

# “HIV In The Navy and Marine Corps – A Discussion For Health Care Professionals”

2 December 2013



**NAVY AND MARINE CORPS PUBLIC HEALTH CENTER**

PREVENTION AND PROTECTION START HERE

[WWW.MED.NAVY.MIL/SITES/NMCPHC/HEALTH-PROMOTION/PAGES/DEFAULT.ASPX](http://WWW.MED.NAVY.MIL/SITES/NMCPHC/HEALTH-PROMOTION/PAGES/DEFAULT.ASPX)

**The views expressed in this briefing are those of the author and do not necessarily reflect the official policy or position of the Department of the Navy, Department of Defense, nor the U. S. Government**

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<http://www.med.navy.mil/sites/nmcphc/health-promotion/reproductive-sexual-health/Pages/reproductive-and-sexual-health.aspx>

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# HIV

- Within a few weeks of being infected with HIV, some people develop flu-like symptoms that last for a week or two, but others have no symptoms at all.
- People living with HIV may appear and feel healthy for several years. However, even if they feel healthy, HIV is still affecting their bodies.
- AIDS is the late stage of HIV infection, when a person's immune system is severely damaged and has difficulty fighting diseases and certain cancers.
- People can now live for decades with HIV before they develop AIDS because of “highly active” combinations of medications that were introduced in the mid 1990s.
- Military service members:
  - Tested every 2 years; and within 12 months of some deployments
  - If positive:
    - Retained on active duty so long as they are healthy
    - Evaluated every 6 months
    - Assignment restrictions vary by service



# HIV

- No vaccine for HIV infection
- No cure for HIV infection
- Post-exposure Prophylaxis (PEP)
  - Within 72 hours can reduce risk
  - Occupational exposure
  - Sexual exposure
- Pre-exposure Prophylaxis (PrEP)
  - Can reduce risk of HIV infection in high-risk people / partners
  - Concerns / considerations:
    - Cost
    - On-going Prevention and Therapy Counseling
    - Daily Truvada adherence
    - Risk implications (couples seem to not increase risk)



# HIV

- HIV cannot reproduce outside the human body.
- It is not spread by:
  - Air or water
  - Insects, including mosquitoes. Studies conducted by CDC researchers and others have shown no evidence of HIV transmission from insects
  - Saliva, tears, or sweat. There is no documented case of HIV being transmitted by spitting
  - Casual contact like shaking hands or sharing dishes.
  - Closed-mouth or “social” kissing

**TABLE. Estimated per-act relative risk for a person without human immunodeficiency virus (HIV) infection acquiring HIV infection, based on sex act<sup>†</sup> and condom use<sup>‡</sup>**

Risk factor	Relative risk for a person without HIV infection of acquiring HIV infection
<b>Sex act</b>	
Insertive fellatio <sup>§</sup>	1
Receptive fellatio <sup>§</sup>	2
Insertive vaginal sex <sup>¶</sup>	10
Receptive vaginal sex <sup>¶</sup>	20
Insertive anal sex <sup>¶</sup>	13
Receptive anal sex <sup>¶</sup>	100
<b>Condom use</b>	
Yes <sup>**</sup>	1
No <sup>**</sup>	20



## Diagnoses of HIV Infection among Adults and Adolescents, by Transmission Category, 2011—United States and 6 Dependent Areas

Transmission Category	No.	%
Male-to-male sexual contact	30,896	61.8
Injection drug use (IDU)	3,836	7.7
Male-to-male sexual contact and IDU	1,423	2.9
Heterosexual contact <sup>a</sup>	13,801	27.6
Other <sup>b</sup>	51	0.1
<b>Total</b>	<b>50,007</b>	<b>100.0</b>

Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays and missing transmission category, but not for incomplete reporting.

