

# Peer Education Training Initiative

*Building the capacity of HIV peer educators as part of the health care team*

**PEER Center**  
Peer Education & Evaluation Resource Center



Boston University School of Public Health



# Panel Overview

- Description of HRSA's (Health Resources and Services Administration) Peer Education Initiative
- Demonstrate a few activities to train peers on promoting adherence to treatment
- Learn about the benefits of training from a participant and how she uses her skills
- Training Impact

*"You have to let the client know that you are like them, that that you have gone through these things before and that if you can go through it, they can go through it. And you will go through it with them."*



-Jackie Howell, former peer advocate of seven years, PACT trainer

# Contributions of Peers in Improving Healthcare Outcomes

- Screening and disease prevention efforts
- Community awareness and education
- Management of chronic diseases
- Promotion of healthy lifestyles
- Facilitation of support groups for cancer, HIV, other chronic diseases

# Contributions of HIV + Peers in Improving Healthcare Outcomes

- Adherence to medical care (keeping appointments, responding to physician referrals, picking up medications)
- Linking to medical care and support services
- Self-management of disease
- Other outcomes
  - Emotional support
  - Reduced risk behaviors

# History of HRSA's Support of Peers/Consumers

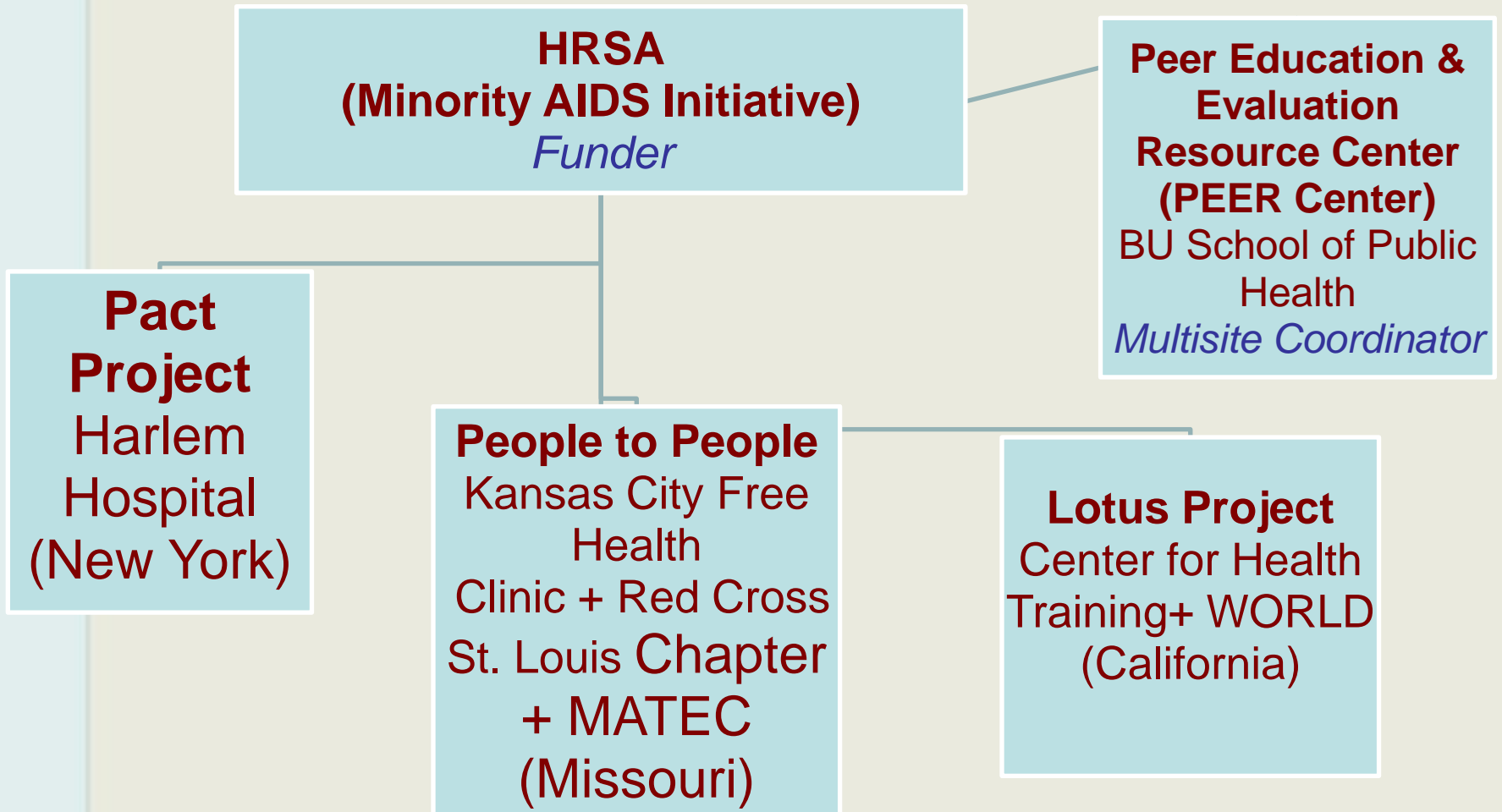
- Consumers are a vital part of Ryan White programming
  - Mandated consumer involvement in all Ryan White Part A, B, C, D funding streams
    - E.g. Consumer Advisory Boards, Consortia, Planning Councils
- HRSA Experience with Peer Training
  - 1999 Minority AIDS Initiative (MAI) created to improve HIV-related outcomes & reduce health disparities for communities of color
    - HRSA creates first Peer Education Training Program focused on training peers

