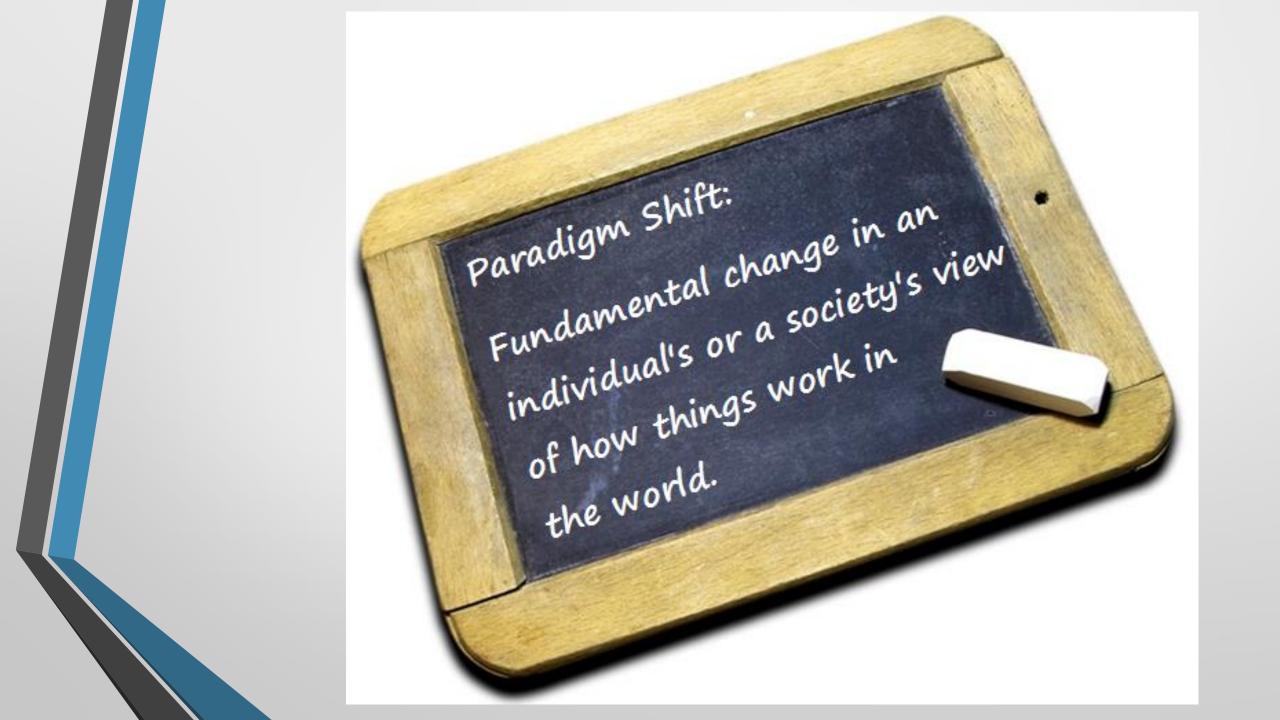
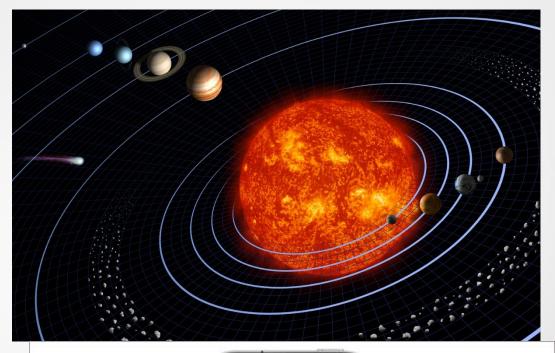
Grasping the Dream: Undetectable = Untransmittable

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History & Scientific Studies

ORIGINAL ARTICLE

Antiretroviral Therapy for the Prevention of HIV-1 Transmission

Research

Original Investigation

Sexual Activity Without Condoms and Risk of HIV Transmission in Serodifferent Couples When the HIV-Positive Partner Is Using Suppressive Antiretroviral Therapy

FACTSHEET

Results of the Opposites Attract Final Analysis presented at the International AIDS Society Conference on HIV Science



Swiss experts say individuals with undetectable viral load and no STI cannot transmit HIV during sex

Edwin J. Bernard Published: 30 January 2008

 The scientific basis for CDC's Treatment as Prevention (TasP), and the pendulum swings toward "Test and Treat"

