HIV Update

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NSW HIV Strategy 2012-2015
A New Era

Goal: To work towards the virtual elimination of HIV transmission in NSW by 2020

Key targets include:

- Reducing the transmission of HIV among gay/MSM by 60% (and by 80% by 2020)
- Decreasing rates of HIV transmission among Aboriginal populations and heterosexual populations by 50%
- Reducing the average time between HIV infection and diagnosis from 4 ½ years to 1 ½ years
- Increase to 90% the proportion of people with HIV who are on antiretroviral treatment, to improve health and to reduce HIV transmission

TREAT EARLY
TEST MORE
ENDING HIV
STAY SAFE
HEALTH.NSW.GOV.AU

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NSW HIV Strategy 2012-2015
A New Era

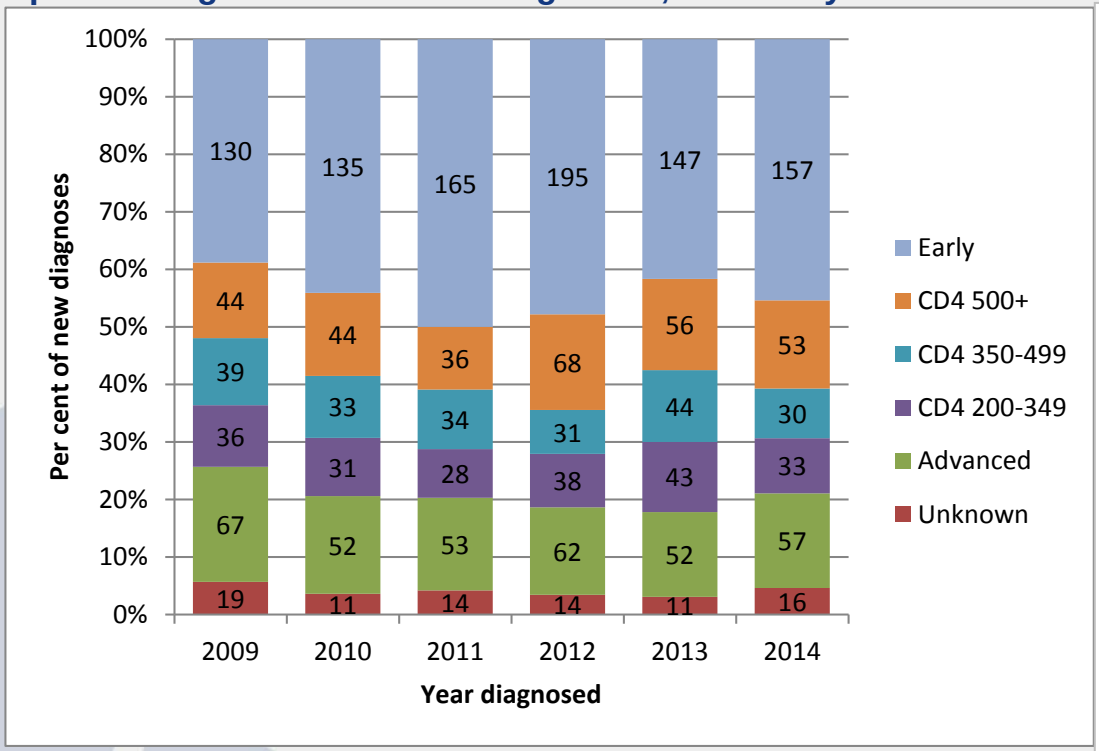
- **Testing**:
  - make it easier to get tested
  - encourage more testing

- **Treatment**:
  - increase uptake and early initiation
  - treatment, care and support in the community

- **Prevention**:
  - safe sex
  - Needle and Syringe Program

NSW HIV notifications

Number and per cent of all NSW residents newly diagnosed with HIV by reported stage of infection at diagnosis[1], 1 January 2009 to 31 December 2014



Stage of infection

Early = Evidence of HIV infection acquired within 12 months of diagnosis

CD4 500+, CD4 350 to 499, CD4 200 to 349 each excludes early and advanced categories

Advanced = CD4 count less than 200 or AIDS defining illness in absence of evidence of 'Early' diagnosis

Data source: NSW HIV/AIDS Database, Health Protection NSW

[1]Evidence of early stage infection was defined as notification of a sero-conversion like illness or negative or indeterminate HIV test within 12 months of diagnosis, irrespective of CD4 or presentation with an AIDS defining illness at diagnosis

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Priority Populations for HIV testing

RISK GROUP	FREQUENCY OF HIV TEST
Men who have sex with men (MSM)	All Annually
MSM with risk behaviours e.g. unprotected sex	3 – 6 monthly
Injecting drug users	Once, then annually if continued use
Contacts (blood or sexual) or someone with HIV (or at risk of HIV)	Once, then annually if ongoing exposure
Anyone diagnosed with an STI, or hepatitis B or C	Once, and with any subsequent infection
Anyone with multiple partners, or recent partner change	Once, then annually if ongoing risk
Anyone reporting risk behaviours in high-prevalence countries	Once, then annually if ongoing risk
Migrants from high-prevalence countries, or partners of such migrants	Once, then annually if ongoing risk
Pregnant women	First antenatal visit each pregnancy
Anyone who received blood products in Australia before 1985	Once
Anyone with features of HIV infection (opportunistic infections, HIV-linked malignancy, conversion symptoms)	Once
Anyone who requests a test or as part of a sexual health "check up"	Once

