



**World AIDS Day 2010**  
"Universal access and human rights"

**WORLD  
AIDS  
DAY**

**PROTECT YOURSELF AND OTHERS  
FROM HIV INFECTION**



**ACT  
BE AWARE**

A digital clock display on a black background. The time shown is 00:00:09:30. The first four digits (00:00) are in grey, and the last four digits (09:30) are in red. The digits are in a standard seven-segment font.

DAYS

HOURS

MINUTES

SECONDS

Every 9½ minutes, someone in the U.S. is infected with HIV

*The Kinsey Institute Research Seminar: December 1, 2010, World AIDS Day*

# Condom-use errors and problems: A decade of research by The Kinsey Institute Condom Use Research Team

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# A joint project of:

The Kinsey Institute for Research in Sex, Gender, and  
Reproduction, Indiana University, Bloomington

and

Rural Center for AIDS/STD Prevention, Indiana  
University, Bloomington

the  
**KINSEY**  
institute



**RURAL CENTER for  
AIDS/STD PREVENTION**

*A Joint Project of*

INDIANA UNIVERSITY, UNIVERSITY OF COLORADO,  
AND UNIVERSITY OF KENTUCKY

# Research Rationale

- Public health officials have recommended the consistent and correct use of condoms as an important strategy to reducing the risk of STI, including HIV infection.
- Failure to use condoms correctly could reduce their efficacy and cause breakage and slippage, meaning that condom failure could be more often caused by user errors than product failure.

# The Decade of Research

- In 2000, a team of five researchers affiliated with The Kinsey Institute for Research in Sex, Gender and Reproduction (KI) and the Rural Center for AIDS/STD Prevention (RCAP), both at Indiana University, Bloomington, began internally and federally funded studies on condom-use errors and problems.
- CURT has published more than 25 empirical articles pertaining to application errors and use problems among condom users during penile-vaginal and penile-anal intercourse.
- For some CURT studies, other researchers collaborated with the five-member, core condom research team.
  - ▣ See the KI ([www.kinseyinstitute.org](http://www.kinseyinstitute.org)) and RCAP ([www.indiana.edu/~aids](http://www.indiana.edu/~aids)) websites for a listing of CURT articles which cite the collaborating authors on the various CURT studies.

## Percent of College Students Reporting the Error or Problem Occurred At Least Once During Sex in the Past 3 Months

Error/Problem	Male appliers*	Female Appliers#
Put condom on after starting sex	43%	51%
Did not hold tip to leave space at end of condom	40%	46%
Put condom on the wrong side up	30%	30%
Used condom without lubricant	19%	26%
Took condom off before sex was over	15%	15%
Condom broke	29%	19%
Condom slipped off during sex	13%	19%
Lost erection before condom was put on	22%	14%
Lost erection after condom was on and sex had begun	20%	20%

\*Sexually Transm Dis, 2002

#J Amer Medical Women's Assoc., 2003

**Prevalence of condom-use errors and problems among 278 men attending a STD clinic** (limited to the last 3 times condoms were used for PVI in past 3 months) \*calculated using the total # of condom acts (834) as the denominator  
*Int J STD & AIDS, 2008*

Type of Error/Problem	Episodes (%)*	Men (%)
Did not check for visible damage before use	67	75
Did not leave space for receptacle tip	30	38
Placed condom on upside down then turned it over	14	29
Removed condom before sex was done	13	28
Put condom on after sex had begun	8	19
Condom contacted sharp object before or during sex	6	10
Used an oil-based lubricant	4	7
Either partner experienced problem with fit or feel	19	30
Condom broke during sex	15	31
Lost erection during sex	14	26
Lost erection while applying condom	9	28
Condom slipped off during withdrawal	8	16
Condom slipped off during sex	6	14



# CURT Research Outcomes

- The work of CURT has led to multiple insights pertaining to behavioral interventions of HIV/STD risk behavior.
- Findings informed the development of two theory-based interventions designed to promote consistent and correct condom use and that “sexualize” condoms: *Focus on the Future* and *The Kinsey Institute<sup>®</sup> Homework Intervention Strategy*.

# MCUES\*

This 16-item assessment follows the CURT system.

7 problems are assessed:

- Erection loss during application
- Erection loss during sex
- Breaking
- Slipping during sex
- Slipping during withdraw
- Fit and feel problems
- Problems with fit and feel expressed by partner

\*In Handbook of Sexuality-Related Measures (3<sup>rd</sup> edition)

# Sample FCUES item

For the last three times you used a condom for \_\_\_\_\_ intercourse, did you let it contact sharp jewelry, fingernails, piercings, or teeth anytime before or after \_\_\_\_\_ intercourse?