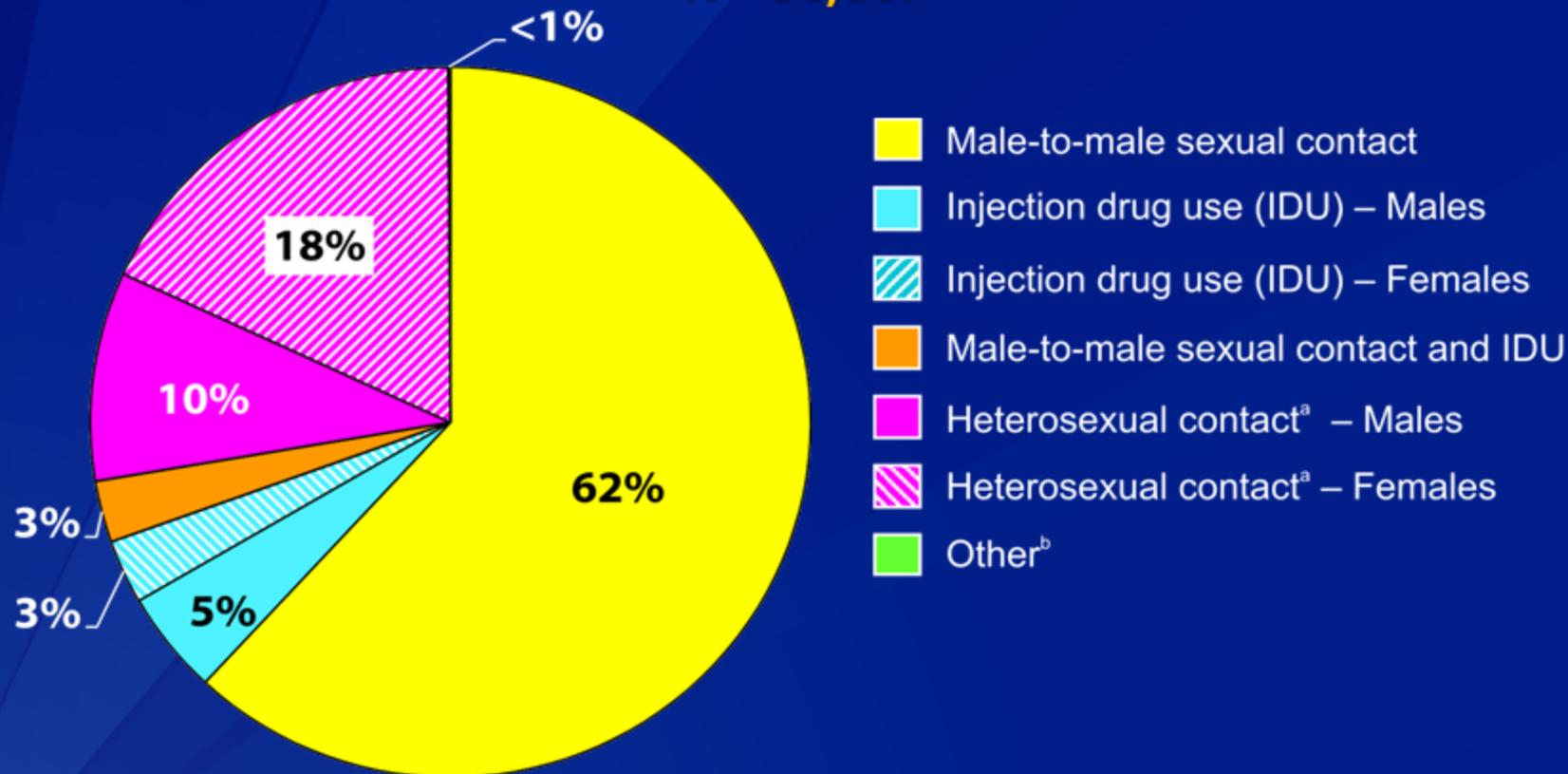
<sup>a</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>b</sup> Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.