http://www.health.nsw.gov.au/endinghiv/Documents/hiv-test-table-july-2014.pdf

HIV testing indicator conditions

2011 National HIV Testing Policy V1.1

Adapted from UK National Guidelines for HIV Testing 2008

Clinical indicator diseases for adult HIV infection		
	AIDS-defining conditions	Other conditions where HIV testing should be offered
Respiratory	Tuberculosis Pneumocystis Recurrent bacterial pneumonia	Aspergillosis
Neurology	Cerebral toxoplasmosis Primary cerebral lymphoma Cryptococcal meningitis Progressive multifocal leucoencephalopathy	Aseptic meningitis/encephalitis Cerebral abscess Space occupying lesion of unknown cause Guillain–Barré syndrome Transverse myelitis Peripheral neuropathy Dementia Leucoencephalopathy
Dermatology	Kaposi's sarcoma	Severe or recalcitrant seborrhoeic dermatitis Severe or recalcitrant psoriasis Multidermatomal or recurrent herpes zoster
Gastroenterology	Persistent cryptosporidiosis Oesophageal candidiasis	Oral candidiasis Oral hairy leukoplakia Chronic diarrhoea of unknown cause Weight loss of unknown cause Salmonella, shigella or campylobacter Hepatitis B infection Hepatitis C infection
Oncology	Non-Hodgkin's lymphoma	Anal cancer or anal intraepithelial dysplasia Seminoma Head and neck cancer Hodgkin's lymphoma Castleman's disease
Gynaecology	Cervical cancer	Vaginal intraepithelial neoplasia Cervical intraepithelial neoplasia Grade 2 or above
Haematology		Any unexplained blood dyscrasia including: • thrombocytopenia • neutropenia • lymphopenia
Ophthalmology	Cytomegalovirus retinitis	Infective retinal diseases including herpesviruses and toxoplasma Any unexplained retinopathy
ENT		Lymphadenopathy of unknown cause Chronic parotitis Lymphoepithelial parotid cysts
Other		Mononucleosis-like syndrome (primary HIV infection) Pyrexia of unknown origin Any lymphadenopathy of unknown cause Any sexually transmitted infection

- **Any AIDS defining condition** - e.g. TB, cerebral toxoplasmosis, CMV retinitis, oesophageal candidiasis (in absence of dentures, corticosteroids and antibiotics)
- An HIV test should be offered if an **STI, hepatitis B or hepatitis C is suspected or diagnosed**
- **Multiple other indicator conditions may present to ED for which HIV may be a differential diagnosis** - e.g. chronic diarrhoea, PUO

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HIV Testing Procedures

- Formal pre- and post-test counselling is no longer best practice for HIV testing
- Written specific consent is not a requirement nor recommended practice
- **Informed consent still applies but it is no more onerous than for any other disease**
- A mix of testing modalities are available in NSW including: rapid HIV testing (PoCT) and community site testing, and home-based sampling (DBS) is on the horizon in NSW

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HIV Treatment

- Treatments for HIV have evolved and dramatically changed the approach to clinical HIV management
- Treatment regimens have been simplified with co-formulation of compounds and the side effect profile of many medications have improved considerably
- HIV is now considered a manageable chronic condition requiring lifelong treatment
- AIDS-related mortality has declined, but HIV +ve people are at greater risk of cancers, cardiovascular disease, mental health disorders, and other co-morbidities compared to people without HIV infection.

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Treatment as Prevention

The goal of antiretroviral treatment (ART) is to:

(1) reduce the HIV viral load to prevent disease progression and reduce HIV-associated morbidity and mortality

(2) reduce the risk of HIV transmission

- Risk of HIV transmission is higher when plasma VL is high – e.g. during seroconversion and advanced disease
- Guidelines recommend starting treatment for **all** HIV-infected individuals – *PBS restrictions for threshold CD4 cell count were removed in March 2014*
- ***Initiation of Antiretroviral Therapy in Early Asymptomatic HIV Infection*** The INSIGHT START Study Group, New England Journal of Medicine. 20th June 2015. http://www.nejm.org/doi/pdf/10.1056/NEJMoa1506816

Post-Exposure Prophylaxis (PEP)

- Case-buy-case assessment of risk, harms & benefits

Risk of HIV transmission
= risk per exposure X risk of source being HIV positive

- http://www.ashm.org.au/pep-guidelines
- **PEP should be prescribed as soon as possible after the exposure and within 72 hours**
- Where HIV, STI or other blood borne virus (HBV/HCV) testing is considered, it is essential to establish the timing of potential risk exposure as part of clinical assessment

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Pre-Exposure Prophylaxis (PrEP)

- Increasing access to and uptake of PrEP is a high priority for the NSW HIV response
- PrEP is highly efficacious for high risk MSM
- PrELUDE trial is assessing the 'real world' implementation of PrEP
- Truvada® licensed by FDA (US) for PrEP, but not yet licensed by TGA in Australia for PrEP
- ASHM's guidelines for PrEP: http://arv.ashm.org.au/arv-guidelines/prep-resources-for-clinicians

PrELUDE
The NSW PrEP Demonstration Project

Summary

- *Testing for STI/HBV/HCV? – Think HIV*
- **Approximately 10-20% of people living with HIV in Australia do not know they are infected**
- **HIV is treatable with an excellent prognosis if diagnosed early and treatment started**
- **Treatment helps to prevent transmission**
- **Groups diagnosed late include >50 years, heterosexual people, people from CALD backgrounds**

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