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An Australian Government Initiative

Hepatitis C in 2017

Part 1: Hepatitis C transmission and testing

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Acknowledgment to Country

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We are committed to supporting reconciliation between Indigenous and non-Indigenous Australian people. In keeping with the spirit of Reconciliation, we acknowledge the Aboriginal and Torres Strait Islander People as the Traditional Owners of the lands. We wish to pay respect to their Elders – past, present and emerging – and acknowledge the important role Aboriginal and Torres Strait Islander people continue to play within our community.

1st March 2016

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Before and After

Before …

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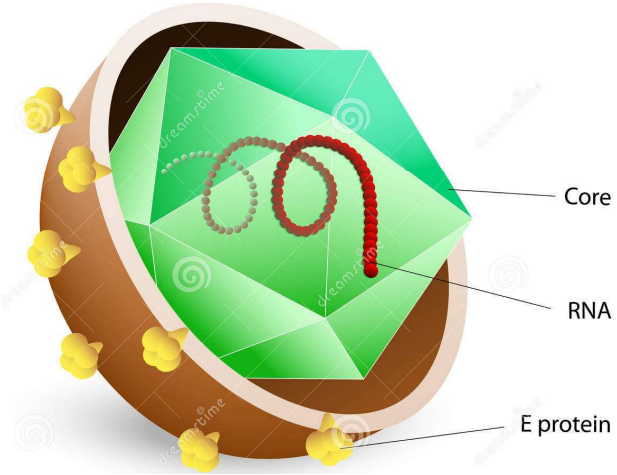

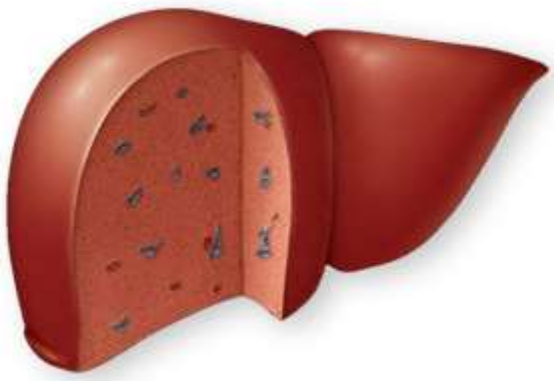

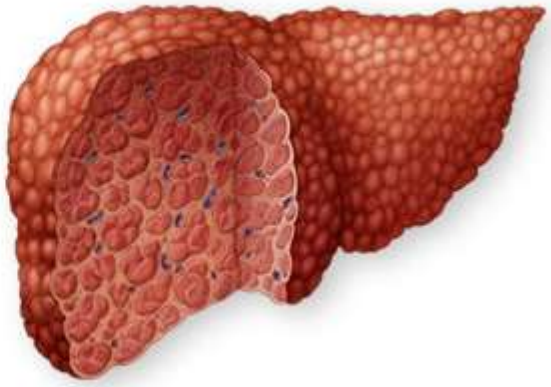

After …

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"..no matter what their condition or how they contracted it…"

After

Hepatitis C in 2016

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- ~ 33,000 people initiated Direct Acting Antiviral (DAA) treatment between March and December 2016
  - Compared to ~2,000-3,000 per year for the last 20 years

Most people treated were already engaged in hepatitis C care

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Hepatitis C in 2017

- The number of people presenting for treatment is slowing down

Poll question

Overview

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- Hepatitis C epidemiology
  - Global and local
- Hepatitis C disease course
- Risk factors for hepatitis C infection
- Hepatitis C cascade of care
- Hepatitis C testing