# Diagnoses of HIV Infection among Adults and Adolescents, by Transmission Category, 2011—United States and 6 Dependent Areas

N = 50,007



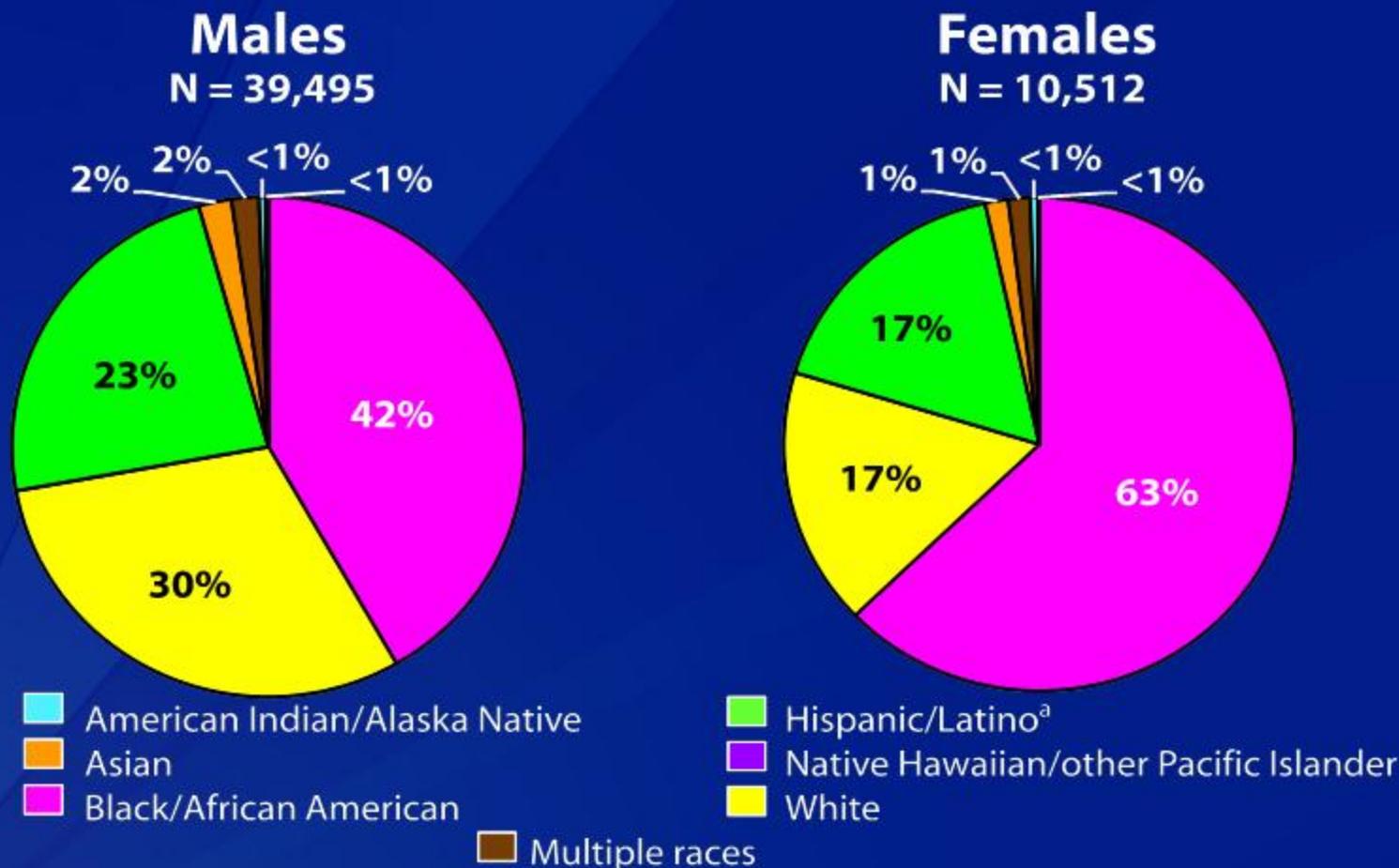
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# Diagnoses of HIV Infection among Adults and Adolescents, by Sex and Race/Ethnicity, 2011—United States and 6 Dependent Areas