HTPN 052 – 2011, 2016

- Demonstrated early initiation of ARV therapy improves patient outcome and reduces transmission rates compared to delayed ARV therapy.
- 1763 index patients enrolled and randomized to early or delayed ART
- 46 virologically linked HIV transmissions occurred: 3 in the early treatment group; 43 in the delayed treatment group
- Transmissions in early treatment group occurred before VL was suppressed
- Study was stopped early all placed on therapy
 ZERO linked transmissions when index PLWH was virally
 suppressed (<400/ml)

2016-2018 - The PARTNERS & (2) Studies

- 1,523 serodiscordant couples were enrolled, 975 MSM & 548 heterosexuals
- The HIV+ partner was virally suppressed (≤200c/mL) at baseline and at each 4-6 month interview.
- Almost all participants (94%) had a sustained viral load <50c/mL
- Condomless sex during the 4-6 month period(s) was reported; (135,000 unprotected sex acts)
- No reported PrEP or PEP use during the 4-6 month period(s).
- ZERO transmissions from PLWH who were virally suppressed (VL <200/mL)

2017 - Opposites Attract

• 358 MSM couples enrolled

• 591 couple-years with reported condomless anal sex (16,889 acts).

 ZERO transmissions from PLWH engaging in condomless anal sex who were virally suppressed (VL <200/mL)

July, 2016 – Prevention Access Campaign Consensus Statement

 "People living with HIV on ART with an undetectable viral load [≤200c/mL] in their blood have a negligible risk of sexual transmission of HIV.... Continued and reliable HIV suppression requires selection of appropriate agents and excellent adherence to treatment. HIV viral suppression should be monitored to assure both personal health and public health benefits.

Dear Colleague

INFORMATION FROM CDC'S DIVISION OF HIV/AIDS PREVENTION

September 27, 2017

 Across three different studies, including thousands of couples and many thousand acts of sex without a condom or pre-exposure prophylaxis (PrEP), no HIV transmissions to an HIV-negative partner were observed when the HIV-positive person was virally suppressed. This means that people who take ART daily as prescribed and achieve and maintain an undetectable viral load have effectively no risk of sexually transmitting the virus to an HIV-negative partner.



STATE OF MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES LANSING

DIRECTOR

FOR IMMEDIATE RELEASE: October 11, 2017

RICK SNYDER

GOVERNOR

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MDHHS supports HIV Prevention Campaign – Undetectable = Untransmittable

- Based on the emerging research, the scientific consensus is that a person living with HIV taking antiretroviral therapy (ART) as prescribed with an undetectable viral load in their blood sample for at least six months has a negligible risk of transmitting HIV sexually.
- While viral suppression prevents the sexual transmission of HIV, condoms and/or pre-exposure prophylaxis (PrEP) use are also important HIV prevention strategies...Using condoms correctly and during every sex act helps to protect against pregnancy and other sexually transmitted infections, such as syphilis, gonorrhea or chlamydia.

Key Definitions

- Viral suppression (VS)* = when a persons HIV viral load is ≤200C/mL of blood (line for enrollment and monitoring in PARTNER and Opposites Attract Studies). This is also how the term is defined by HRSA and understood by those providing medical and support services to people living with HIV in Michigan.
- Undetectable* = when the amount of circulating HIV is so low that the viral load lab test is unable to detect any HIV in the blood.

Viral Suppression = Undetectable = <200 c/mL

Maintained and Monitored

Viral Suppression



U=U

Take home messages...

Taking into consideration multiple studies in the last 15 years, there have been zero linked transmissions documented at the <200C/mL level.

Once a person's viral load is undetectable for six months, when maintained through adherence to HIV meds, and monitored regularly (every 4-6 months), the risk of passing HIV sexually is effectively zero.

In these studies, the presence of other STDs did not result in transmissions of HIV when the viral load was undetectable.

Important reminders for providers and PLWH considering U = U as aprevention strategy...

Adherence is key to getting to undetectable and staying there.

