

Hep C factsheets

Australian snapshot



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- around 4% involve other routes such as unsterile tattooing and body piercing.

There have been over 225,000 notifications of hep C positive diagnoses between 1990 and 2005. Men comprise 65% of the diagnoses, women 35%. Around 65% of people diagnosed are in the age range 20-39 years.

Out of all those in Australia estimated to have hep C, a considerable number are yet to be diagnosed and are unaware of their condition.

How is hep C transmitted?

Hep C is transmitted via blood-to-blood contact. Around 82% of existing infections occurred as a result of people sharing equipment used to inject illicit drugs.

Around 11% of existing cases are believed to involve immigrants who contracted hep C in their countries of origin through unsterile medical procedures or other means.

Around 7% of current cases involved people having blood transfusions or blood products prior to 1990 - when screening by Australian blood banks was introduced, or through other blood contact risk behaviours: unsterile tattooing and body piercing, transmission from mother to baby, unsterile skin penetration equipment including barbers' clippers and razors, needle stick injuries, possible blood-to-blood contact during sex and possible household transmission through shared toothbrushes or razors.

Hep C is not transmitted through sharing crockery, cutlery, toilet or laundry facilities. For hep C to be transmitted, the blood of a person who has hep C needs to get into the bloodstream of another person.

Prisoners are at particular risk of new infection or reinfection with hep C because rates of prevalence (existing infections) and incidence (new infections) within corrective services establishments are vastly higher than in the broader community.

How many people in Australia have hep C?

At the end of 2007, there were an estimated 280,000 people in Australia who had contracted hep C. Of these, about 210,000 are estimated to have chronic hep C infection.

An estimated 9,700 new hep C infections occur annually:

- around 89% of these new infections occur through blood-to-blood contact between people sharing equipment used for injecting illicit drugs
- around 7% occur among immigrants to Australia (through medical procedures and other transmission routes in their countries of origin), and

What does hep C do?

The hep C virus causes inflammation of the liver. Usually, a person's immune response does not initially clear hep C nor does it protect against reinfection.

There is no vaccine to protect against hep C infection.

What's the likely outcome of infection?

Very few people will show any outward signs of illness soon after infection, as acute symptoms are rare. Unless they have a hep C antibody blood test, most people will not know for many years that they have hep C.

Around 75% of people who contract hep C will develop chronic (long term) infection.

Of 100 people with chronic hep C infection who remain untreated and after 20 years of infection..

- 45 would not develop serious liver damage
- 47 would develop progressive liver damage which may be only mild or moderate
- 7 would develop cirrhosis of the liver
- 1 would develop liver cancer or liver failure

If the same group of 100 people were followed up for a further 20 years (40 years of infection)..

- 45 would still have not developed serious liver damage
- 30 would have remained as having mild to moderate liver damage
- 20 would have developed cirrhosis of the liver
- 5 would have developed liver failure or liver cancer

Hep C symptoms and their effects

Typical symptoms include debilitating fatigue, nausea and abdominal pain. People with significant illness are often unable to carry out ordinary, everyday functions, including employment and home duties.

Other common symptoms include joint and muscle pain, general malaise, weight loss, hormonal irregularities in women, flu-like symptoms and depression.

Hep C infection is the most common reason for liver transplantation in Australia. Because hep C circulates in the bloodstream, the new liver will become infected.

History and treatments

Earliest evidence of hep C comes from blood samples stored in the 1940s. The virus has been transmitting widely via blood-to-blood contact since the early 1970s yet was only identified as a distinct virus in 1989. Prior to that it was known as non-A, non-B hepatitis.

Current treatment involves combination therapy (pegylated interferon injections and ribavirin tablets). Response is related to a person's hep C genotype (subtype). Hep C genotypes 2 and 3 have been shown to have a higher sustained response rate (approx 80%) than genotype 1 (approx 50%).

A sustained response is where no presence of the virus can be detected immediately after therapy, and also at six months after treatment ceases. Recent research shows that 99% of people maintain their viral clearance for at least four years and it is believed their response will last indefinitely.

Many people with hep C report benefits received from complementary or alternative therapies. Proven efficacy is hard to establish, given limited research in the area. However one Australian scientific trial of Chinese herbal therapies showed some optimistic results and evidenced the need for further research.

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Personal and social costs

Because of the relatively recent identification of hep C, health care worker knowledge, including that of general practitioners, can be limited. Levels of discrimination and stigmatisation, from both health care workers and the general public, are high. Ignorance, and misplaced fear of infection, are potential causes for this discrimination. The fact that the risk behaviour that most commonly leads to hep C infection - injecting drug use - is an illegal behaviour, adds another level of stigmatisation for all those affected.

On initial testing, during ongoing monitoring and during treatment, levels of support for people affected by hep C are inadequate. Personal costs, through inability to work, relationship breakdown or through discrimination, stigmatisation and vilification are great.

A government-funded inquiry into hep C-related discrimination was undertaken by the Anti-Discrimination Board of NSW in 2001. Its report, *C-CHANGE*, notes that hepatitis C is a highly stigmatised condition and that discrimination against people with hep C is rife, particularly in the health care setting.

Economic costs of infection

Economic studies estimate both the direct and indirect costs of hep C. Direct costs are those associated with action taken to tackle specific aspects of the disease, and include research, prevention, diagnosis, treatment and palliation. Indirect costs are related to loss of workplace production resulting from premature death and ill health.

Looking at lifetime costs (direct and indirect) per person infected with hep C is alarming. Combining the lifetime average treatment cost per case (being \$13,000) and the indirect costs per case (being \$33,600), gives a conservatively estimated costs of hep C infection of \$46,600 per person.

Using this figure, the 197,000 people (to end of 2005) already living with hep C represent a \$9.2 billion cost to our health care system.

Additionally, each year, the estimated 9,700 new cases of hep C occurring in Australia would annually add \$452 million in lifetime costs to our health budget.

Needle and syringe programs (NSPs) have been shown to be effective in reducing hep C prevalence rates in people new to drug injecting. It has been estimated that NSPs prevented 21,000 hep C infections (from 1991 to 2000). In preventing these cases, NSP has saved an estimated \$783 million in lifetime hep C treatment costs.

Government responses

In November 1998 the Standing Committee on Social Issues tabled its report *Hepatitis C: The Neglected Epidemic* in the NSW Legislative Council, following its public inquiry. It found unanimously that hep C is a disease that was largely neglected by decision makers, health planners, the media, health care workers and the community in general. It found that there was no overarching policy to guide and direct the control, treatment and prevention of hep C. It found that the impact of hep C is enormous. The social impact of the disease is "profound and touches every facet of life."

The Federal government has developed a formal hep C strategy (most recently, *2005/2008*) and funds one-off and ongoing research, education and prevention projects through various Commonwealth/State funding mechanisms.

The NSW State government has also developed a formal hep C strategy (most recently, *2007/2009*) and an NSP policy (*2006*). It is currently reviewing hep C care and treatment services (*2008*). These initiatives have been put in place to better guide the state-wide delivery of services that reduce transmissions and reduce the negative social and economic impact caused by hep C infection.

Key challenges include ensuring that sufficient ongoing funding from Federal and State and Territory governments is applied to meet identified needs, and that evidence based approaches to drug policy and law reform are considered in order to make a significant impact on reducing hep C transmission.

Under our current national harm minimisation drug policy, only 3% of government expenditure on drugs is for harm reduction programs, and the vast majority is spent on law enforcement and customs (56%), prevention education (23%) and drug treatment/rehab (17%).

Also see

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- This factsheet was developed by the Hepatitis C Council of NSW.