# HRSA Goals: 5-Year Initiative

- To improve HIV-related health outcomes for communities of color and reduce health disparities through HIV peer education by:
  - Providing training and education to HIV peer educators
  - Replicating successful peer education programs through training-of-trainers
  - Building capacity in existing HIV/AIDS peer programs or in organizations developing a peer program



# The Peer Education Initiative





# Peers in a Primary Care Setting

## Kansas City Free Health Clinic



# **Training Competencies**

# Training Competencies

- HIV transmission & risk reduction
- HIV life cycle
- Treatment & adherence
- Peer roles
- Peer counseling
- Navigating the health system
- Communicating with providers
- Boundaries & self care
- Cultural competency
- Return to work

# Peer Training Levels

- **Level 1:** 1 day, didactic (MO Alliance)
  - Basic HIV information,
  - Intro to peer roles
- **Level 2:** 3-9 days, interactive skills building
  - Advanced HIV knowledge & information
  - Role plays for peers: working with client, medical providers and other social service providers
  - Boundaries, self-care
- **Level 3:** preceptorships, mentors (on-going)
  - Actual clinical care experience with patients



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# **Training Demonstrations**

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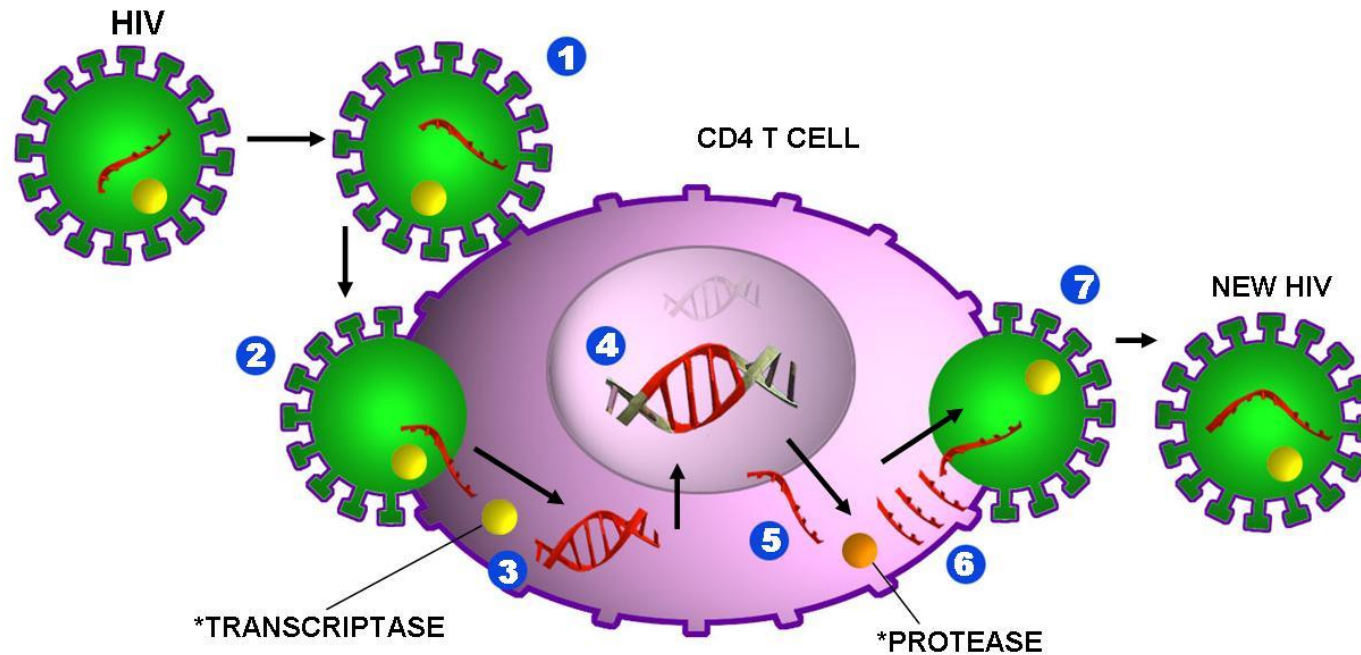
Peer Education Training Site  
Level II Training



# THE HIV LIFE CYCLE

*Understanding How Antiretroviral  
Medications Work*

# HIV Life Cycle - The Big Picture



## Attachment

1. HIV binds to receptors on the CD4 T-cell.
- A message is sent to the CD4 T-cell to let the virus in.

## Fusion

2. Once bound, the virus is allowed to dump its contents into the CD4 T-cell.
- Included in its contents are HIV RNA and reverse transcriptase.