Learning objectives

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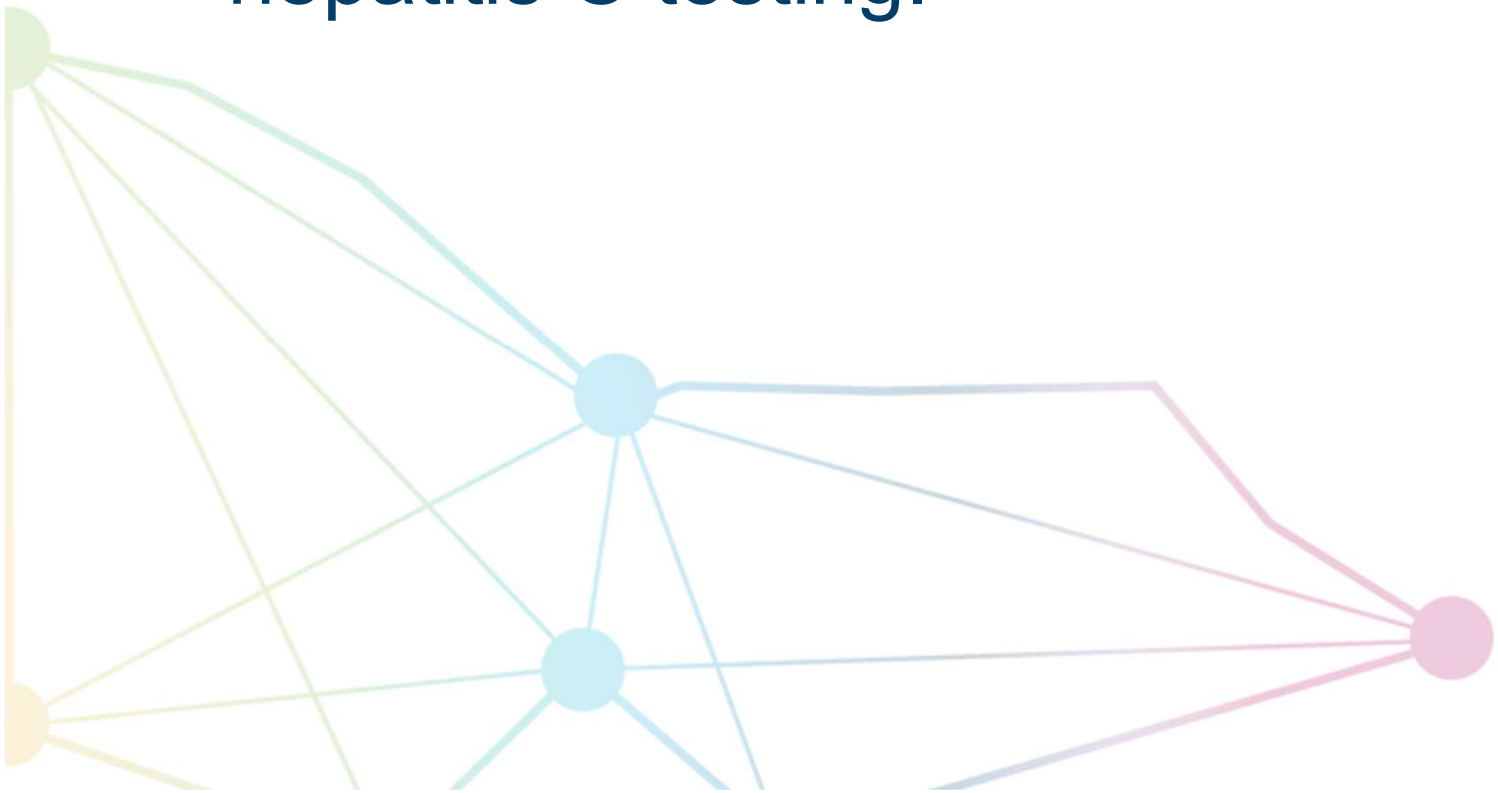
1. Discuss common risk factors for hepatitis C
2. Understand the process involved in hepatitis C testing.



