
HIV 101 & HIV Testing

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HIV/STD Regional Training
Fall, 2016

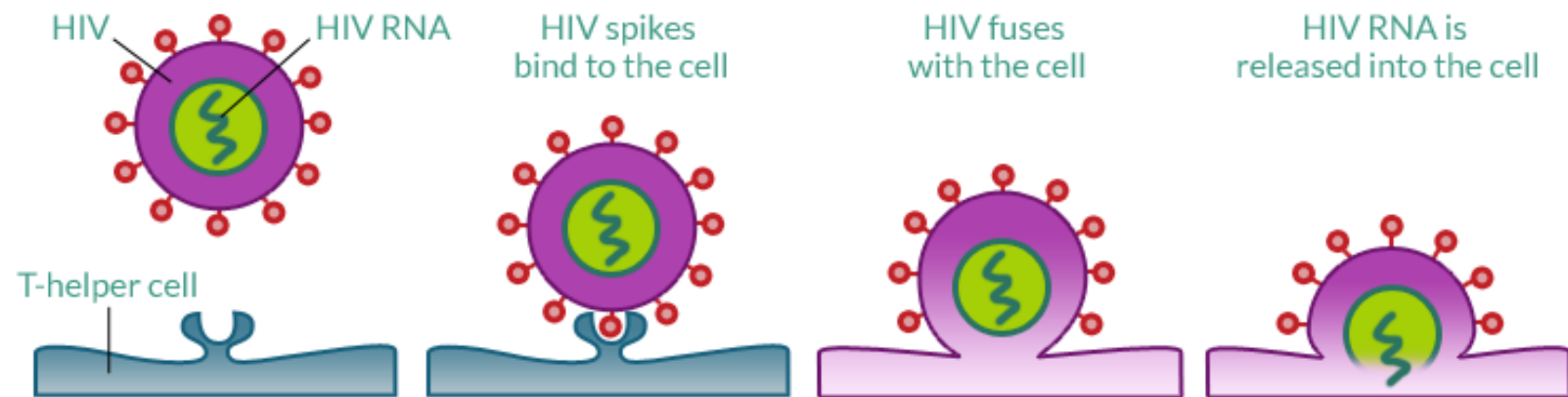


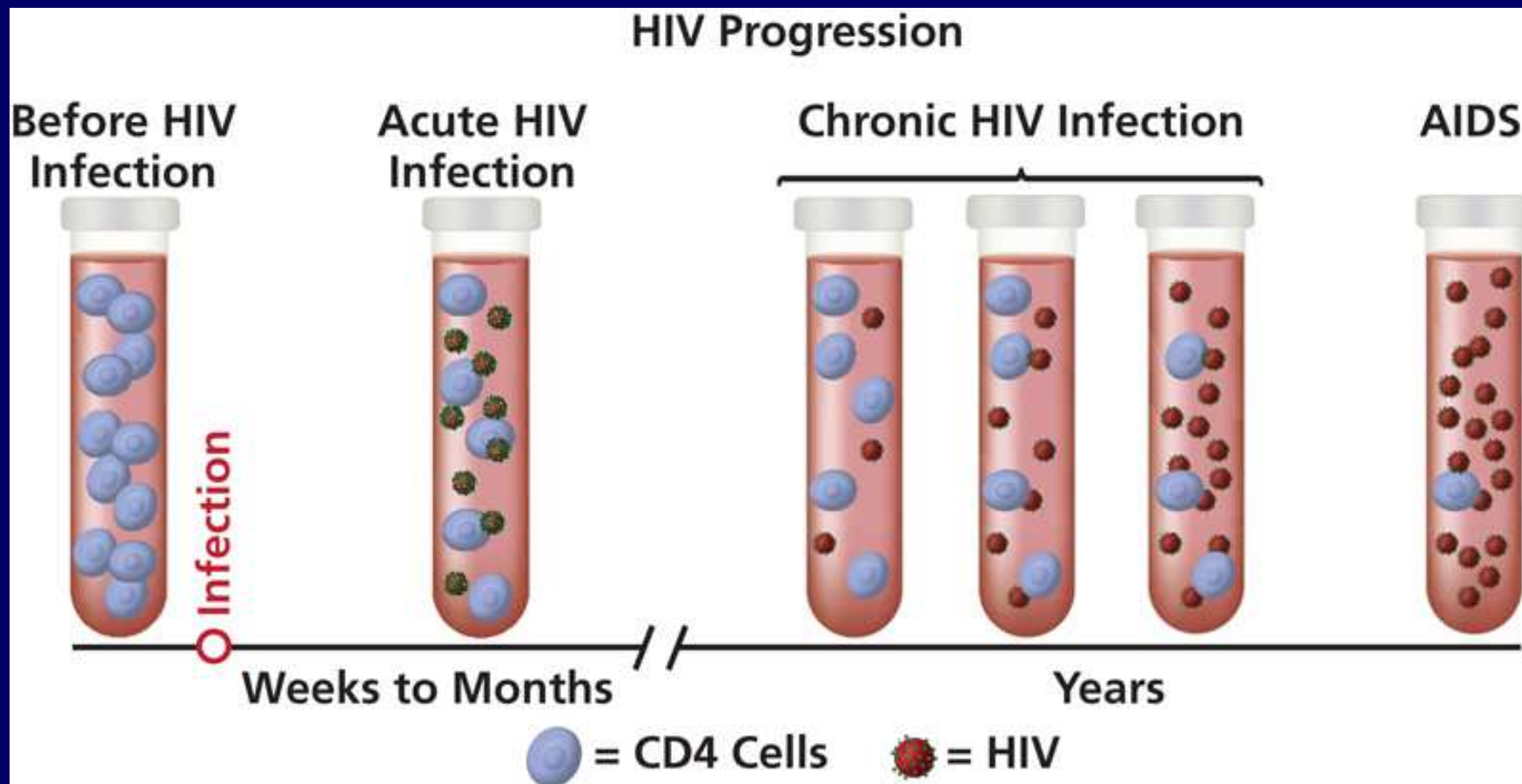
HIV/STD/TB SECTION
Public Health Division

