tips for phrasing sensitive questions/topics.</u>

- Do you have any idea where you might have contracted hepatitis B?
- I have a questionnaire with routine questions we ask everyone and if it's ok with you, I'll go through that with you. ***Proceed to complete ESF.***
- Your household and sexual partner or partners should be tested for hepatitis B also and offered a free vaccine available to them if they are not immune. I can help them organise this. It's important this is done as soon as possible.
- Do you feel comfortable informing your household and sexual contacts?
- If yes, can you inform them and tell them that I will contact them shortly to offer testing and vaccination?
- If you don't want to inform them, I can call them and we won't give your details to protect your confidentiality.

Appendix 4b. Introductory script for sexual/household contacts

Hello, My name is ***(name)***, is this ***(name of case)***? I am a ***(nurse/doctor)*** in the Department of Public Health.

Option 1 - informed

I understand you are expecting my call as you have been identified as a close contact of a person with hepatitis B and you may have been exposed. Were you expecting my call? Please understand that this call is routine. Everybody who is diagnosed with hepatitis B has to be notified to our Department of Public Health. My job is to advise you on how to prevent and protect yourself from getting this infection as you may have been exposed. This call should take 10-20 minutes, does that suit you now? ***Proceed to check understanding of hepatitis B and interview/counsel contact as per protocol.***

OR

Option 2- not informed.

We have been made aware that you are a close contact of a person confirmed with hepatitis B. Because of confidentiality, I am not allowed tell you who that person is without their consent. Please understand that this call is routine. Everybody who is diagnosed with hepatitis B has to be notified to our Department of Public Health. My job is to advise you on how to prevent and protect yourself from getting this infection as you may have been exposed. This call should take 10-20 minutes, does that suit you now? ***Proceed to check understanding of hepatitis B and interview/counsel contact as per protocol.***

Appendix 5: Close contact's record

Addendum to HPSC enhanced surveillance form

Close Contact Details, Criteria:

Household contacts

- Infants born to mothers with acute or chronic HBV infection (children who have **completed** their primary childhood vaccination programme in Ireland since 2008 are protected against hepatitis B) – include in list recording vaccination dates if known.
- List the spouse and household contacts of individuals with acute infection.

Sexual Contacts:

- Sexual partners of case in the last six months only.

Where testing for markers of current or past infection is clinically indicated, this should be done at the same time as the administration of the first dose. Vaccination should not be delayed while waiting for results of the tests. Further doses may not be required in those with clear evidence of past exposure**.**

Name	DOB	Tel. No / Email / Address	GP Name and Contact Details	Type of Contact: Household / Sexual	Vaccinated (Yes / No)	Dates of Vaccination	Serology Test Date	Serology Result
		Tele: Email: Address:	Name: Address:	Choose an item.	Choose an item.			
		Tele: Email: Address:	Name: Name:	Choose an item.	Choose an item.			
		Tele: Email: Address:	Address: Name:	Choose an item.	Choose an item.			
		Tele: Email: Address:	Name: Name:	Choose an item.	Choose an item.			
		Tele: Email: Address:	Address: Name:	Choose an item.	Choose an item.			

Appendix 6: Acute hepatitis B checklist & advice

This checklist is intended as an "aide memoire" to clinicians in relation to the public health management of patients recently diagnosed with acute hepatitis B.

☐ **Patient informed of diagnosis by diagnosing clinician.**

☐ **Patient given verbal and written information** in relation to diagnosis and implications of hepatitis B. Explanation given as to the need for referral to specialist services. Explanation given of the need for contact tracing and precautions needed to minimise the risk of infection to others (Appendix 7).

☐ **Enhanced surveillance form completed and entered on CIDR** (and enhanced questionnaire in the setting of cluster/outbreak, sent to HPSC)

☐ **Management of household/sexual contacts**

Contacts given specific information about hepatitis B and referred for screening, immunisation and HBIG as clinically appropriate.

☐ **Household/sexual contacts advised as to how they can reduce their risk of acquiring hepatitis B.**

Provide close contact with the leaflets 'Someone you know has hepatitis B' and 'Hepatitis B vaccine what you need to know'. Translated leaflets are available here

☐ **Communicate with other relevant health professionals as necessary with the case's consent.**

General Practitioner.

Relevant consultants/clinics involved in the patient's healthcare.