Global hepatitis C epidemiology

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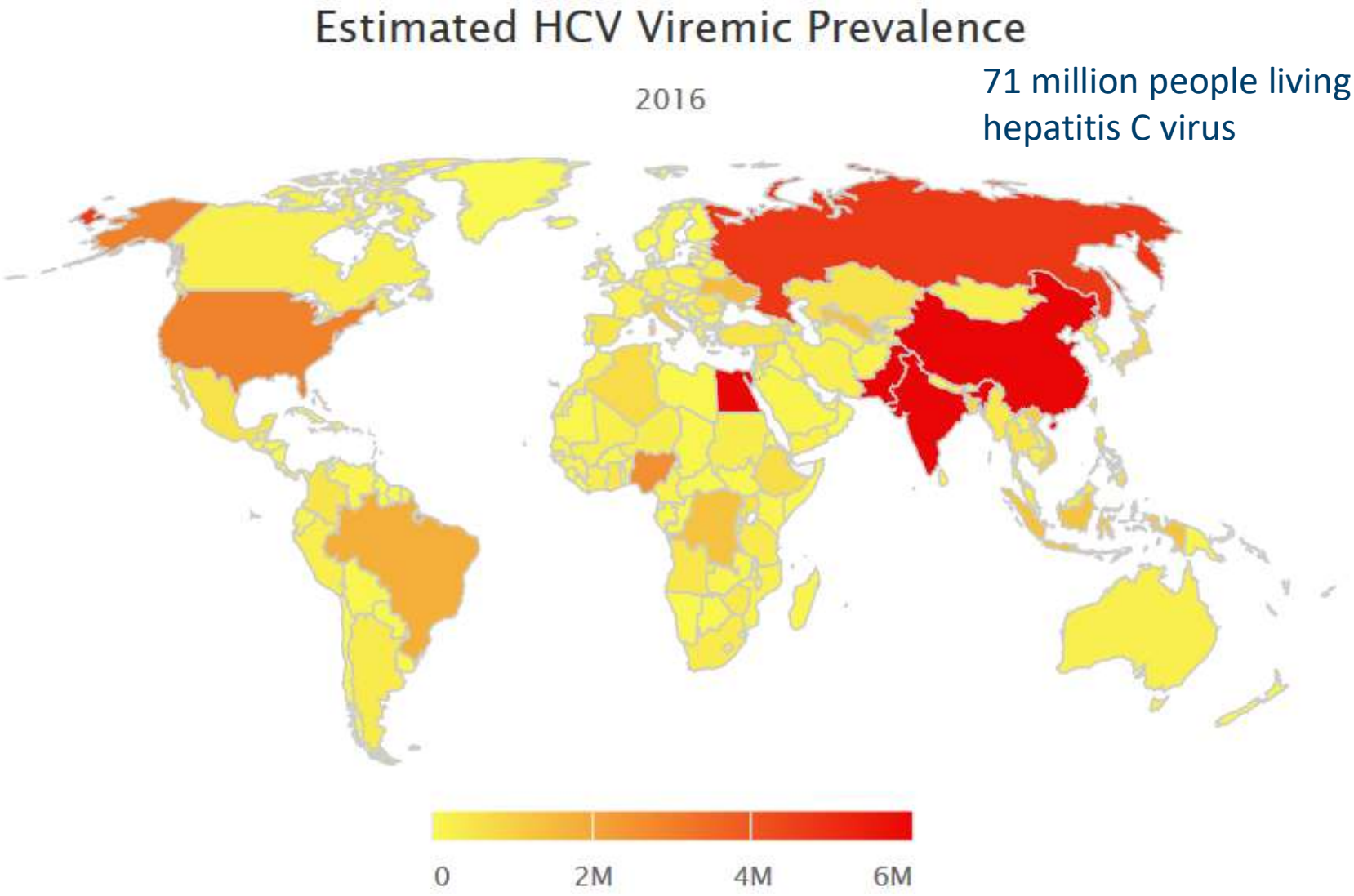