HIV & AIDS

- **HIV = Human Immunodeficiency Virus**
- HIV attacks white blood cells (aka T-helper or CD4 cells) that are important for us to fight off diseases and infections
- **AIDS = Acquired Immune Deficiency Syndrome**
 - AIDS is late stage HIV disease
- Medications can be used to keep the virus from destroying white blood cells and multiplying and keep people from progressing to AIDS
 - Viral suppression = our goal!

What HIV looks like





Acute HIV Infection

- Between 40%-90% of people recently infected with HIV may show signs of acute HIV infection
- Phase of HIV immediately after infection that is characterized by an initial burst of viremia
 - Anti-HIV antibodies are undetectable, HIV-1 RNA or p24 antigen are present

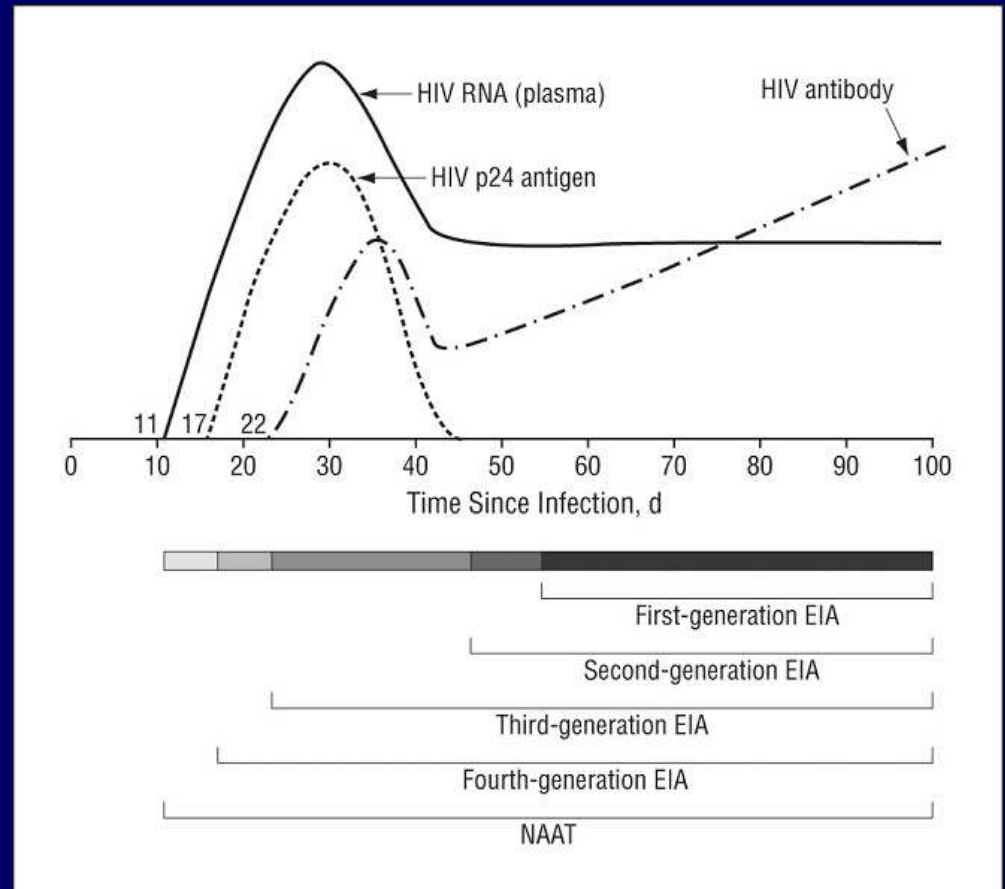
Acute HIV Infection

- Can be commonly missed
- Exercise high degree of suspicion for acute infection if individual presents with s/s and has recent high-risk HIV exposure ~ 2-6 weeks

Fever (usually >101°F)	Headache
Fatigue	Nausea
Swollen lymph nodes	Night sweats
Weight loss	Rash
Muscle aches	Diarrhea

Acute HIV Infection

- Individuals are highly infectious during acute stage
- Results on a traditional HIV antibody test will typically be negative
- Acute infection is identified using NAAT/RNA testing or a test looking for the p24 antigen



How is HIV transmitted?

