

# RETURN ON INVESTMENT: NEEDLE AND SYRINGE PROGRAMS IN AUSTRALIA

Between 2000 and 2009 the Australian Government spent \$243 million on Needle and Syringe Programs (NSPs). This investment:

- Prevented **32,050 cases of HIV**;
- Prevented **96,667 cases of hepatitis C virus**;
- **Saved \$1.28 billion** in healthcare costs.

## BACKGROUND

Sharing of syringes or other injecting equipment by injecting drug users (IDUs) causes the spread of blood-borne viruses such as HIV and hepatitis C virus (HCV). Needle and syringe programs (NSPs), which have been in operation in Australia since 1987, reduce the spread of these infections by providing clean injecting equipment.

NSPs also provide education, referral to drug treatment and medical care, and legal and social services to IDUs.



## THE RETURN ON INVESTMENT 2 REPORT

*Return on Investment 2: Evaluating the Cost-Effectiveness of Needle and Syringe Programs in Australia* is a report by the National Centre in HIV Epidemiology and Clinical Research at the University of New South Wales.

It examines the health and financial benefits associated with NSPs, and shows that a large number of HIV and HCV infections are prevented, and that NSPs are very cost-effective.

The analysis uses a mathematical epidemic model informed by extensive data on biology, disease progression, epidemiology, IDU behavior, and NSP program functions. Its economic analysis used these model results and detailed data on healthcare costs.

## RESULTS ABOUT NSPs DURING 2000-2009

### *NSPs prevent serious and significant spread of infections*

The Australian government's spending of \$243m between 2000-2009 directly averted **32,050 new HIV infections and 96,667 new HCV infections**.

## ***NSPs are highly cost effective***

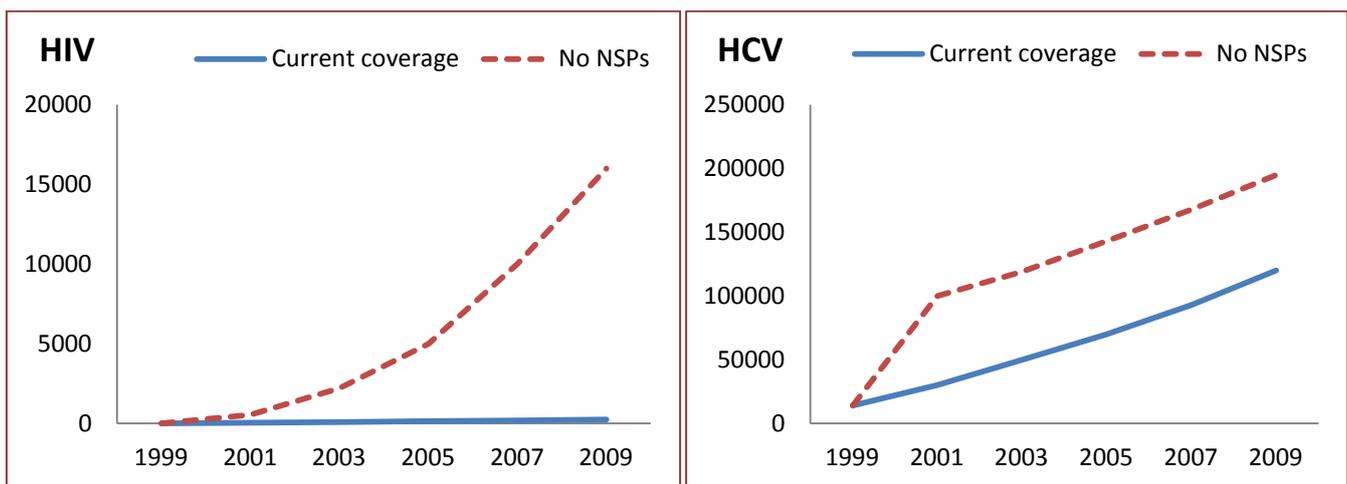
The report found that **for every \$1 invested in NSPs, more than \$4 was returned** in healthcare cost-savings in the short-term in addition to the initial investment.

This corresponds to **savings of \$1.28 billion in healthcare costs** for the investment of \$243m.

These figures do not include all potential savings. If productivity gains and patient/carer costs are included, then for every \$1 invested in NSPs, \$27 is returned in cost savings. Even greater financial returns are also yielded over the long-term due to the infections averted. Total savings are estimated at over \$8 billion.

## **RESULTS ABOUT FUTURE NSPs**

Maintaining current levels of NSP funding will enable further declines in the incidence of HIV, and limit increases in HCV incidence. The current level of investment will save \$28.71bn by 2079.



**HIV and HCV infections among Australian IDUs with and without NSPs, 2000-2009**

With no NSPs, HIV incidence would continue to expand. HCV incidence would also increase significantly.

Decreasing funding of NSPs will allow increases in both HIV and HCV, with reduced savings, while expansion would have significant public health benefits, especially in preventing HCV infections, and increased savings.

## CONCLUSIONS

The rigorously conducted report Return on Investment 2 provides strong evidence that **NSPs provide substantial health benefits and return healthcare savings greater than their costs.**

There are many other benefits of NSPs, apart from those focused on in this study, including reducing mental health episodes, psychosocial benefits, other support, referral, education and prevention. Thus, the true economic benefits provided by NSPs are likely even greater than the estimates provided here.

### OTHER INFORMATION:

Other research into Needle and Syringe Programs has found that the Programs:

- Do not encourage more drug injecting
- Do not lead to an increase of new injecting drug users
- Do not lead to a transition from non-injecting drug use to injecting drug use
- Do not increase crime or violence
- Do not increase the number of used needles and syringes discarded in public areas
- Can act as an important referral point into drug treatment

Source: Dolan, K. MacDonald, M., Silins, E. & Topp, L. 2005. *Needle and syringe programs: A review of the evidence*. Canberra: Australian Government Department of Health and Ageing.

## *Authors and Organisations*

The report was conducted by a team of investigators at the National Centre in HIV Epidemiology and Clinical Research (now known as the Kirby Institute), at the University of New South Wales, Sydney, Australia. The work was commissioned and funded by the Commonwealth of Australia Department of Health and Ageing.



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The full *Return on Investment 2: Evaluating the cost-effectiveness of needle and syringe programs in Australia* can be downloaded from the Department of Health and Ageing website at:  
<http://www.health.gov.au/internet/main/publishing.nsf/Content/needle-return-2>

Summary paper prepared by the Australian National Council on Drugs' Asia-Pacific Drug Issues Committee: <http://apdic.ancd.org.au/>



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