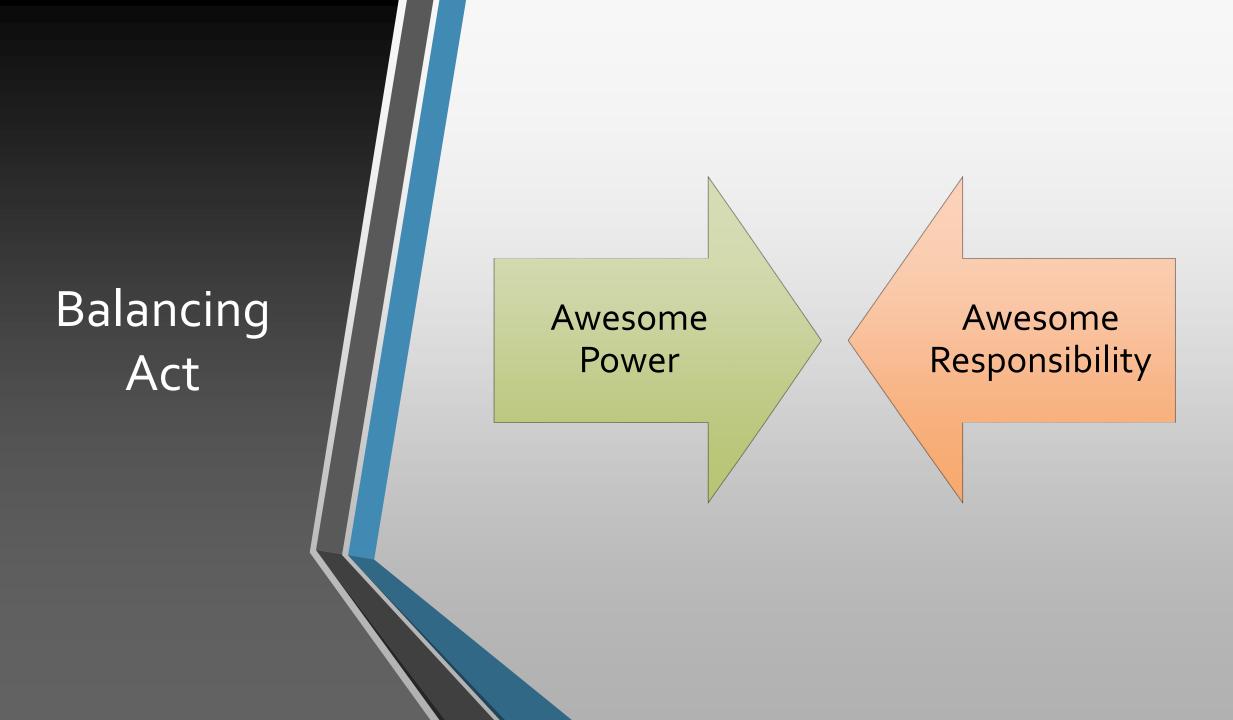
Monitor viral load every 4-6 months for peace of mind.

HIV medication (ART) does not protect against STDs – use of condoms and/or frequent testing are encouraged to decrease the harm caused by STDs.

If a person stops taking medication, or misses doses, back-up prevention methods (condoms, abstinence, partner on PrEP etc) should be considered.

MCL 333.5203 – Director's Powers Warning Notice Against Carrier of Disease

Allows director or local health officer who determines "that an individual is a carrier and is a health threat to others" to issue a warning notice requiring person to cooperate in preventing or controlling transmission of disease.



MCL 333.5201(b), a "health threat to others"

- an individual who is a carrier has demonstrated an inability or unwillingness to conduct himself or herself in such a manner as to not place others at risk of exposure to a serious communicable disease or infection. A health threat to others includes, but is not limited to, one or more of the following:
 - (i) behavior by the carrier that has been demonstrated epidemiologically to transmit, or that evidences a careless disregard for transmission of, a serious communicable disease or infection to others;
 - (ii) a substantial likelihood that the carrier will transmit a serious communicable disease or infection to others, as evidenced by the carrier's past behavior or statements made by the carrier that are credible indicators of the carrier's intention to do so; and
 - (iii) **affirmative misrepresentation** by the carrier of his or her status as a carrier before engaging in behavior that has been demonstrated epidemiologically to transmit the serious communicable disease or infection.



 What are the investigative steps when a health threat report/complaint is received?

 What are the implications of the science of U = U to these policies and procedures?

 How/where could U = U be used/applied to the process?
 Should it be?

The Second Promise...

Stigma Reduction

The U=U Campaign Can Reduce Stigma by...

- Removing the perception of PLWH as vectors of disease, and hopefully leading to the removal of HIV criminalization laws
- Empowering PLWH to take control of their health and prevention goals
- Providing PLWH with peace of mind about their risk of transmitting HIV to sexual partners
- Encouraging the initiation and adherence to successful ARV treatment
- Supports routine testing for HIV benefits the patient and partners

"There was something in me that said I'm damaged and I made a mistake, and people see it and I'm a danger. When I finally internalized this message...something suddenly listed off of me that is hard to describe. It was almost as if someone wiped me clean. I no longer feel like this diseased pariah."

• Mark King

"I thought, 'My God, I've been living with my man for 20 years, and we've been using condoms. And I phoned him right that afternoon."

Brigitte Charbonneau

"It was like the sky opened. Are you kidding? There's like, zero risk? I don't feel like I'm as threat anymore. I don't feel like I'm dirty. I don't feel like I'm a dangerous person."

Jennifer Vaughan

Now What?



Questions/ Thank you

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KEEP CALM AND SPREAD THE WORD