- Sexual contact
- Sharing of needles or needlestick
- Perinatal transmission (mother-to-child)
- Prior to 1985 in U.S. – blood transfusions

- It is not transmitted via
 - Casual contact
 - Mosquitoes
 - Toilet seats, etc.

What fluids can transmit HIV?

- Blood
- Semen
 - Including pre-seminal fluid (pre-cum)
- Vaginal secretions
- Rectal fluids
- Breast milk

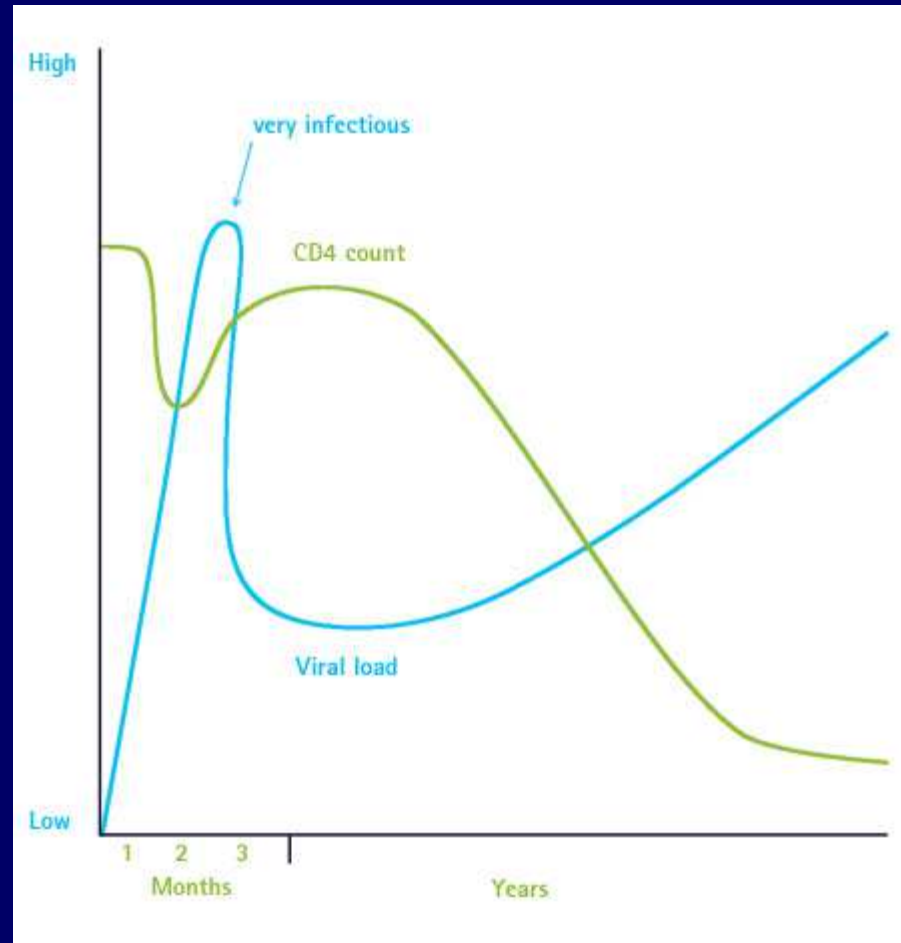
How is HIV transmitted?

- Not all risks are created equally

Estimated per-act Probability of Acquiring HIV from an Infected Source	Risk per 10,000 exposures
Blood transfusion	9,250
Needle sharing during injection drug use	63
Needle-stick	23
Receptive anal sex	138
Insertive anal sex	11
Receptive penile-vaginal sex	8
Insertive penile-vaginal sex	4
Oral sex	low