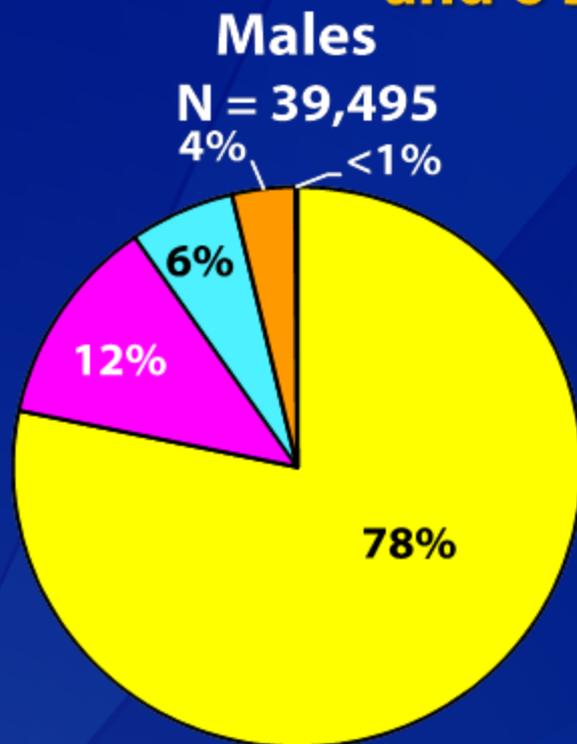


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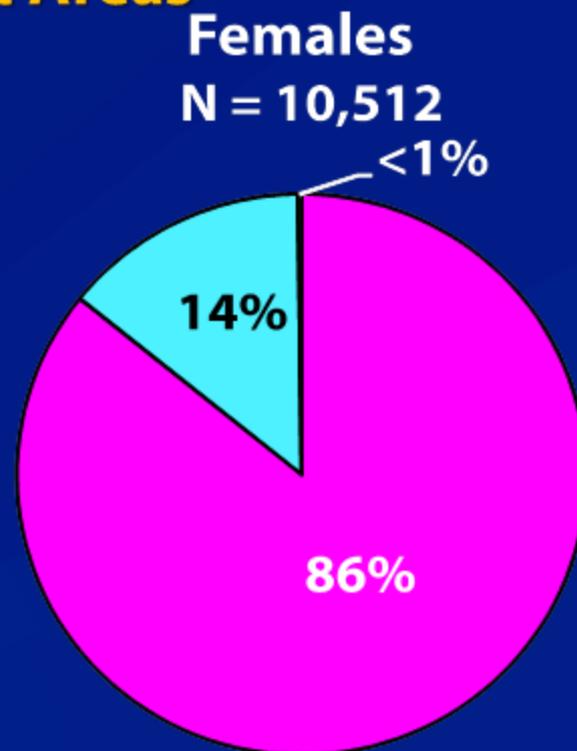
<sup>a</sup> Hispanics/Latinos can be of any race.



# Diagnoses of HIV Infection among Adults and Adolescents, by Sex and Transmission Category, 2011—United States and 6 Dependent Areas



- Male-to-male sexual contact
- Injection drug use (IDU)
- Male-to-male sexual contact and IDU