71 million people living with hepatitis C virus

Hepatitis C in Australia

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- ~227,306 people were living with hepatitis C at the end of 2015
  - 29,070 had severe fibrosis
  - 17,149 had hepatitis C-related cirrhosis
  - 818 deaths were attributable to hepatitis C
- 65,000 Victorians living with hepatitis C

Hepatitis C genotypes

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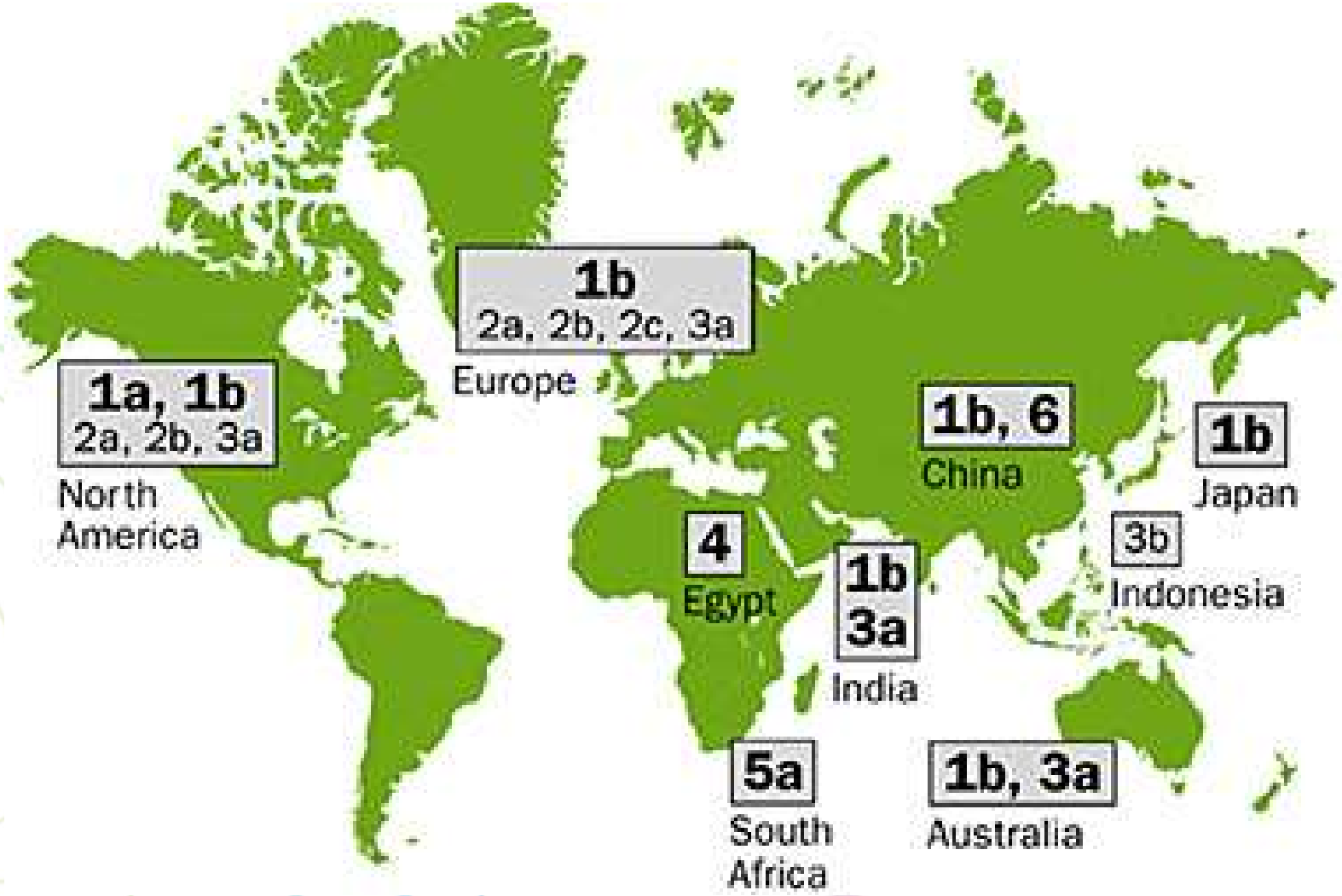

Disease course of hepatitis C

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- 75% of people will develop chronic infection
  - ~20%–30% will develop cirrhosis, after 20–30 years of infection
- Hepatitis C infection can be associated with a range of non-specific symptoms:
  - Fatigue, depression, mood swings and anxiety, liver pain/discomfort, nausea and poor appetite, brain fog, muscle and joint pain.