☐ **Exclusion**

Index cases who develop symptoms of acute hepatitis B will be too ill to be at school/work. Cases will be given specific advice by their doctor about when they are well enough to return.

☐ **Documentation.**

Document decisions and actions taken, advice to patients and consent etc

Appendix 7: Preventing onward transmission checklist: Advice for patients on precautions needed to minimize the risk of infection to others while infectious.

	Tick here
Advised of the need for screening and immunisation of contacts.	
Advised to discuss the infection with any sexual partners. In cases of suspected/confirmed acute hepatitis B infection, advise the patient that it is safer not to have sex. The treating clinician will advise the patient when they are no longer infectious. If the patient does decide to have sex, advise them to use condoms for all sexual activities including oral sex, not to share sex toys, and not to engage in group sex. Advise them to use condoms until partners have been fully vaccinated and are known to have responded adequately to the vaccine (i.e. are immune).	
No sharing of razors, toothbrushes, or towels with others.	
No sharing of needles, tooters or other drug paraphernalia with others.	
Do not donate blood or other bodily fluids (e.g. sperm)	
Counsel about the risk of vertical transmission	
Dentist /doctor should always be advised	
Clean and cover cuts, scratches, and open wounds with a waterproof plaster	
Blood and body fluids should always be considered potentially infectious. If there are any blood injuries or spillages, wash hands thoroughly with soap and water after coming into contact with blood, body fluids, or contaminated surfaces. Patients should clean spills of blood/body fluid themselves -clean the area and follow with bleach solution (one part household bleach to 10 parts water)	

Handling clothing contaminated with blood: If contamination is not excessive, all potentially contaminated linen should be washed at the highest possible temperature recommended for that particular fabric. The combination of temperature (when more than 40^{o}C), detergent action and dilution effect during the wash and rinse steps, will contribute to the process of soil removal and disinfection for the washed item. **https://www.hse.gov.uk/biosafety/blood-borne-viruses/laundry-treatments.htm**	

Appendix 8: Letter to send to close contact's GP (during an outbreak)

PRIVATE and CONFIDENTIAL

Date: DD/MM/YYYY

Re: NAME, DOB and ADDRESS of close contact

To: GP

Dear Dr _____

The above-named patient of your practice has been identified as a household/sexual contact of a case of hepatitis B by the Department of Public Health.

They have been advised to attend their GP without delay for the following:

1) Serology to determine if they have hepatitis B or immunity to hepatitis B. The following blood tests are most relevant:
   Hepatitis B Surface Antigen (HBsAg), Hepatitis B Surface Antibody (Anti-HBs) and Hepatitis B Core Antibody (Anti-HBC)

2) An accelerated hepatitis B vaccination schedule (i.e. 0, 1, 2 and 12 months). The first dose should be given at the same time as serology.

The first hepatitis B vaccination should be given at the same visit as serology taken and can be discontinued if the blood tests indicate previous exposure to hepatitis B e.g. resolved infection. Vaccines can be ordered for free for close contacts via the cold chain using an outbreak code (email udd@hse.ie). Reimbursement for administration of hepatitis B vaccinations during an outbreak is available via the PCRS browser.

If you are unable to provide vaccination and serology for your patient please contact the Department of Public Health at the number / email address above.

For more information on hepatitis B: https://www.hpsc.ie/a-z/hepatitis/hepatitisb/

For more information on hepatitis B vaccination see chapter 9 of the NIAC guidance: https://www.rcpi.ie/Healthcare-Leadership/NIAC/Immunisation-Guidelines-for-Ireland

Yours sincerely,

Appendix 9: Letter to send to close contacts

PRIVATE and CONFIDENTIAL

Date: DD/MM/YYY

To:

Dear NAME

Thank you for speaking to me/the department of Public Health today.

As discussed, you have been identified as a close contact of a case of hepatitis B.

Hepatitis B is a virus that affects the liver. It can be passed from person to person by coming into contact with blood or bodily fluids, especially among people in close contact such as household or sexual contacts. In most people the virus clears up within 6 months and they become immune. But some people (about one in ten of those who get hepatitis B as an adult) remain infected and of these, about 1 in 4, go on to develop cirrhosis or cancer of the liver over a period of years. Follow up is important to detect early changes and treat when necessary.

Please take this letter to your GP to discuss hepatitis B blood tests and vaccination. A blood test can diagnose if a person has hepatitis B or is immune to hepatitis B. If you are diagnosed with hepatitis B, you will be referred to a specialist and treatment may be advised.

