# ...lts not what it used to be!

Keith Fraser
Clinical Nurse Specialist
Infection Management Service

Te Whatu Ora Health New Zealand

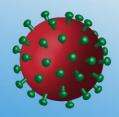


## History

- Originated Central and West Africa 1920's- Chimpanzees
- Likely spread to humans by hunters eating infected chimps
- 1960's Caribbean, 1970s -San Francisco
- 1981 5 men in the USA Pneumocystis Pneumonia- Immune disorder
- 1982 335 males- 136 Deaths
- 1982 AIDS-"Gay Plague" Cases reported in Europe
- 1984 First HIV testing 2 types- HIV-1 , HIV-2
- 1987 First Antiretroviral Medications AZT

# HIV and AIDS: What's the difference?

Years without HIV medicines



### HIV

- HIV is the virus that causes HIV infection.
- HIV damages the immune system by killing CD4 cells.

### AID



 CD4 cells are part of the immune system.

**CD4 Cells** 

- · HIV attacks and kills CD4 cells.
- Loss of CD4 cells makes it hard for the body to fight off infections.



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## **AIDS**

- AIDS is the last stage of HIV infection.
- As HIV infection advances to AIDS, the amount of HIV in the body increases and the number of CD4 cells decreases.
- HIV medicines can stop HIV infection from advancing to AIDS.
- Without HIV medicines, HIV advances to AIDS in about 10 years.



# HIV/AIDS

### HIV is transmitted



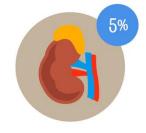
use of non-sterile syringes and tools



pregnancy breastfeeding



blood transfusion



organ transplant



unprotected sex

### HIV is not transmitted



food, drink, utensils



insect bites



kiss, touch



clothes, towels



toilet, shower

# Stage 1 - Primary

- Short, flu-like illness occurs one to six weeks after infection
- no symptoms at all
- Infected person can infect other people

# Stage 2 - Asymptomatic

- Lasts for an average of ten years
- This stage is free from symptoms
- There may be swollen glands
- The level of HIV in the blood drops to very low levels
  - HIV antibodies are detectable in the blood

# Stage 3 - Symptomatic

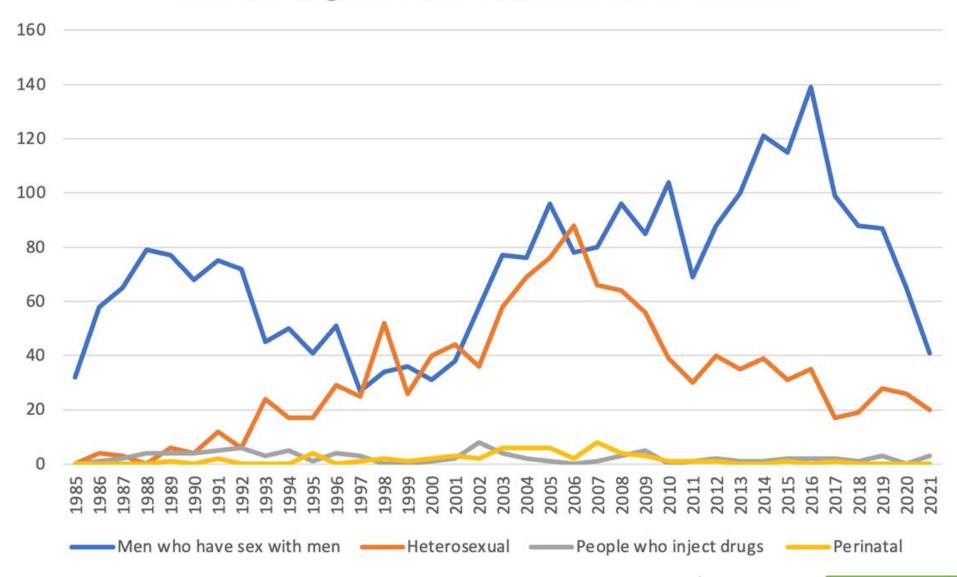
- The symptoms are mild
- The immune system deteriorates
- emergence of opportunistic infections and cancers