Disease course of hepatitis C

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- Clinical risk factors for cirrhosis include:
  - male gender
  - older age at infection
  - prolonged duration of hepatitis C (> 20 years)
  - comorbidities including excessive alcohol consumption, diabetes, the metabolic syndrome and coinfection with hepatitis B or HIV

Hepatitis C-related stigma

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- 2016 Victorian Hepatitis C Strategy prioritises reducing hepatitis C-related stigma and discrimination
  - The proportion of people experiencing and reporting hepatitis-C-related stigma and discrimination will be: **0%** by 2030
- Health care settings remain the most likely place where hepatitis C-related discrimination will occur

Risk factors for hepatitis C infection

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Blood

to

blood

Risk factors for hepatitis C infection

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- Sharing of injecting drug use equipment
  - Accounts for an estimated 82% of all infections

- Rates of hepatitis C (anti-HCV+) have remained stable among people who inject drugs, attending needle and syringe programs, at 57% over the last 5 years
- Aboriginal and Torres Strait Islander people are four time more likely to have hepatitis C than non-Indigenous people

Risk factors for hepatitis C infection

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- Recipients of organs, tissues, blood or blood products before February 1990 in Australia
  - Or before mandatory screening of donors and dontations in other countries

Risk factors for hepatitis C infection

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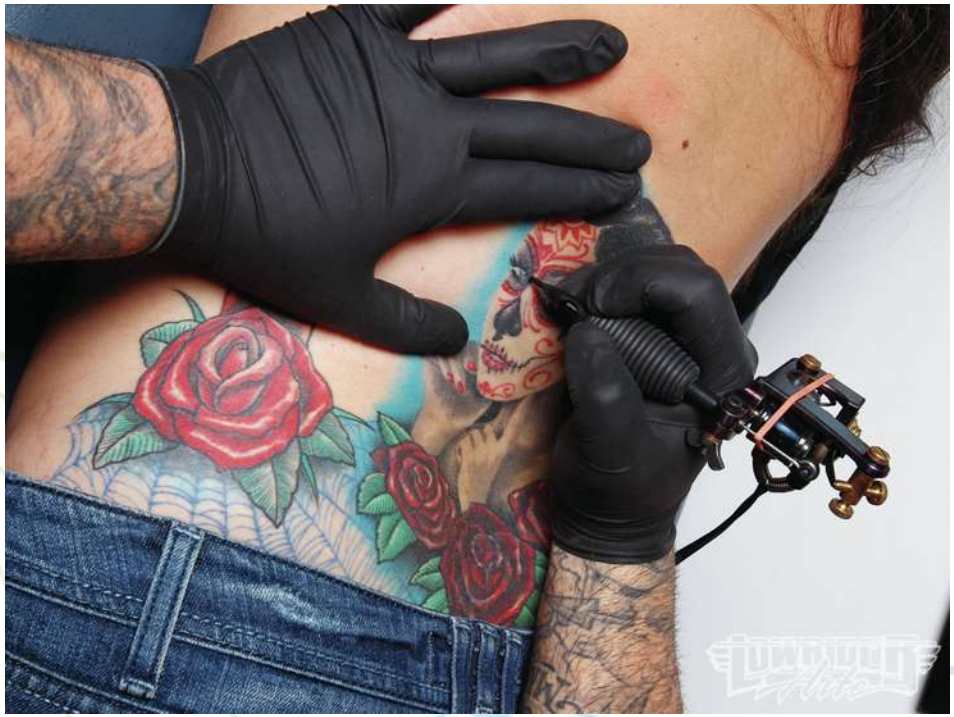