You will be offered the first vaccine on your first visit to the GP. If you are not immune, you will require three further vaccine doses.

Enclosed are two information leaflets for your information, on hepatitis B and on hepatitis B vaccination.

Yours sincerely,

_____

For further information see: https://www2.hse.ie/conditions/hepatitis/ or https://www.hpsc.ie/az/hepatitis/hepatitisb/factsheetsleaflets

Appendix 10: Letter for residents of multi-occupancy households

NAME
ADDRESS

PRIVATE and CONFIDENTIAL

dd.mm.yy

Re: Public Health Case

Dear NAME (if known),

You may have been exposed to an infectious disease called hepatitis B, as you have been identified as a contact of a case by the Department of Public Health.

While we consider the risk of hepatitis B to be low, we recommend that you attend your general practitioner (GP) for the following:

1. Serology (blood test) to determine if you have hepatitis B or immunity to hepatitis B.
2. Hepatitis B vaccination if there is no evidence of immunity.
    - Vaccination can be acquired free of charge from your GP. The first dose should be given at the same visit as serology (blood test) and three further doses will be required if you have no immunity to hepatitis B.
    - Enclosed are two information leaflets for your information, on hepatitis B and on hepatitis B vaccination.

If you have any questions, or if you do not have a GP, please contact the Department of Public Health and we can discuss options for testing and vaccination.

Kind Regards

Dr NAME

Doctor in Public Health Medicine,

Department of Public Health

CONTACT NUMBER

For further information see: https://www2.hse.ie/conditions/hepatitis/ or https://www.hpsc.ie/az/hepatitis/hepatitisb/factsheetsleaflets/

Appendix 11: Training and other materials to support implementation of this SOP.

Training

HSE courses

- Introduction to Children First see Children First Training - HSE.ie
- The fundamentals of GDPR at Fundamentals of GDPR training - HSE Staff
- National Social Inclusion HSE training on working with interpreters at Translation & Interpreting Company - HSE.ie

An online training module on sexual health history taking is currently being developed by the Sexual Health and Crisis Pregnancy Programme. When available, a link to this resource will be added to this list.

Responsible, accountable, consulted, and informed (RACI) matrix

Task	Responsible	Consulted/informed
Notification is allocated		
Determine if acute or chronic		
Confirm that the case has not already been notified in this Public Health		
Contact the clinician who requested the Hepatitis B serology test		
Document details of investigation, advice given and actions taken		

Advice re preventing onward transmission advice		
Public Health Risk assessment (PHRA) of congregate settings requiring interview		
Interview of individual cases		

End users' signature sheet

- I have read, understand and agree to adhere to the following SOP

Title of Policy, Procedure, Protocol or Guideline

- I have read, understand and agree to adhere to the underlying guidance for this SOP
- I have watched and understand the current online departmental training session

Name	Reg number	Electronic Signature	Area of Work	Date

< include additional departmental resources here>

Appendix 12 Monitoring, Audit and Evaluation

This standard operating procedure will be reviewed and updated in 3 years, or earlier if required.

For information, see audit tool kindly provided by HSE West Northwest. Can be used and/or adapted for local circumstances.

Audit criteria	**n/a**	**Done**	**Substantially done**	**Not done or partially**
Patient informed of diagnosis Note this should be done by diagnosing clinician.				
Confirm that case has been referred to the appropriate specialist services Note this should be done by diagnosing clinician.				
Patient given verbal advice **i**n relation to diagnosis and implications of hepatitis B				
Patient given written information in relation to diagnosis and implications of hepatitis B where appropriate				
ESF completed				
ESF entered onto CIDR				
Patient advised of the precautions needed to minimize the risk of infection to others while infectious. Interview checklist completed.				
Consent obtained and documented in relation to disclosure or non-disclosure of case identity to contacts				

Household contacts identified				
Sexual contacts identified				
Screening arranged for household contacts				
Appropriate written or verbal advice given to household contacts				
Vaccination arranged for household contacts				
Screening arranged for sexual contacts				
Vaccination arranged for sexual contacts				
All contacts suitable for HBIG identified and offered HBIG				
Consent obtained and documented to speak to relevant health professionals				

In addition, the proportion of acute cases where compliance with the content of the "Preventing onward transmission checklist" has been documented could be audited on an annual basis.