{same CURT system for response options}

## *How aspects of pleasure related to condom use:*

- **Physical pleasure:** male condom exacerbated vaginal dryness and detracted from sensation for many women as well as men
- **Spontaneity and sexual flow:** respondents disliked methods that interrupted the sexual flow, such as condoms
- **Pleasing one's partner:** women in particular wanted to maximize their partner's pleasure by abandoning condom use

# Fit and feel of condoms

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- both men and women reported that condoms can interfere with sensation and sexual arousal as well as feeling of emotional closeness
- issues raised included condoms drying out, condoms causing irritation, and condoms smelling badly

*“Sometimes I have to go through 3 or 4 condoms just, in like, one round... It'll be 30 minutes, 20 minutes, but the inside will dry out. She'll be real wet but the inside of it will dry out...”*

# “Turn-Offs” Study

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- regardless of gender, age, education, and marital status three related turn offs were commonly reported: condoms “just don’t feel right”, condoms decrease ‘my’ sensation, and condoms decrease ‘my partners’ sensation

# “Turn-Offs” Study (cont’d)

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- some of the turn offs e.g., smell have received little attention in previous literature and were reported by over one-third of women and men

# Erection Problems Associated with Condom Use

Condom Associated Erection Problems (CAEP)

- application
- intercourse

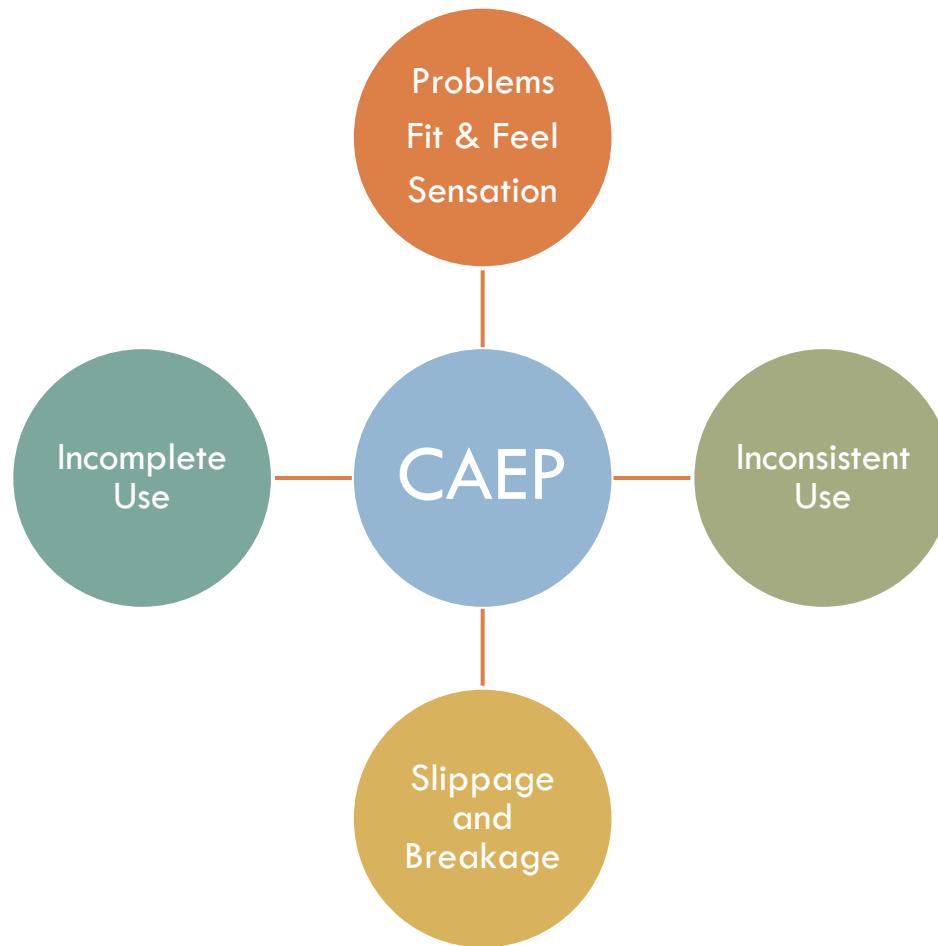


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# Constellation of Risks



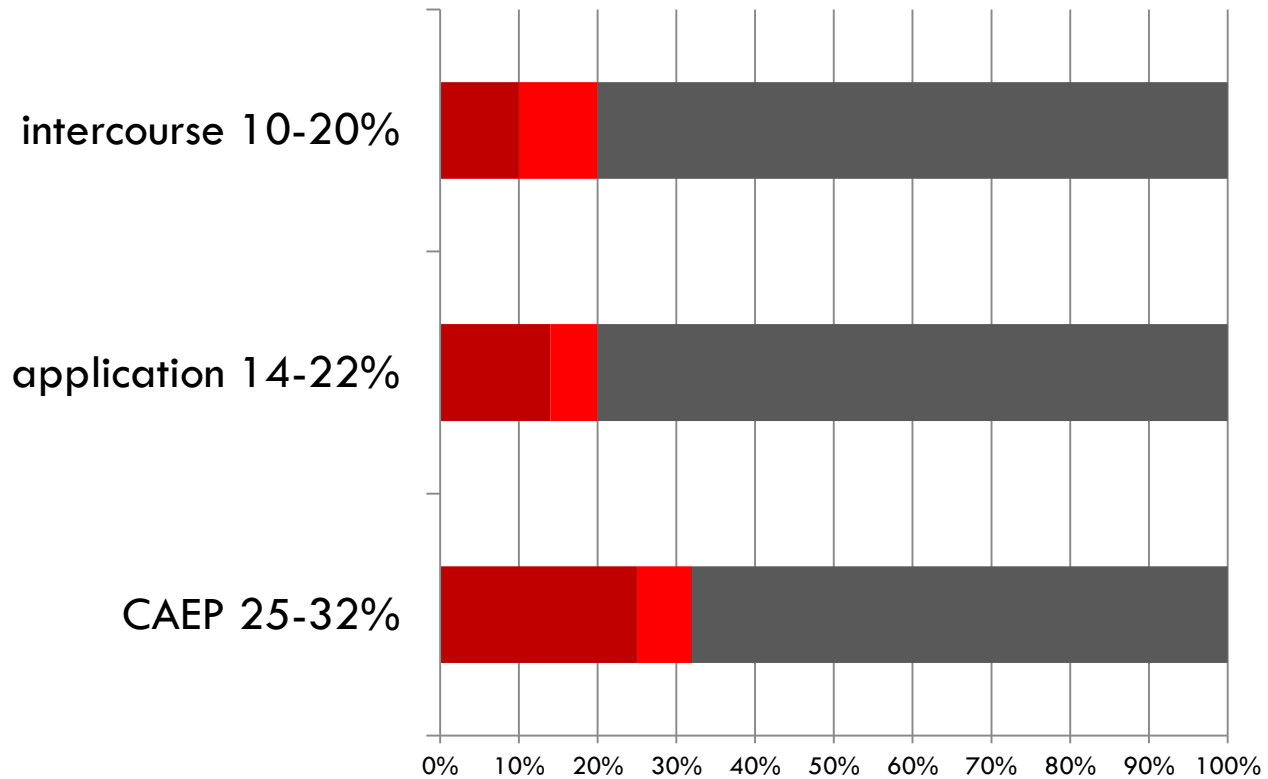
# Important Point

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Men reporting CAEP men  
**are motivated** to use condoms  
but having difficulty doing so