## Reverse Transcription

3. The HIV RNA is turned into double-stranded DNA within the CD4 T-cell.
- The enzyme *\*reverse transcriptase* aids in this process.

## Integration

4. Once the DNA is formed, it hides itself in the human DNA housed in the CD4T-cell nucleus.

## Transcription

5. Copies of HIV DNA are made and released from the nucleus in small packages'.
  - Each of the small packages' contains information for creating a new HIV.

## Assembly

6. The *\*protease* enzyme in the cell combines the DNA 'packages' to create active virus.

## Budding

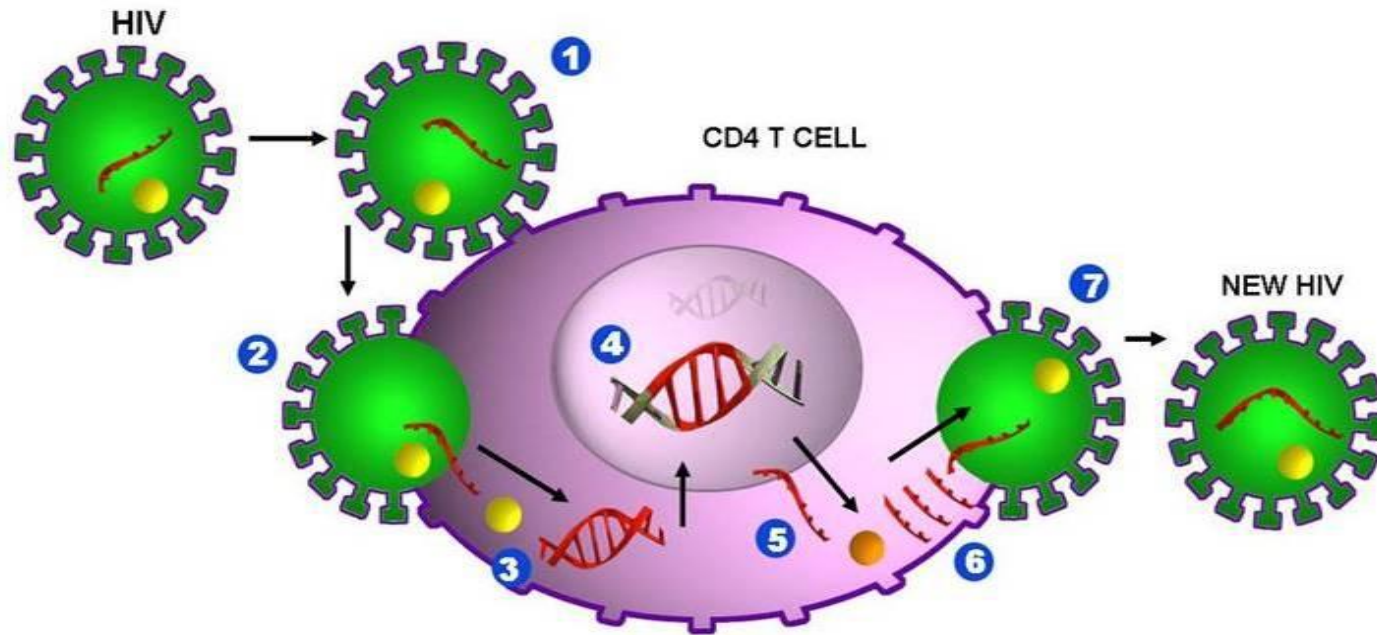
7. Once the new HIV is formed, it pushes itself out of the CD4 T-cell
  - The virus steals part of the CD4 T-cell protective coating.



- Virus is in the bloodstream but also hides in other cells (e.g. lymph nodes)
  - Drugs don't reach these sequestered cells\*
  - That's why there is no cure
- Virus destroys CD4 cells which lead to:
  - Immune suppression
  - Opportunistic infections and AIDS

\*HIV hides in cells in certain organs which are “protected” by the body: lymph nodes, the brain, reproductive organs. Not enough meds can get to those cells.

