

An Australian HCV snapshot

HEPATITIS C FACTSHEET

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How many people in Australia have HCV?

More than 210,000 people in Australia are estimated to have been exposed to HCV infection. Almost half, over 90,000 people, live in NSW.

Around 11,000 new hepatitis C virus (HCV) infections are estimated to be occurring across the nation each year - that's around 30 new infections each day - and again, almost half of these are in NSW. Around 90% of these new infections occur through blood-to-blood contact between people sharing equipment used for injecting illicit drugs.

There have been over 140,000 notifications of HCV positive diagnoses between 1990 and 1999. To December 2000, there have been almost 64,000 HCV positive notifications in NSW alone, more than 40% of the national total. Thus, out of all those in Australia estimated to have HCV, around one-third have yet to be diagnosed. Men comprise 62% of the diagnoses, women 36%. Almost 60% of people diagnosed are in the age range 30-49, and 29% are aged 20-29. An increasing number of people aged 15-19 are being diagnosed.

How is hepatitis C transmitted?

HCV is transmitted via blood-to-blood contact. Around 80% of existing infections occurred as a result of people sharing equipment used to inject illicit drugs. It is estimated that half of those people no longer inject drugs.

Up to 10% contracted HCV through blood transfusions or blood products prior to the start of screening by Australian blood banks in 1990.

The remaining 10% involved other blood contact risk behaviours: unsterile tattooing and body piercing, transmission from mother to baby, unsterile medical procedures (mainly in people, now Australians, infected in countries abroad), unsterile skin penetration equipment including barbers' clippers and razors, needle stick injuries, possible sexual transmission and possible household transmission through shared toothbrushes or razors. A few people have no identifiable risk history.

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

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

What does HCV do?

The hepatitis C virus causes inflammation of the liver. Usually, a person's immune response does not initially clear HCV nor does it protect against *reinfection* (acquiring another strain of the virus).

There is no vaccine to protect against HCV infection, nor is one likely to be developed in the foreseeable future.

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 an HCV antibody blood test, most people will not know for many years that they have HCV infection.

Around 75% of people who get exposed to HCV will develop chronic (long term) infection.

Out of 100 people with chronic infection, 25 may never become ill, and around 75 develop signs of illness, usually after 10-15 years. Although this illness is usually mild to moderate, in some cases it can be very serious and debilitating.

Of the 75 people who develop actual illness, 15 may develop cirrhosis (scarring of the liver tissue) after 20-40 years following infection. Of these 15 people, around 5 may develop liver failure or liver cancer after a further 5-10 years. It is in these relatively small number of cases that hepatitis C is a life threatening condition.

Symptoms and their effects

Typical chronic symptoms include debilitating fatigue, nausea and abdominal pain. People with significant symptomatic 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.

HCV infection is now the most common reason for liver transplantation in Australia. The new liver will, however, always become infected, with liver damage progressing at a greatly increased rate.

History and treatments

Earliest evidence of HCV comes from blood samples stored in the 1940s. It has been transmitting widely via blood-to-blood contact since the early 1970s, yet was identified as a distinct virus only in 1989. Prior to that it was known as non-A, non-B hepatitis. Its molecular structure is extremely complex.

Treatments are limited and expensive. Interferon monotherapy is of very limited success and because of its toxicity as a chemotherapy, its side effects are significant and potentially debilitating.

A new pharmaceutical treatment, interferon used in combination with ribavirin, has received funding approval in Australia, and is far more successful than interferon monotherapy. There are additional side effects caused by ribavirin.

Many people with HCV 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, currently being carried out in NSW and W A.

Personal and social costs

Because of hepatitis C's relatively recent identification, health care worker knowledge of HCV, including that of general practitioners, is 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 HCV 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 hepatitis C are inadequate. Personal costs, through inability to work, relationship breakdown or through discrimination, stigmatisation and vilification are great.

An Inquiry into hepatitis C-related discrimination is being undertaken by the Anti-Discrimination Board of NSW in 2001.

Economic costs of infection

Recent studies estimate both the direct and indirect costs of hepatitis 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.

In the 1996/97 year, conservatively calculated direct costs were \$75 million, and similarly understated indirect costs were \$32.5 million, making a total of almost \$110 million. (see note 1, far right).

Put another way, and based on lifetime direct and indirect costs of a cohort of 1,000 newly infected people totalling some \$46.6 million, the lifetime average treatment cost per case of hepatitis C is at least \$13,000. Add to this indirect costs of \$33,600, and the conservatively estimated costs of HCV infection amounts to just under \$50,000 per person.

Given that there are around 11,000 new transmissions of HCV occurring in Australia each year, with 200,000 people (at 1997) already living with hepatitis C, the estimated additional financial burden of \$550 million lifetime costs, added each year to the \$10 billion already committed, gives great cause for alarm in financial terms alone.

Needle and syringe programs have been shown to be effective in reducing HCV prevalence rates in people new to drug injecting. With estimates of 2,000 HCV infections having been prevented each year by existing needle and syringe programs and education efforts, saving at least \$12 million in health costs annually.

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 hepatitis C is a disease that is 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 HCV. It found that the impact of hepatitis C is enormous. The social impact of the disease is "profound and touches every facet of life."

The Federal and NSW governments developed hepatitis C strategies in 2000 and fund one-off and ongoing research, education and prevention projects. NSW Health has recently undertaken a review of care and treatment needs, and planning structures are in place to reduce transmissions and reduce the negative social and economic impact caused by HCV 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 HCV transmission reduction.

References

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Notes

1) Costs shown are undiscounted, and exclude personal costs of people with hepatitis C, state or territory reference laboratory costs, government administration costs, illness related work absenteeism not associated with healthcare and all non market activity, such as housekeeping.