- Heterosexual contact<sup>a</sup>
- Other<sup>b</sup>

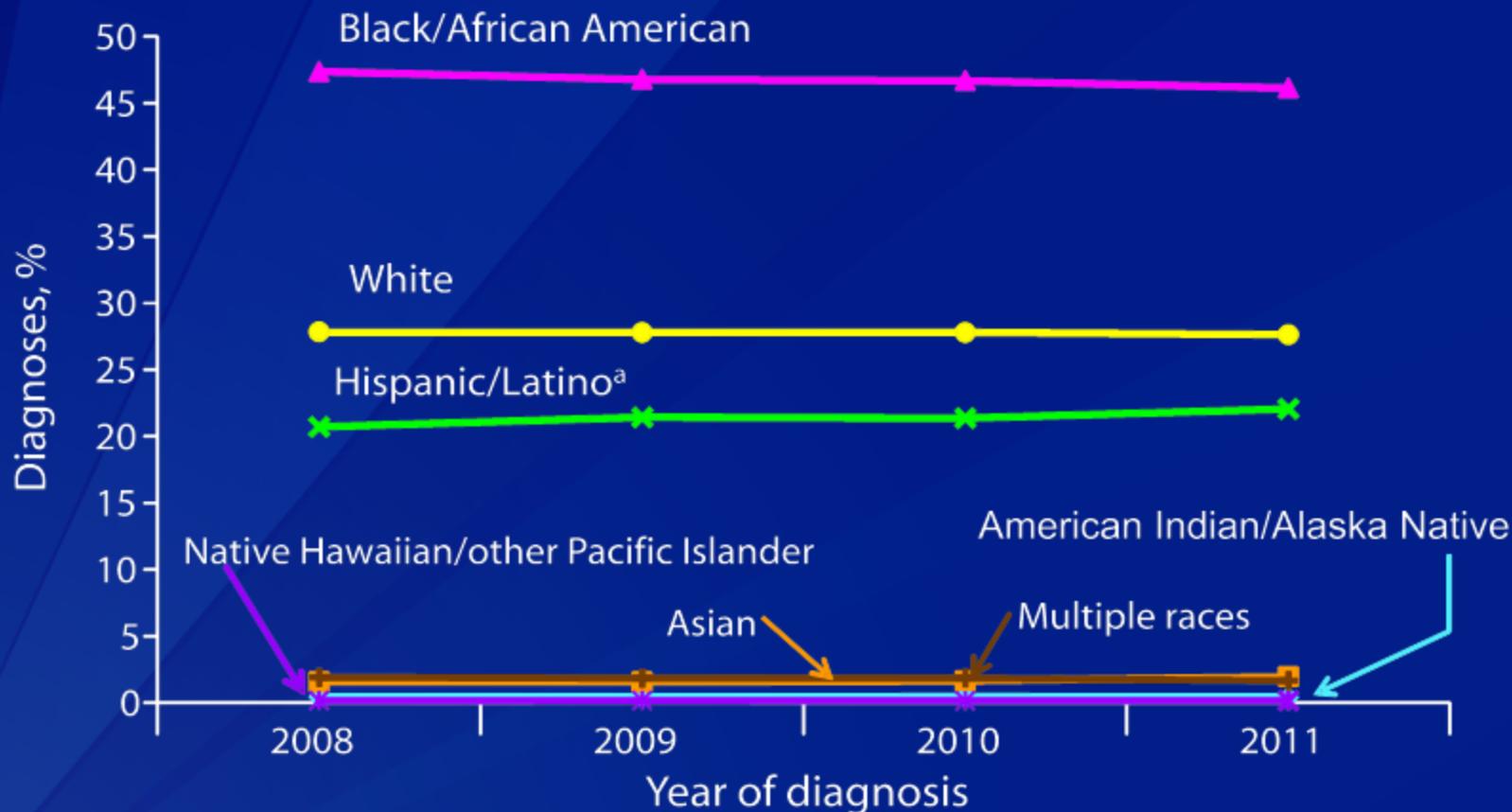
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## Diagnoses of HIV Infection among Adults and Adolescents, by Race/Ethnicity, 2008–2011—United States and 6 Dependent Areas