# HIV Life Cycle - Worksheet



## A F R I T A B

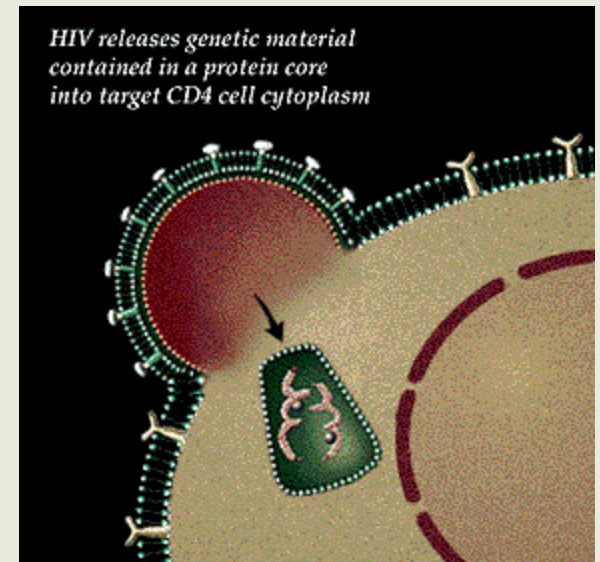
- HIV binds to receptors on the CD4 T-cell.
  - A message is sent to the CD4 T-cell to let the virus in.
- Once bound, the virus is allowed to dump its contents into the CD4 T-cell.
  - Included in its contents are HIV RNA and reverse transcriptase.
- The HIV RNA is turned into double-stranded DNA within the CD4 T-cell.
  - The enzyme reverse transcriptase aids in this process.
- Once the DNA is formed, it hides itself in the human DNA housed in the CD4 T-cell nucleus.
- Copies of HIV DNA are made and released from the nucleus in small packages.
  - Each of the small packages' contains information for creating a new HIV.
- The protease enzyme in the cell combines the DNA 'packages' to create active virus.
- HIV is formed, it pushes itself out of the CD4 T-cell.
  - The virus steals part of the CD4 T-cell protective coating.

# How Medications Work: *Drug Classes and Side Effects*



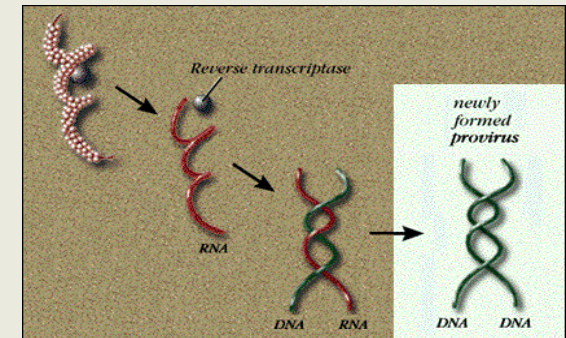
# FUSION INHIBITORS

- Inhibit first step of HIV replication
  - Prevent fusion of HIV to CD4 T-cell
  - Virus is prevented from using host for replication
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- Enfuviritide (Fuzeon®)-BID



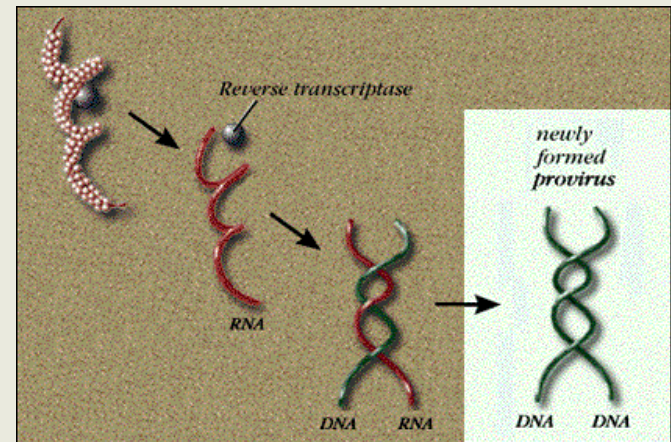
# NON-NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS (NNRTIs)

- Inhibit reverse transcriptase—the enzyme responsible for turning HIV RNA into DNA
- Prevents virus from replicating
- Delavirdine (Rescriptor®)-3x daily
- Nevirapine (Viramune®)-BID
- Efavirenz (Sustiva®)-daily
- Etravirine (Intelence®)-2x daily



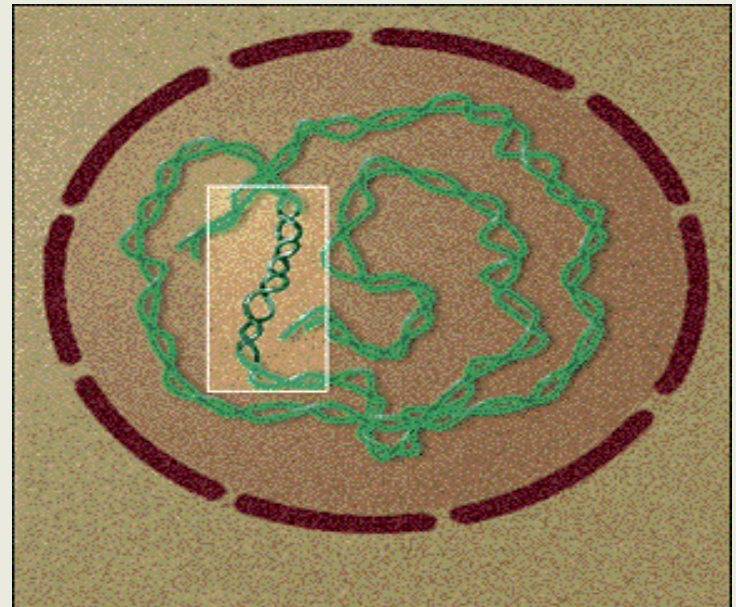
# NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS (NRTIs)