# Stage 4 - HIV AIDS

The immune system weakens

 The illnesses become more severe leading to an AIDS diagnosis

#### Local HIV diagnoses with a known route of infection

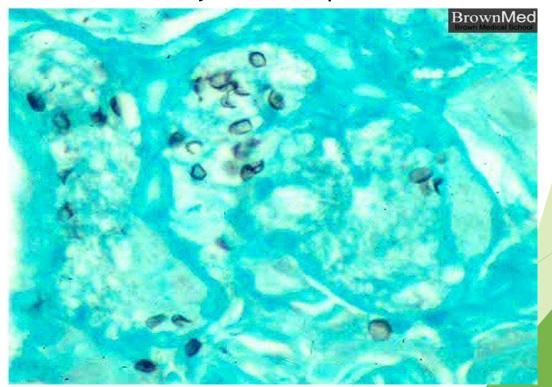


25 AIDS defining conditions in New Zealand ...most 'common'

Kaposi's sarcoma -A cancer that causes lesions in the soft tissues.



• PCP - Pneumocystis carinii pneumonia



Prevention

Condoms

PREP- Pre exposure prophylaxis

Education

Regular STI screening

Needle exchange

Being aware of HIV status

PEP- Post Exposure Prophylaxis

Medications



# ARV Medications (ART-antiretroviral therapy)

#### A combination of drugs which target different stages in the HIV lifecycle to prevent replication.

Medications have come a long way. Less side effects and significantly less tablets/day.

- When taken correctly they:
  - keep the immune system healthy
  - prevent the symptoms and illnesses associated with AIDS from developing
  - mean that PLWHIV can enjoy long and healthy lives.

Once diagnosed we commence patients onto ARV medications ASAP!

#### **Challenges**

- Adherence
- It's important you liaise with pharmacy and team so <u>no missed doses</u>
- Hospital pharmacy does have stock on site of most ARV medications.
- If you have trouble call ID CNS to help
- Resistance

#### **Considerations**

- ▶ Pill burden
- Side effects







IV and helps you live a better quality of life



#### MAINTAIN UNDETECTABLE

A durable undetectable viral load requires high levels of adherence and regular viral load testing.



#### AVOID VIRAL REBOUND

f you stop taking HIV treatment, viral rebound can occur within 1 - 2 weeks and you may pass HIV to your sexual partners.



It may take up to 6 months of HIV treatment to bring HIV down to undetectable



#### HIV TREATMENT AS SOON AS POSSIBLE

Both newly diagnosed with HIV and those previously diagnosed out not taking ART should get on treatment.

SUPPORT THOSE LIVING WITH HIV

INFORM ALL PATIENTS



#### REGULAR STIS TESTS

Even if they believe they have no symptoms, this keeps themselves and their sexual partners healthy

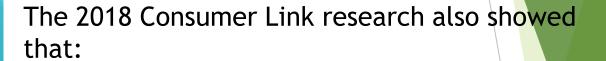


#### THE EVIDENCE BASE BEHIND U=U

The research is clear, no HIV-positive and on treatment passed HIV to their HIV-negative sexual partner.

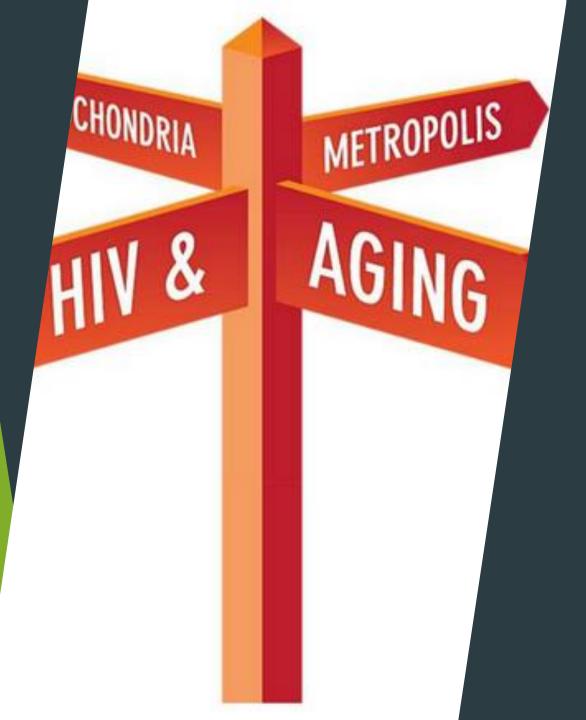


People who keep their HIV viral load at an undetectable level by consistently taking HIV dications will not pass HIV to others through sex.