# Common Problem

## □ College Students

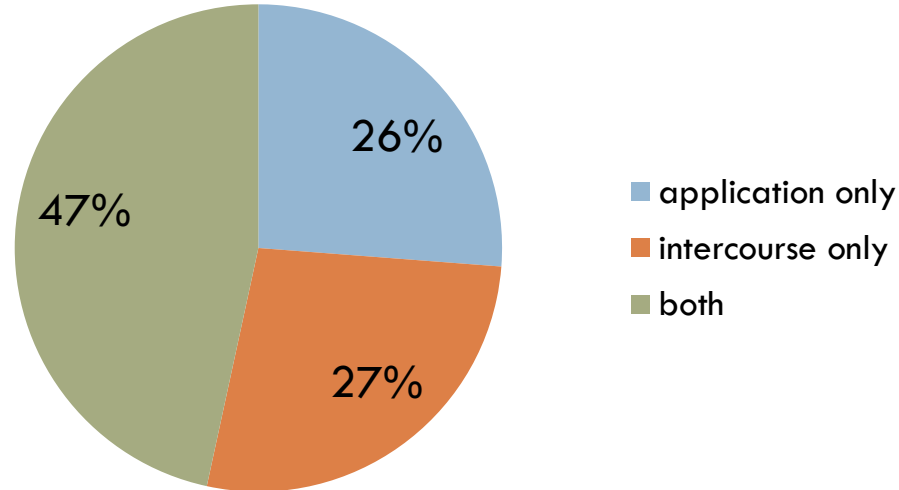


# Men Attending STI Clinic (n=278)

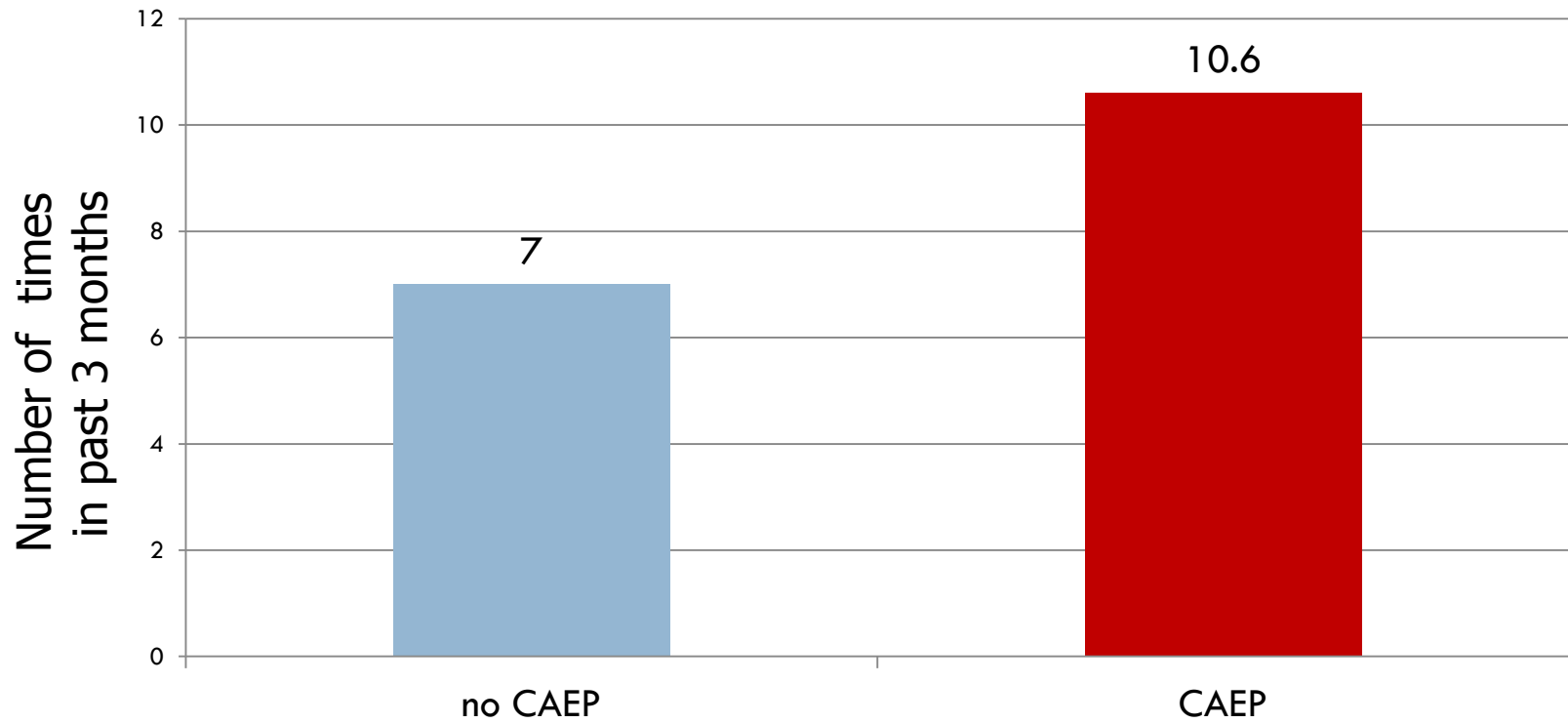
Graham et al., *Sexual Health*, 2006, 3:255-60.

Crosby et al. *Int J STD AIDS*, 2008; 19: 90–93.