- Inhibit reverse transcriptase. Drug binds to the enzyme at a different place than the NNRTIs
- **Combivir- bid**



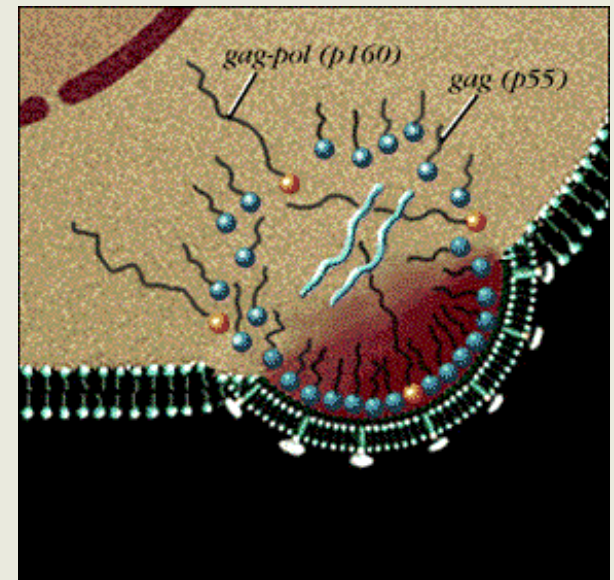
# INTEGRASE INHIBITORS

- Newest class of drugs that work within the cell nucleus.
- Blocks viral DNA and keeps HIV from binding to the host cell DNA.
- Prevents viral replication.
- **Raltegravir (Isentress) – 1 to BID**