Only 7% of respondents are aware that someone living with HIV who is taking medication and who has an Undetectable Viral Load (UVL) for more than six months, cannot pass HIV on to their sexual partners

https://www.ashm.org.au/HIV/UequalsU/ASHM%20uu%20guidance%20handbook%20FA%20web.pdf



- ▶For most people, HIV infection is now a chronic condition that can be managed over a long time. This is due to improved ARV medication. As a result:
- ▶ People living with HIV can expect to have the same life span as people who do not have the HIV virus.
- Many people taking ARVs for a long time do not die from causes linked to the HIV virus.
- ► HIV infection can cause severe damage to the immune system. For some people, this may result in much earlier health conditions.

By 2023, about 70% of people living with HIV will be over the age of 50.

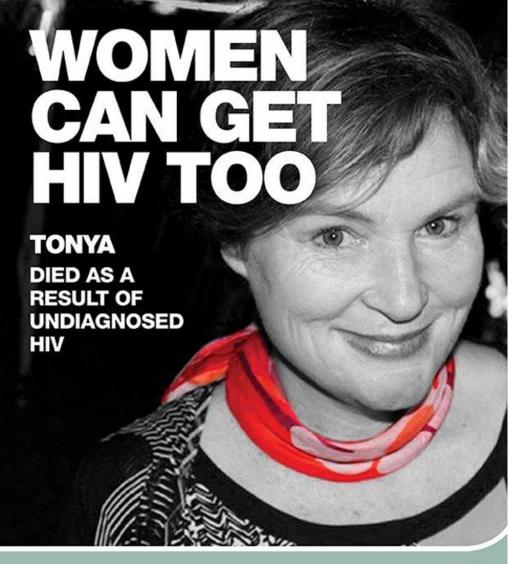
- This means monitoring for other co-morbidities which we see in the ageing population
  - e.g. heart disease (lipids), Diabetes
- Because normal aging typically results in a variety of other conditions, those who are aging and living with HIV find themselves taking more pills more often.
- Long-term survivors of HIV have taken a variety of different antiretrovirals for decades.
- Mental Health
- Potentially along with medications to control complications of HIV, and also side effects of the medications themselves;
  - ► E.g. hypertension, diabetes, cognitive impairment, bone density problems, and high cholesterol.

# Nearly Half of People Living with HIV Experienced <u>Stigma</u> from Healthcare Providers:

The Aged Care Worker may need to challenge their own beliefs and attitudes towards such issues as sex and sexuality (including same sex relationships, transgender and intersex people), injecting drug use, fears of and knowledge of HIV/AIDS in order to provide the best possible care for people with HIV.

HIV Stigma is a huge problem in Aotearoa New Zealand. To face this problem it is imperative that we have the voices of people living with HIV speaking out and sharing their experiences.

## LIVING WITH HIV 38% **Ucomfortable** Uncomfortable **Uncomfortable** with having a sexual with letting having a flatmate living with HIV their children relationship with play with an somebody living **HIV-infected person** with HIV



WITH HIV MEDICATIONS, THE RISK OF HIV TO A BABY BORN TO A MOTHER WITH HIV, HAS REDUCED FROM 31.5% TO LESS THAN 1% New Zealand National Health Committee 2004

# TAKE CHARGE TAKE THE TEST

For a HIV Test, contact your nearest Sexual Health, Family Planning clinic or your GP to make an appointment. For more information contact Positive Women Inc. 0800 POZTIV (769 848) jane⊕positivewomen.nz www.positivewomen.org.nz



Positive Women

A few months ago a doctor from the sexual health clinic asked me if I was gay, when I replied that I have a wife and she is my only partner, he asked me "so how did you get HIV then?" and this was an awkward situation.

My priest once said that no child of God can contract HIV. After my diagnosis, I begged God to forgive me.

My friend disclosed my HIV status without my permission. Many in my community worried because I had visited their homes. As a result, I withdrew from my community.

Someone at work accidentally cut themselves. When I went to help, they joked 'don't worry, I haven't got AIDS'.

https://www.burnettfoundation.org.nz/

### Where to from here....

- Education- esp within the healthcare sector
- Awareness
- Research- New treatments- Clinical drug trials