HIV viral load and transmission

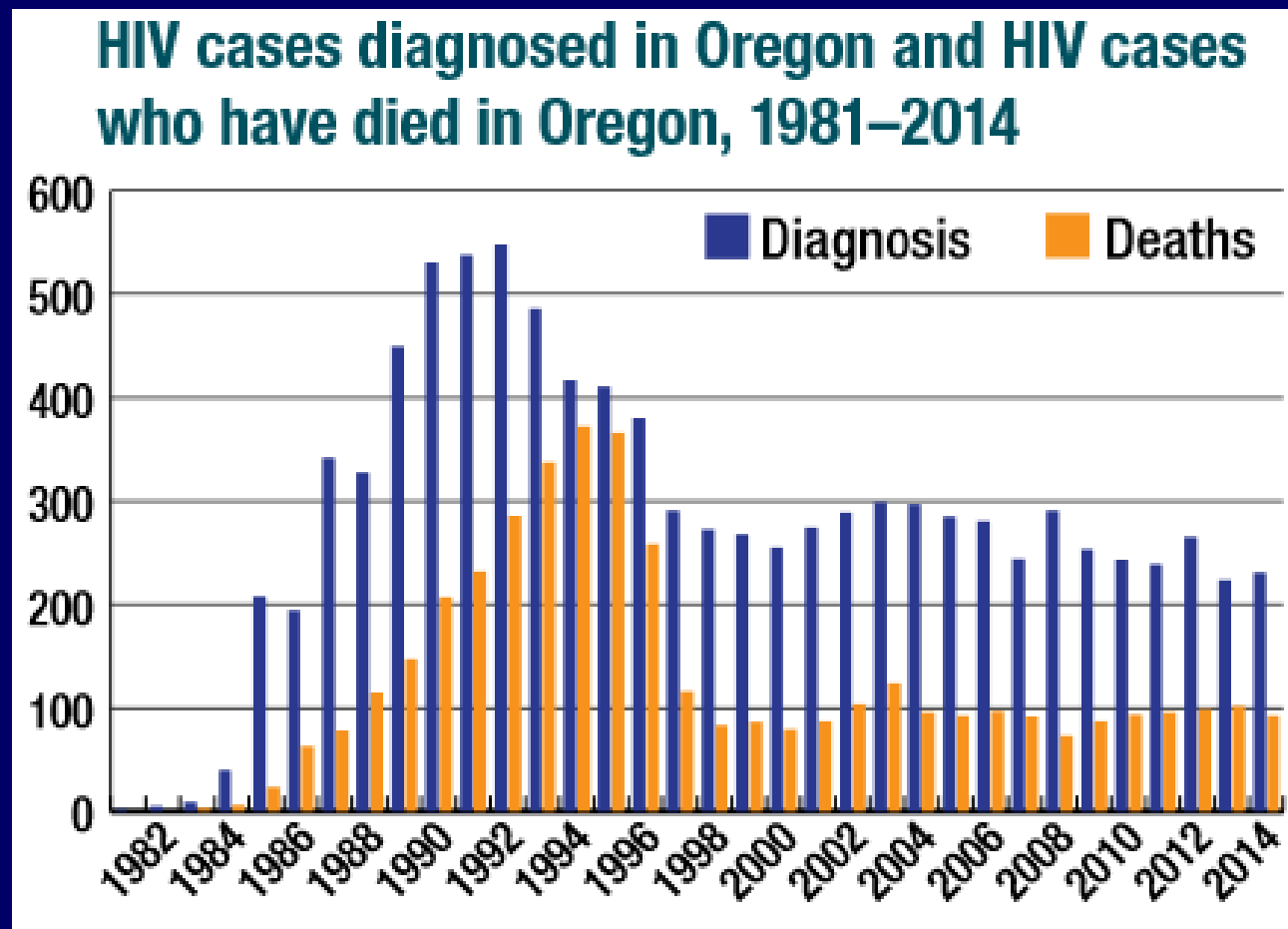
- High viral load increases risk of HIV transmission substantially



Prevention strategies

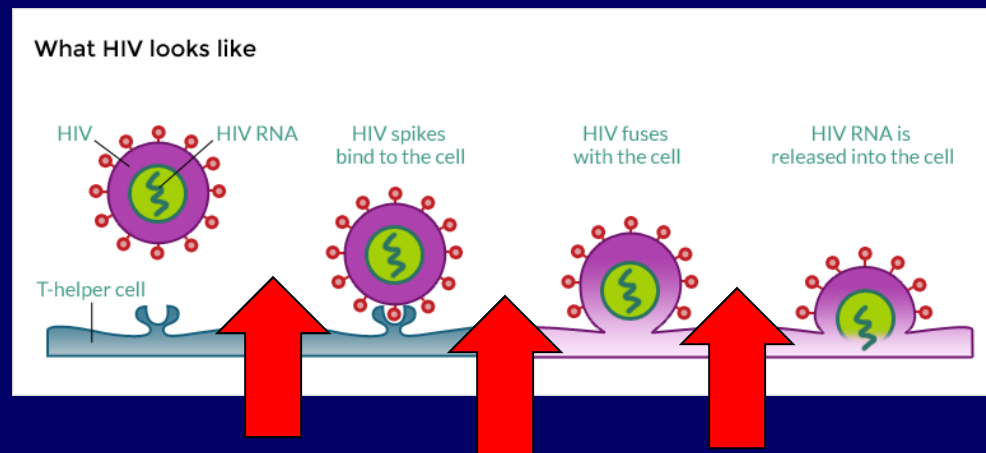
- Condoms and lubricant
- Using clean needles and works and not sharing
- Abstinence
- Reducing number of partners
- Post-exposure prophylaxis (PEP)
- Pre-exposure prophylaxis (PrEP)
- Treatment as Prevention (TasP)

Treatment as Prevention (TasP)