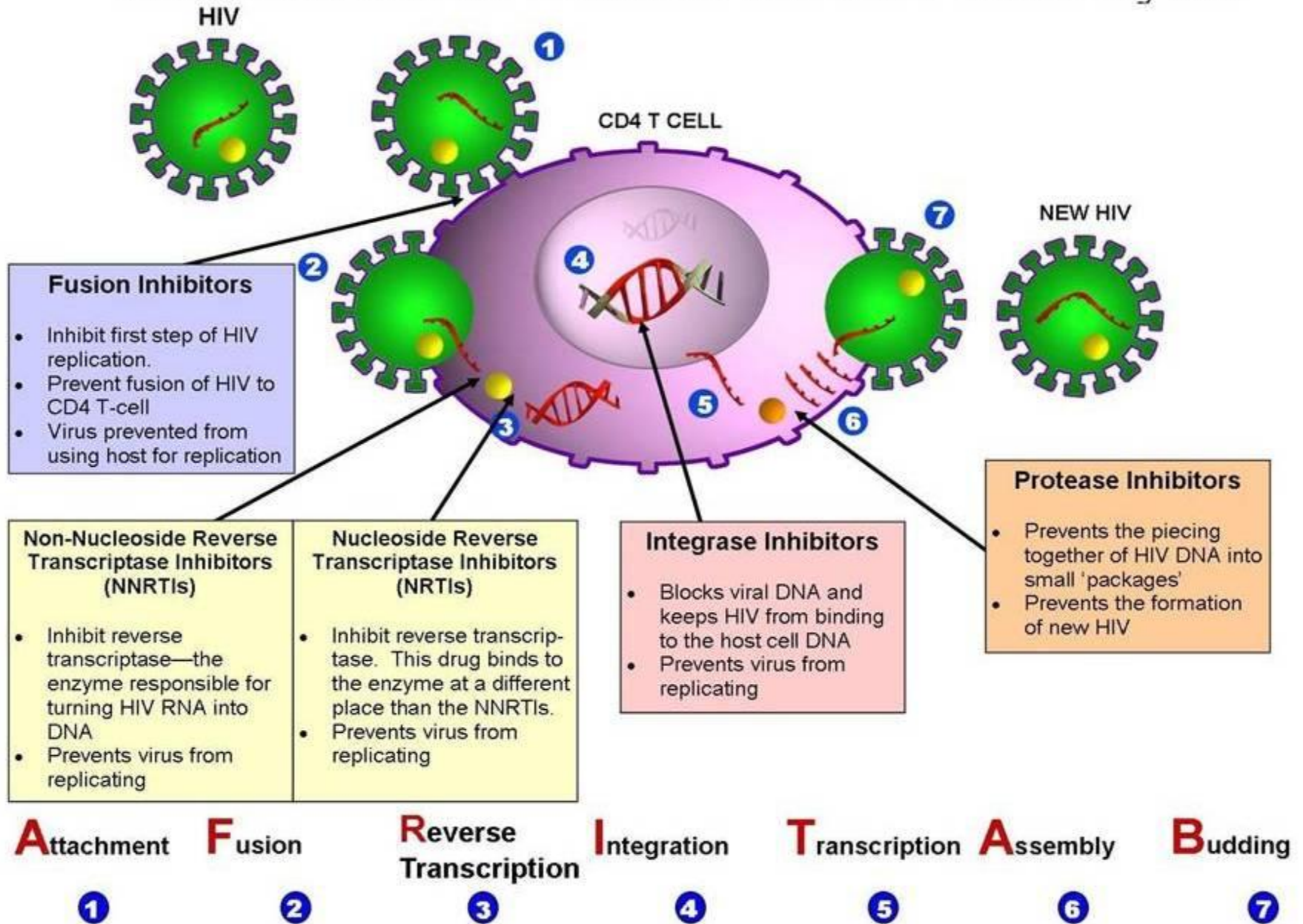
# PROTEASE INHIBITORS

- Prevent the piecing together of HIV DNA into small ‘packages’
- Prevents formation of new HIV
- Fosamprenavir (Lexiva®)-1 to bid
- Indinavir (Crixivan®)-tid
- Saquinavir (Invirase®, Fortovase®)-2 to 3x
- Lopinavir/ritonavir (Kaletra®)-1 to bid
- Atazanavir (Reyataz®)-daily
- Nelfinavir (Viracept®)-2 to 3x
- Tipranavir (Aptivus®)-
- Norvir(Ritonavir®)-1 to bid
- Agenerase (Amprenavir®)-1 to bid
- Aptivus (Tipranavir®)- 1 to bid
- Prezista (Darunavir®)- 1 to bid





# Medications at Work in the HIV Life Cycle



# Goals Of Therapy

- Suppress HIV VL to  $<50$  copies/ml for as long as possible
- Improve quality of life
- Preserve medications for future use
- Restore immune function





# Adherence



# Adherence

## What is Adherence?

- How closely you follow a prescribed treatment regimen
- Partnership between patient and provider
- It is a skill to be learned
- Client must be able to do the following to be adherent to their therapy:
  - Understand the regimen
    - The Who, What, When, Where, Why? of treatment
  - Believe they can adhere
  - Remember to take medications
  - Integrate medications into current lifestyle
  - Problem-solve changes in schedule and routines



## Adherence

### Why is adherence so important?

- Affects how well ARVs decrease VL and increase CD4
- Missing meds allows for replication of the virus
- Prevents drug resistance



# Adherence

## Probes for Assessing Adherence

- What is the reason you are taking this drug?
- How do you take this medication?
- Are you taking this medication with food?
- Where did you receive information about this medication?
- What do you use to help you remember to take your medication?
- What do you do when you miss a dose?
- What problems have you encountered while taking this medication?



# Adherence

## What tools can peers use to support adherence with clients?

- Self-monitoring (pill boxes, tracking booklets)
- Location of pill boxes
- Create individual adherence plan
- Develop problem-solving skills
- Habit building/cueing (integrating adherence into daily routines)
- Reinforcement (accountability coach, reviewing lab values)
- Incentives (better health, staying in relationships, connecting to values)
- Electronic reminders (Cadex watches, pagers, cell phones)
- Pharmacy can automatically refill medications
- Research on the medication options and a lengthy discussion with your doctor
- Reduced pill burden
- Scheduling medications based on dietary requirements, such as taking them at snack times or when your stomach is empty
- Scheduling particular dates monthly on the calendar to request refills of medications
- Planning ahead if you are going to be out of town to ensure you have sufficient medications
- There is no “gold standard” or consensus on the best interventions to promote adherence to PLWHA



# **Training Demonstrations**



# Training Impact

# Numbers of Peers Trained

PET Site	Number of Peers Trained
Lotus Project	155
Pact Project	181
People to People	170
<b>Total</b>	<b>506</b>

# Who Participates in Our Trainings?(n=364)

<b>Age</b>	
Mean	44 (SD 9.4)
Range	19-70 yrs
<b>Gender</b>	
Female	60%
Male	38%
Transgender	2%
<b>Race Ethnicity</b>	
Black/AA	54%
White	26%
Latino/Hispanic	18%
Other	4%
<b>Did you do paid or unpaid work as a peer in the last 6 months?</b>	
No	47%
Yes	53%