- Unsterile tattooing and body piercing
  - one in five (19%) Australians has one or more tattoos
  - higher % of women with a tattoo (24%) vs men

Risk factors for hepatitis C infection

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- Sexual transmission (blood to blood)
  - High-risk sexual practices that result in bleeding and/or mucosal trauma
    - Concomitant drug use cannot be excluded
- Mother to baby transmission
  - ~ 5% risk of transmission
- Transmission in health care settings
  - Poor infection control
- Sharing personal items e.g. razors and toothbrushes
  - Very low risk

Risk groups for hepatitis C

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- People who inject drugs or who have ever injected drugs
- Sex workers
- People in custodial settings
- People with tattoos or body piercing
- People who received a blood transfusion organ transplant before 1990
- Children born to mothers with hepatitis C
- Sexual partners of a person with hepatitis C
- People infected with HIV or hepatitis B virus
- People with evidence of liver disease (persistently elevated ALT)
- People who have had a needlestick injury
- Migrants from high-prevalence regions (Egypt, Pakistan, Mediterranean and Eastern Europe, Africa and Asia)

Hepatitis C cascade of care

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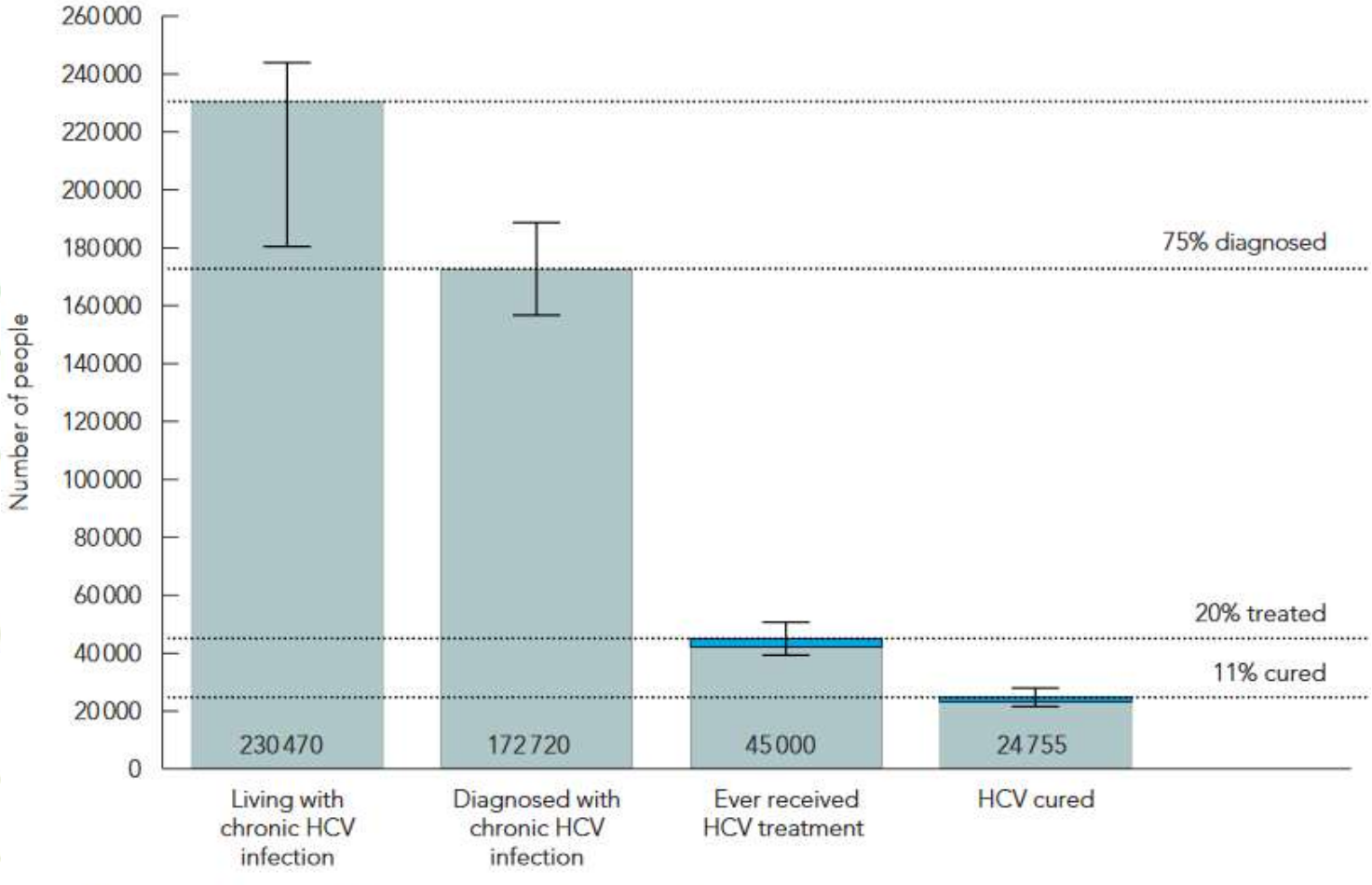
Figure 1. Estimates of the cascade of care for people with chronic hepatitis C virus (HCV) infection in Australia