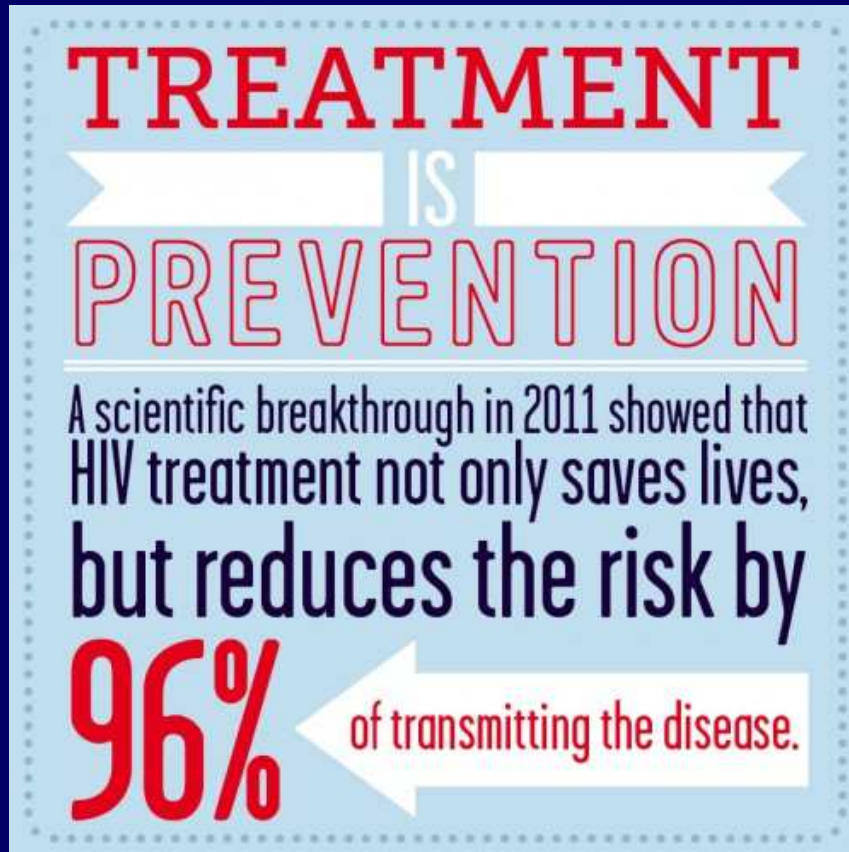


Treatment as Prevention (TasP)

- There are six classes of drugs and more than 25 types of drugs now available to treat HIV.
 - Highly active antiretroviral therapy (HAART)
- Drugs are given in combination with one another – no monotherapy
 - Several fixed dose combinations (1 a day pills)
- Different drugs target different parts of the HIV viral replication process

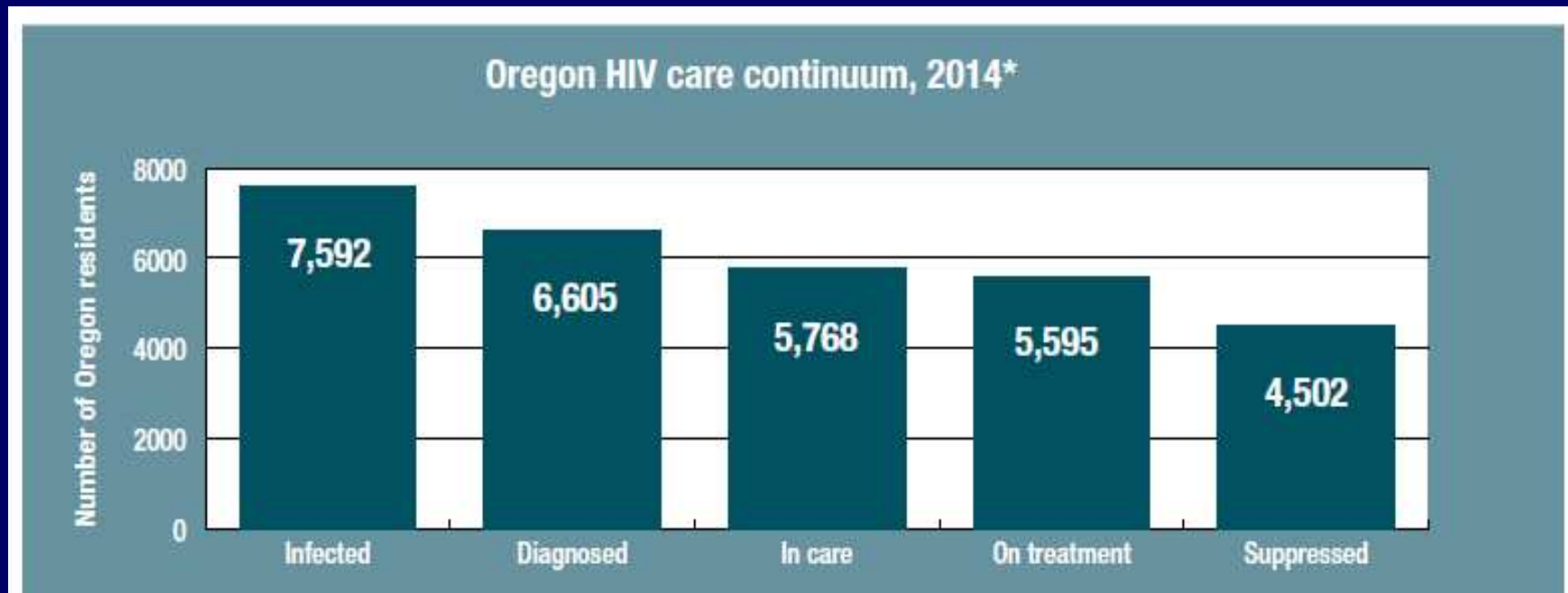


Treatment as Prevention (TasP)