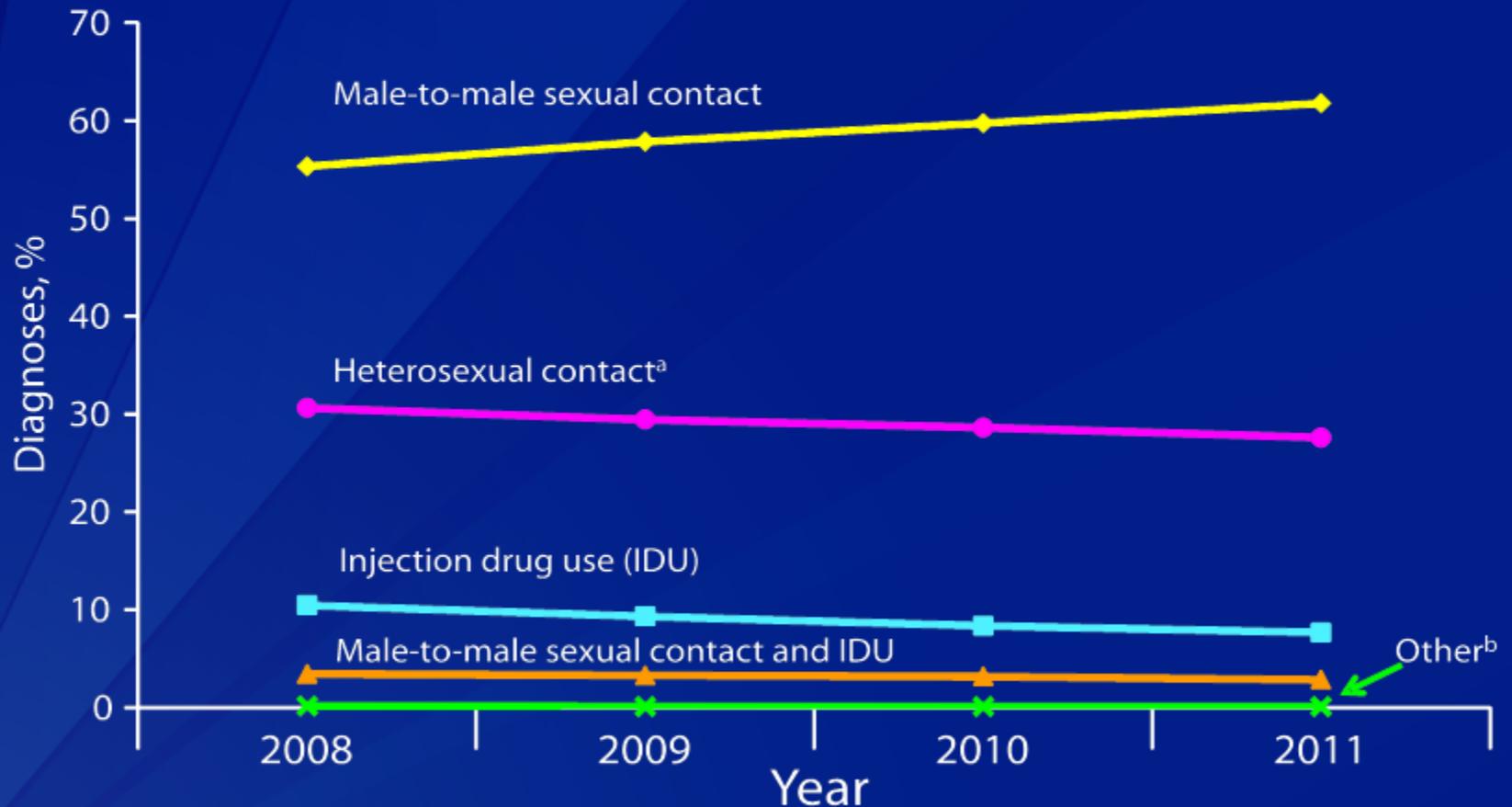


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## Diagnoses of HIV Infection among Adults and Adolescents, by Transmission Category, 2008–2011—United States and 6 Dependent Areas