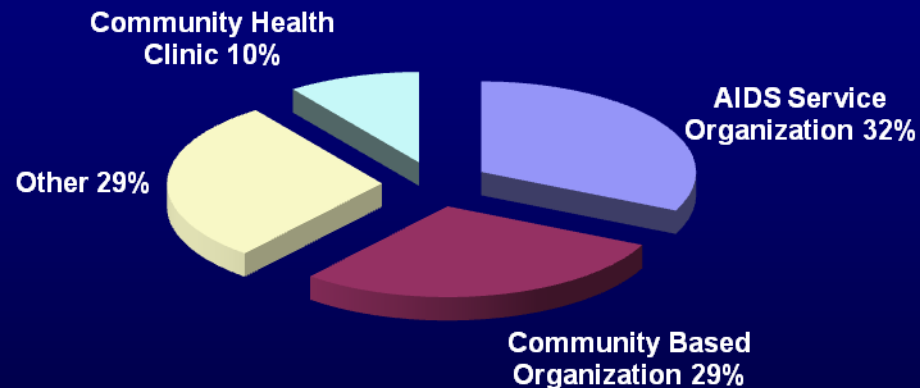
# Who Participates in Our Trainings?

<b>Years with HIV</b>	
Mean	11.4 (SD 6.3)
Range	<1 year to 27 years
<b>Sexual Orientation</b>	
Heterosexual	70%
Bisexual	10%
Gay/Lesbian	20%

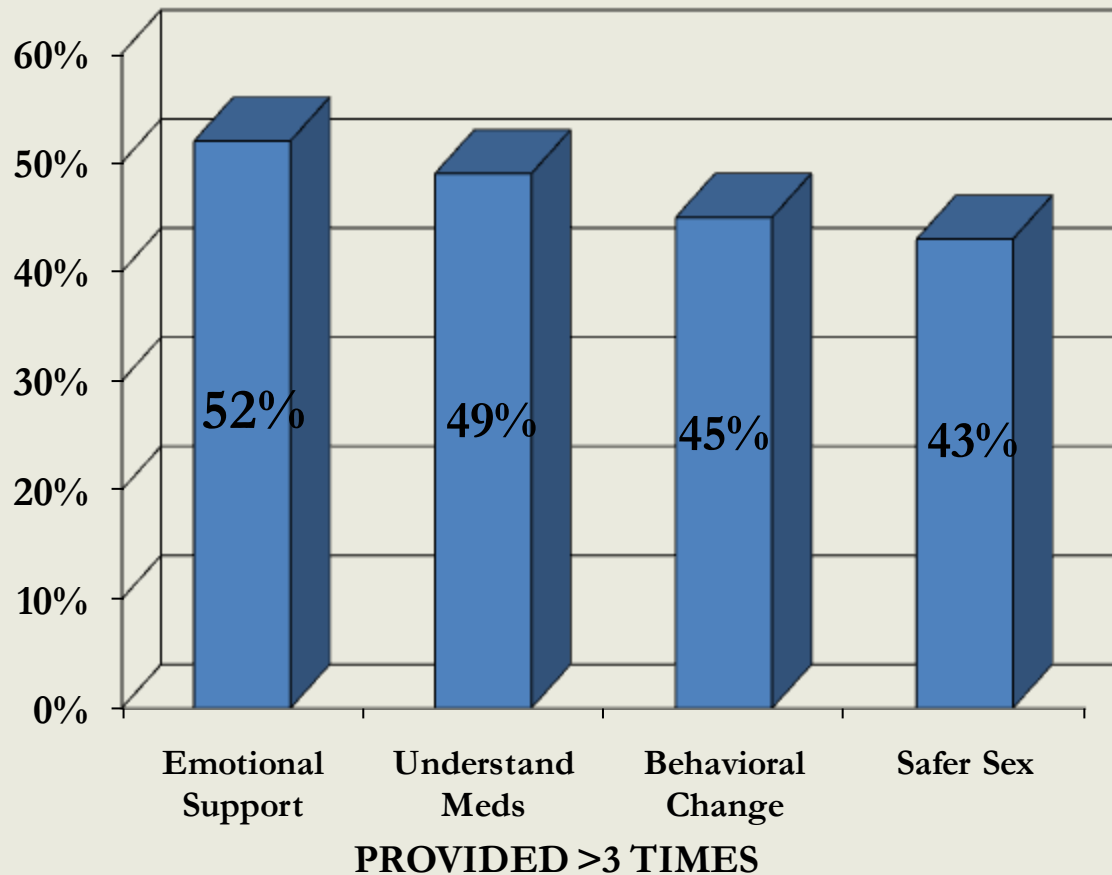
# Did you work or volunteer in the last 6 months to help PLWHA?