- 37.1% of the men reported CAEP on at least one occasion
- Of those

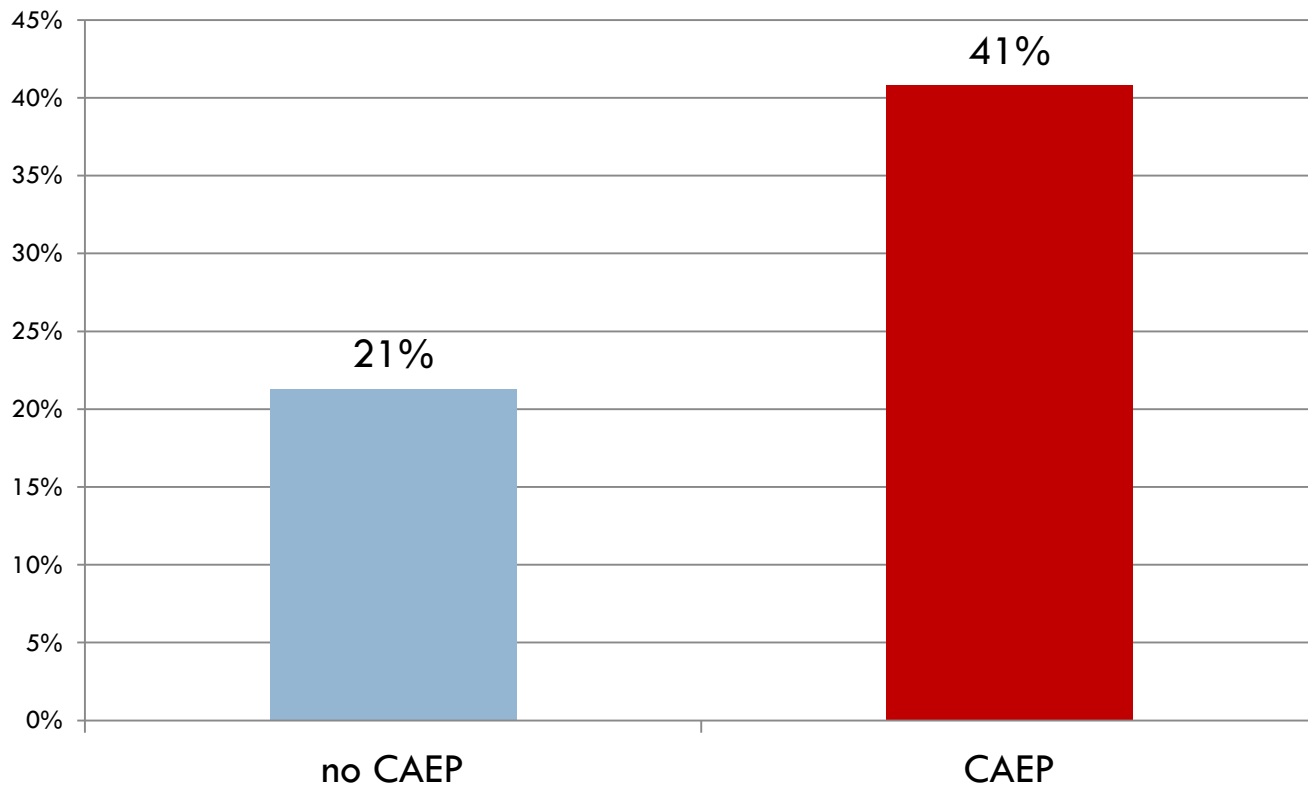


# CAEP associated with more frequent unprotected PVI ( $p = .04$ )



# CAEP associated with Early Removal

( $p = .001$ )



# Predictors of Erection Loss

Multivariate logistic regression controlling for age

- Low self-efficacy to use condoms correctly AOR=2.8
- Problems with fit and feel AOR=2.2
- 3 or more sexual partners in past 3 months AOR=1.9

# Last Condom Use Event: PDE5i Use/Non-Use Comparison

- logistic regression models controlling for age, marital status, and having children (n=705, age 26-70)
- Compared to non-users, PDE5i users were:
  - 3X more likely to report erection loss during sex while using a condom
  - 5X more likely to report the condom slipped off during sex
  - 2X more likely to remove condoms before sex was over
  - trend problems with condom “fit”
- *Therefore, assuming that PDE5i will overcome CAEP may be erroneous.*

# CAEP associated with:

- ▣ More general problem with erections even when condom not used.
- ▣ Cognitive factors—worry, distraction
- ▣ Interference with sensation, pleasure, orgasm
- ▣ Condom errors, lack of application skills
- ▣ Breakage, slippage
- ▣ Alcohol & drug use
- ▣ Problems with fit and feel of condoms
- ▣ Partner attitudes, comfort, and arousal

# Summary

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- Interventions to promote consistent and correct condom use need to address erection and arousal issues associated with condom use.