

# Hepatitis D

Infection with hepatitis D virus (HDV) causes inflammation of the liver. Hepatitis D virus is also known as “delta hepatitis” and is considered the most severe form of viral hepatitis (hepatitis caused by a virus) in humans.

Hepatitis D only occurs in people who have hepatitis B. This is because hepatitis D virus is a defective (incomplete) virus and requires hepatitis B virus to survive and multiply. Hepatitis D is uncommon in Australia.



**Hepatitis D is a notifiable condition<sup>1</sup>**

## How hepatitis D is spread

Hepatitis D is spread when infectious body fluids (blood, saliva, semen and vaginal fluid) come into contact with body tissues beneath the skin (for example, through needle puncture or broken skin) or mucous membranes (the thin moist lining of many parts of the body such as the mouth, throat and genitals). In Australia most infections are associated with:

- > immigration from a country where hepatitis D is relatively common
- > sharing injecting equipment (for example needles or syringes)
- > mother-to-baby transmission of hepatitis D virus at or around the time of birth can occur, although this is uncommon.

## Signs and symptoms

Symptoms are similar to those of hepatitis B and may include:

- > fever
- > loss of appetite
- > nausea and vomiting
- > abdominal pain (especially in the right upper abdomen)
- > yellow skin and eyes (jaundice) (see image)
- > dark urine and pale faeces
- > muscle and joint pain
- > rash.



*Image Courtesy Public Health Image Library (PHIL), Department of Health and Human Services, Centers for Disease Control and Prevention (CDC-USA) CDC, Dr. Thomas F. Sellers / Emory University*

## Acute infection

Sometimes people can become infected with both hepatitis B and hepatitis D at the same time (co-infection). While most people with co-infection will get rid of both viruses on their own, there is a higher risk (2 to 20%) of developing fulminant (overwhelming) hepatitis (acute liver failure).

When someone with hepatitis B virus later becomes infected with hepatitis D virus (superinfection) acute hepatitis D develops.

## Chronic infection

Most people with superinfection develop chronic hepatitis D infection with few, if any, symptoms initially, but are capable of spreading hepatitis D virus to others.

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Most people with chronic hepatitis D (70 to 80%) develop cirrhosis (scarring of the liver). About one quarter of people with cirrhosis due to chronic hepatitis D infection will die of liver failure. People with cirrhosis are also at increased risk of developing liver cancer.

## Diagnosis

The diagnosis is based on signs and symptoms and confirmed with a blood test and/or PCR (polymerase chain reaction) test in a pathology laboratory.

Positive serology indicates previous exposure to hepatitis D virus while PCR testing is used to confirm the presence of the virus.

## Incubation period

*(time between becoming infected and developing symptoms)*

Not known precisely but thought to be 2 to 8 weeks.

## Infectious period

*(time during which an infected person can infect others)*

All people with hepatitis D are infectious.

## Treatment

There is currently no specific treatment for hepatitis D infection. Antivirals used to treat hepatitis B have little effect on hepatitis D. Long term follow up by a liver specialist is recommended.

## Prevention

- > Exclusion of people with hepatitis D from childcare, preschool, school and work is not necessary.
- > Hepatitis B vaccination will prevent infection with hepatitis D. Hepatitis B vaccination is recommended for infants and those at a higher risk of acquiring hepatitis B infection and/or at higher risk of severe infection. Vaccination for hepatitis B, when given to newborn infants, is effective in preventing hepatitis D (even if the mother has hepatitis D).
- > Any open sores, cuts or abrasions should be covered with waterproof dressings
- > Practice safer sex – use condoms consistently and correctly.
- > Injecting drug users should never share injecting equipment.
- > If required to handle blood or body fluids, the use of standard precautions will reduce the risk of spreading hepatitis D virus.
- > Infected health care workers must comply with the requirements of their professional boards.

## Useful links

SA Health website – [www.sahealth.sa.gov.au](http://www.sahealth.sa.gov.au)

> Handling blood and other body substances

> Hepatitis B

> Hepatitis A, B, C, D and E summary

Hepatitis SA website – [www.hepatitissa.asn.au](http://www.hepatitissa.asn.au)

1 In South Australia the law requires doctors and laboratories to report some infections or diseases to SA Health. These infections or diseases are commonly referred to as 'notifiable conditions'.

## You've Got What? 5th Edition

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The SA Health Disclaimer for this resource is located at [www.sahealth.sa.gov.au/youvegotwhat](http://www.sahealth.sa.gov.au/youvegotwhat)



This document has been reviewed and endorsed by SQCAG\* for consumers and the community – November 2017.

Public-I3-A1

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