	Baseline	6 Month Assessment
No, I didn't work or volunteer	41%	33%
Yes, I did unpaid work	37%	41%
Yes, I did paid work	22%	27%

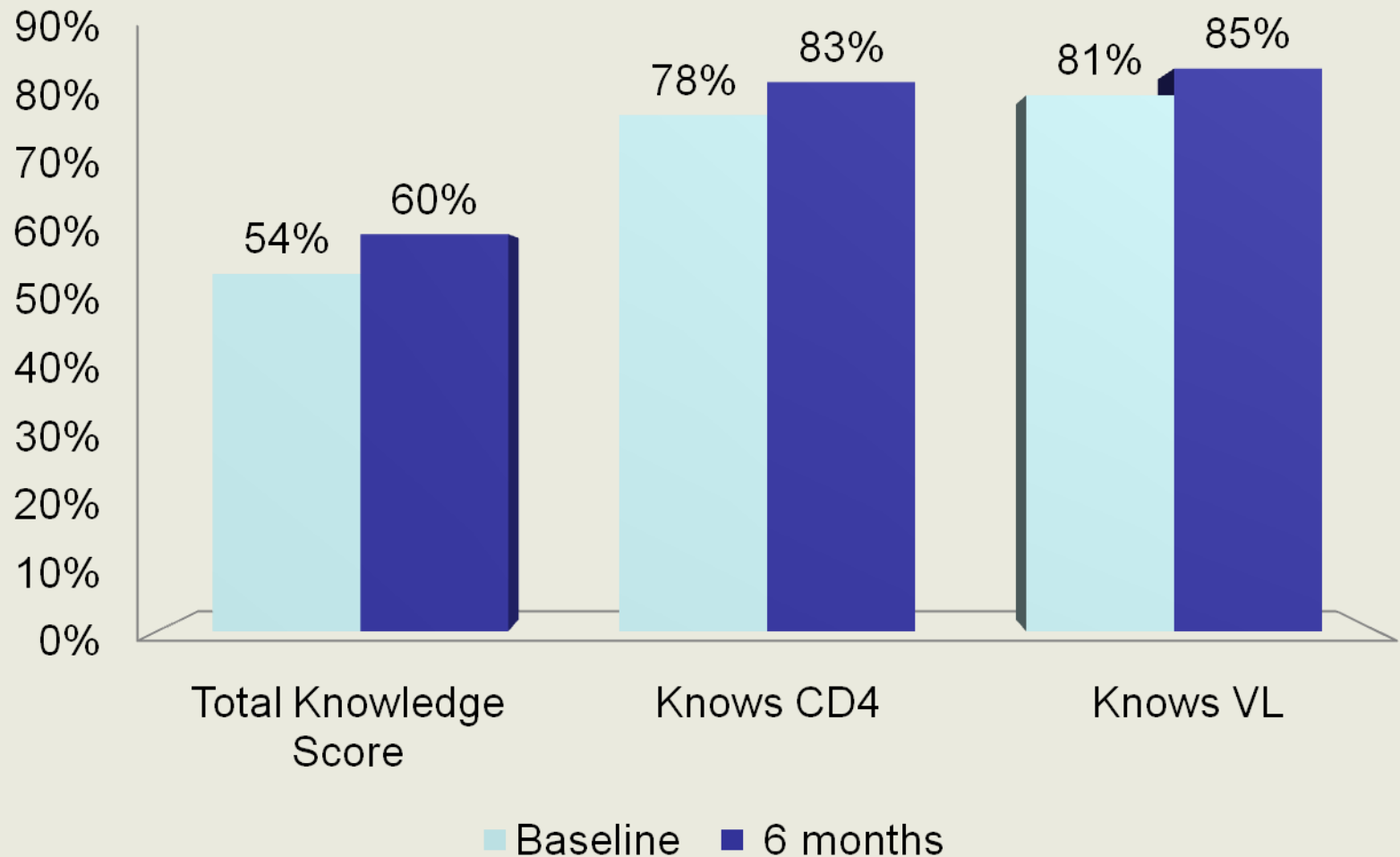
# Top Organizations where peers work or volunteer at the time of 6 month interview



# Most Prevalent Peer Services at 6 Month Follow Up



# Peer Outcomes: Changes in HIV Knowledge & Literacy





# Skill Development

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“We had a candlelight service ceremony where we lit each candle and everybody began to talk about what we are dealing with as HIV infected women... there is something about when you can talk to someone that I can identify with you, not from a book level...I was able to do the candlelight with a group of women that were single mothers and so I was able to share that.”

## Impact on client's life

- “...She give me tips on how to take [my meds]...take it with food, better to take it with something to drink...the bad taste...I take my medicine better than the way I was taking it...”
- “I found out all the details [of HIV]....I knew HIV was something people had but I didn't know how they cared for themselves or how they could get it, how it's transferred... I didn't know any of that until I sat down with [my peer]...”
- “ ...I know if I work long enough with [my peer] she can show me the tricks how to reach out to other women like me...how to go out and gain people to come and not be ashamed of their status, I would like to help somebody...”

# Plans for Future Study

- Regional workshops & web seminars to build the capacity of organizations to implement peer programs
- Build the capacity of organizations to train peers (TOT)

# Thank you !

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