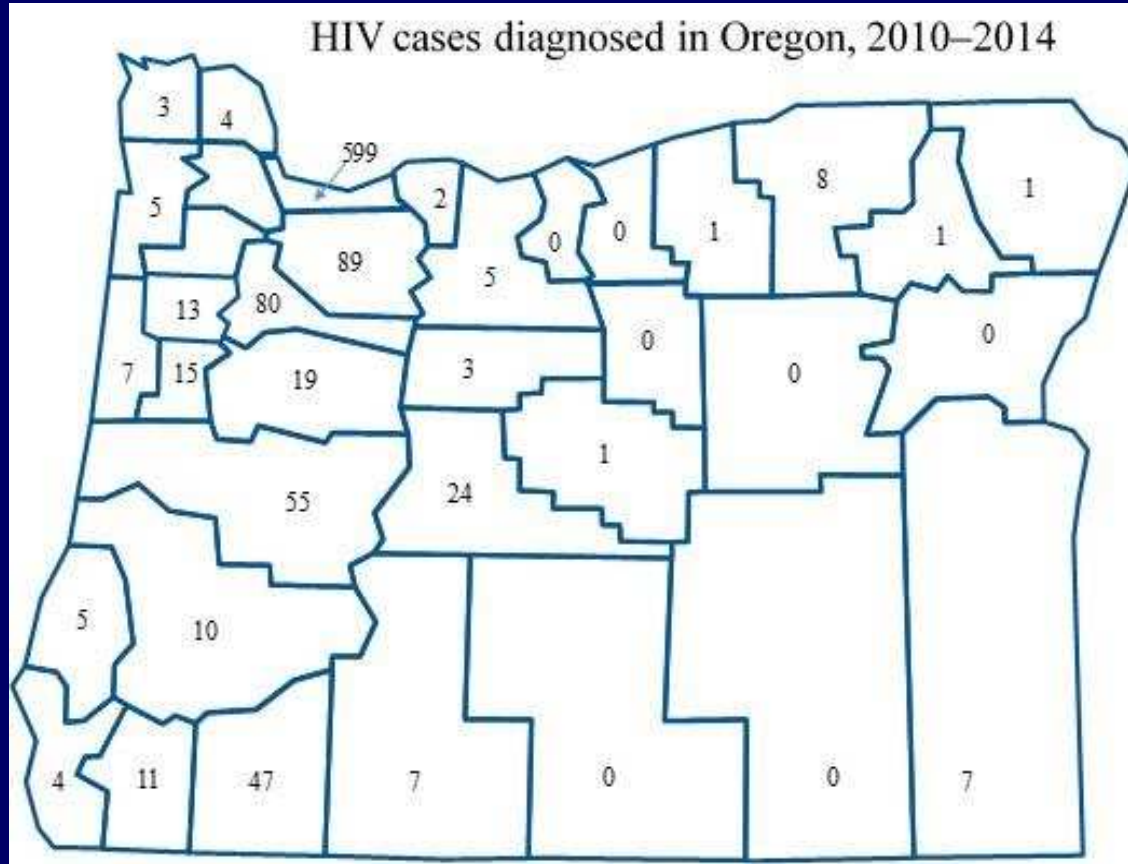


- Our end goal – viral suppression!
- CD4 cells up
- Viral load down
 - Undetectable levels
- HIV treatment is prevention!
 - The ability to transmit HIV is dramatically reduced

HIV Care Continuum



HIV in Oregon



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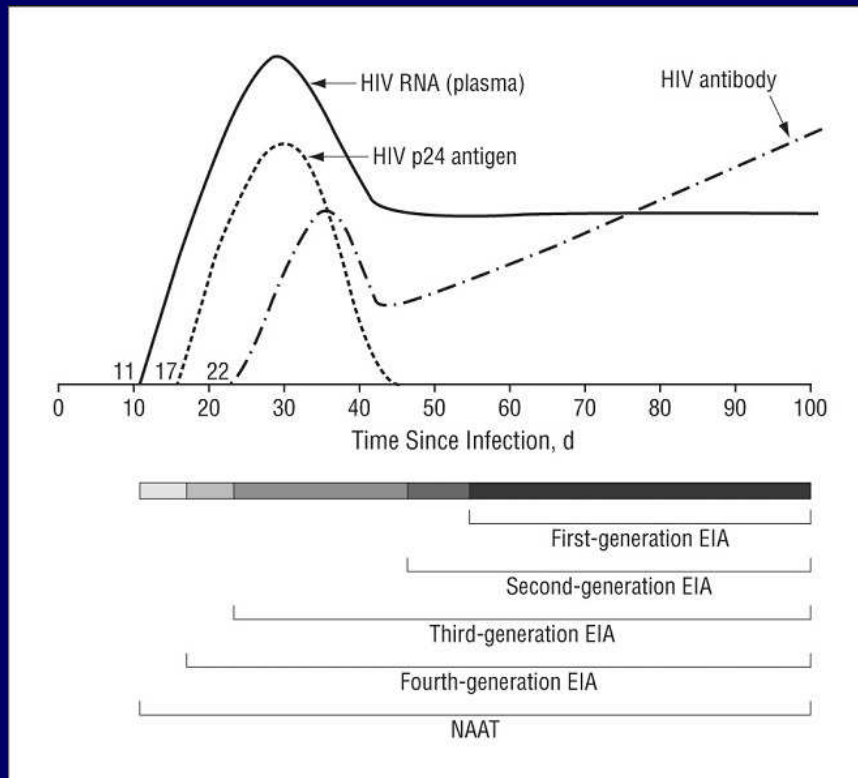