Source: Hajarizadeh B, et al. *Global Antiviral Journal* 2015; 11 Suppl 3: 85-86.[2]

Hepatitis C testing

- Hepatitis C antibody test
  - Screening test
    - Antibodies are the body's response to a virus
    - May take up to 3 months to develop antibodies
- Polymerase Chain Reaction (PCR)
  - Confirmation of current infection
  - PCR technology used to perform:
    - Virus detection
    - Viral load
    - Genotype

Hepatitis C testing

- Liver function test (LFT)
- Liver fibrosis assessment (presence of cirrhosis influences treatment duration and regimen)
  - Elastography e.g. FibroScan
  - Serum biomarker e.g. APRI (AST to platelet ratio index)

Pre and post test discussion

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- Everybody has the right to confidential, voluntary testing with informed consent and post-test discussion
  - Stigma and discrimination can be significant barriers for people accessing hepatitis C testing
- National Hepatitis C Testing policy
  - http://testingportal.ashm.org.au/hcv

Summary

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- Hepatitis C is a blood borne virus
- Transmission occurs through blood to blood contact
    - Sharing of injecting equipment is the highest risk for infection
- Hepatitis C testing should be offered to anyone with risk factors

Summary

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- There have been significant changes to the treatment of hepatitis C infection in 2016
- Primary health care has a significant role in:
  - Identifying people at risk of infection
  - Offering hepatitis C testing
  - Facilitating access to hepatitis C treatment
- For more information: Hepatitis Victoria

  www.hepvic.org.au or 1800 703 003

References

1. The Kirby Institute. Hepatitis B and C in Australia Annual Surveillance Report Supplement 2016.The Kirby Institute, University of New South Wales Australia, Sydney.

2. Polaris Observatory. Accessed at: www.polarisobservatory.org

3. Hajarizadeh B, Grebely J, McManus H, et al. Chronic hepatitis C burden and treatment uptake in Australia: updated figures at the beginning of a new era [abstract]. HEP DART 2015: Frontiers in Drug Development for Viral Hepatitis. Global Antiviral Journal 2015; 11 Suppl 3: 85-86.

4. National HCV Testing Policy Expert Reference Committee – a joint working party of the BBVSS and MACBBV. National Hepatitis C Testing Policy 2012. Accessed on 17th December 2016: http://testingportal.ashm.org.au/hcv

5. Victorian Government. 2016 Hepatitis C Strategy. Available at https://www.health.vic.gov.au/sexualhealth