HIV Testing

- There are a wide variety of tests available to detect HIV
 - Conventional testing through OSPHL or other lab
 - Rapid testing
 - Home testing kits



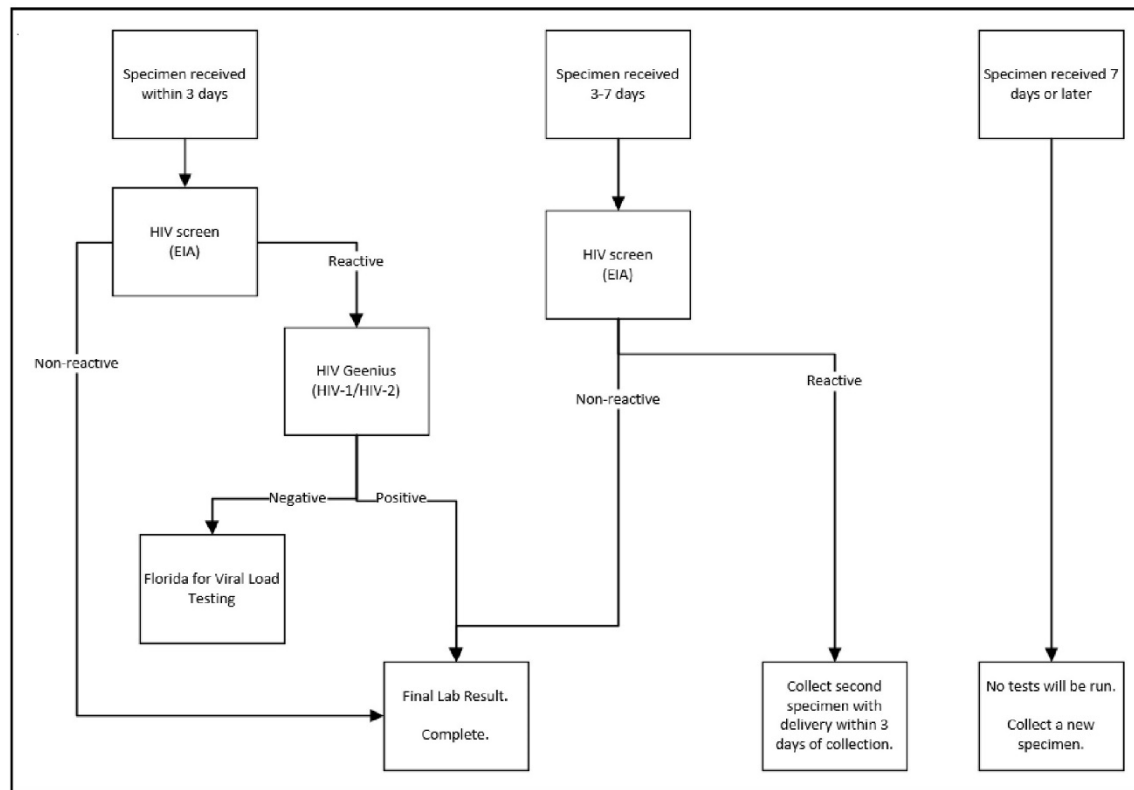
HIV Testing



- HIV tests look for the presence of antibodies the body produces to fight HIV.
- Window period for HIV that varies depending on type of test used.
- Some tests now can detect the p24 antigen which shows up before antibodies

HIV Testing in Oregon

OSPHL HIV Testing Algorithm, effective November 1, 2016:



HIV Testing in Oregon

- A variety of rapid HIV testing technologies are available
 - CLIA-waived
 - One also available as home testing kit
- Read time varies between 1 minute and up to 20 minutes
- Finger stick or oral fluid
- A positive rapid test always needs to be confirmed with a second test (either rapid or conventional)

Resources available through HIV Program

- Testing through OSPHL
- Required to complete form (Form 44)
- Submit yellow copy with specimen
- Send white copy to us for data entry
- Not meant to pay for routine screening for all
 - If they are asking for a test or have risk, test them and we will pay!

1002087651

Oregon State Public Health Laboratory
P.O. Box 275, Portland OR 97207-0275
Information: 503-693-4100

HIV Test Request Form

Date of collection (mm/dd/yyyy):

Patient Information

Name (Last, First):

Date of birth (mm/dd/yyyy):

Client record number: County: State: ZIP:

Current gender: ☐ Male ☐ Female ☐ Declined ☐ Trans (male to female) ☐ Trans (female to male) ☐ Trans (unspecified) ☐ Not asked ☐ Other (specify):

Sex at birth: ☐ Male ☐ Female ☐ Declined ☐ Not asked ☐ Other (specify):

Race (self report; may select more than one): ☐ White ☐ Asian ☐ N/HP ☐ Don't know ☐ Black ☐ AI/AN ☐ Declined ☐ Not asked ☐ Other (specify):

Do you identify as Hispanic/Latino? (self report): ☐ Yes ☐ Don't know ☐ Not asked ☐ No ☐ Declined ☐ Other (specify):

Test History

Previous HIV testing? ☐ Yes ☐ No ☐ Declined ☐ Don't know ☐ Didn't ask

If yes, last test was? (skip if not previously tested) ☐ Negative ☐ Positive ☐ Declined to answer ☐ Preliminary positive — clinic ☐ Didn't ask ☐ Preliminary positive — house ☐ Indeterminate ☐ Month of last test (mm): () Year (yyyy): () ☐ Don't know

If two rapid tests performed at a single visit, write other test form ID number here:

Submitter Information

Site name:

Authorized ordering clinician/physician:

Contact phone number and name, Tester name:

Non-Rapid Test Specimen Information

Specimen source ☐ Blood ☐ Plasma ☐ Serum ☐ Other (specify):

Test requested ☐ Screen ☐ Confirmation of preliminary positive rapid test (write form ID number from preliminary reactive rapid test here) ☐ Follow-up of invalid rapid test ☐ Other (specify):

Rapid Testing #1 (complete this section only if testing done today)

Specimen type ☐ Oral ☐ Finger stick ☐ Venous blood

Result provided to client? ☐ Yes ☐ No, declined ☐ No, referred elsewhere ☐ No, client left ☐ No, other (specify):

Results ☐ Negative ☐ Preliminary positive (specify): ☐ Invalid

Rapid Testing #2 (complete this section only if testing done today)

Specimen type ☐ Oral ☐ Finger stick ☐ Venous blood

Result provided to client? ☐ Yes ☐ No, declined ☐ No, referred elsewhere ☐ No, client left ☐ No, other (specify):

Results ☐ Negative ☐ Presumptive positive (specify): ☐ Invalid ☐ Referred to care? ☐ Yes ☐ No

Risk/Exposures

1. Sex partners: ☐ Male ☐ Female ☐ Transgender ☐ Declined to answer ☐ Not asked ☐ No risk from list below

2. In the past 12 months:

☐ Had anal or vaginal sex? If yes, condom use: ☐ Yes ☐ No ☐ Sometimes

☐ Exchanged sex for drugs, money or something you needed?

☐ If female, had vaginal or anal sex with a person you know is a man who also has sex with other men?

☐ Had vaginal or anal sex with a person who is HIV positive?

☐ Had vaginal or anal sex with a person who uses injection drugs?

☐ Used injection drugs? If yes, shared injection equipment? ☐ Yes ☐ No

3. Client referred to PrEP? ☐ Yes ☐ No ☐ N/A currently taking PrEP

4. Client referred to PEP? ☐ Yes ☐ No ☐ N/A currently taking PEP

Local use only

PT ID: S1002087651 S1002087651 S1002087651 S1002087651 S1002087651 S1002087651 S1002087651 S1002087651

OHA 0044 (06/2015)

True or False?

- Under Oregon law, a separate written consent for HIV testing is required.

Consent for HIV Testing

- Under Oregon law, a separate written consent for HIV testing is required.
 - ***FALSE***
- Previously Oregon law required special informed consent for HIV testing.
- Senate Bill 1502 passed in 2012 removed this requirement.

Consent for HIV Testing

- Now patients must be:
 - Notified testing may occur
 - Given the opportunity to decline if they wish
- Notification may be done in any of the following ways:
 - Verbally through health care provider or their designee
 - In writing through a general medical consent form, brochure, fact sheet, or signage in a waiting area

Oregon Revised Statute 433.045 (§3)

Oregon Administrative Rule, Chapter 333, Division 22, Section 0205

Consent for HIV Testing

- The following language is compliant with the law and could be inserted into a general medical consent form:

You may be tested for HIV. If you want to decline HIV testing, check this box [☐].

- This one of several acceptable approaches you could use.
- You are free to decide what procedure will work best for your practice as long as the patient is notified testing may occur and allowed to decline.

True or False?

- HIV testing must be accompanied by a counseling session (sometimes referred to as pre- or post-test counseling)?

True or False?

- HIV testing must be accompanied by a counseling session (sometimes referred to as pre- or post-test counseling)?
 - **FALSE**
- The CDC has moved away from its recommendation that counseling accompany each HIV testing event in non-clinical settings.
- Goal is to decrease time and resources necessary to make testing simpler, easier, and more routine.

HIV Testing Process

Individual *Rapid* HIV Testing Protocol

1	Introduce and Orient Client to Session
2	Prepare For and Conduct Rapid HIV Test (10-20 minute read time)
3	Conduct Brief Risk Screening
4	Provide Initial Results and Follow Protocol for Confirmatory Testing
5	Develop Care, Treatment, and Prevention Plan Based on Results
6	Refer and Link with Medical Care, Social and Behavioral Services

Individual *Nonrapid* HIV Testing Protocol

INITIAL VISIT	
1	Introduce and Orient Client to Session
2	Conduct Brief Risk Assessment
3	Prepare For Test and Collect Sample
RETURN VISIT (ideally no more than 1 week from initial visit)	
4	Check-In With Client
5	Provide Confirmed Results
6	Develop Care, Treatment, and Prevention Plan Based on Results
7	Refer and Link with Medical Care, Social and Behavioral Services

Questions?