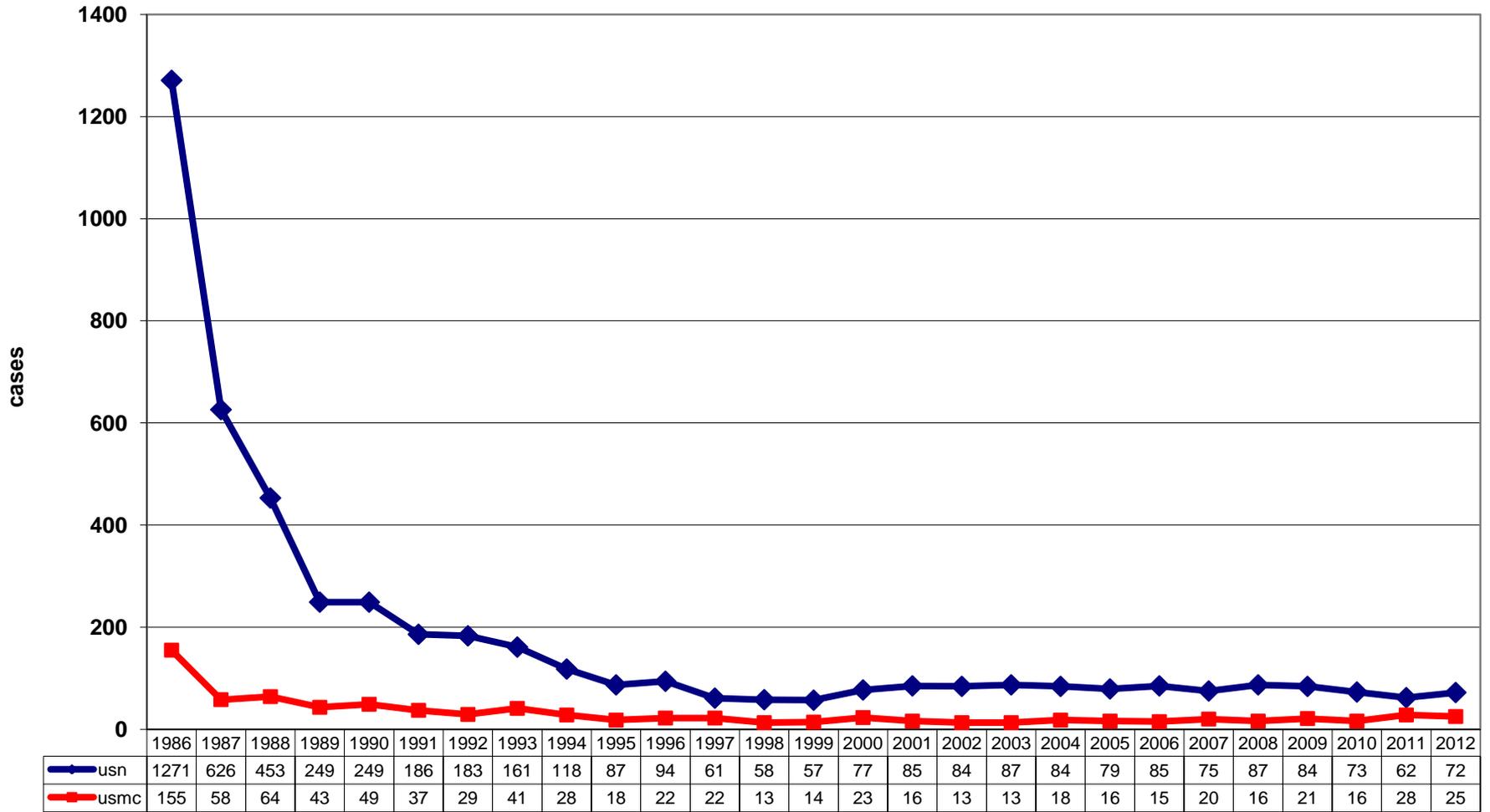


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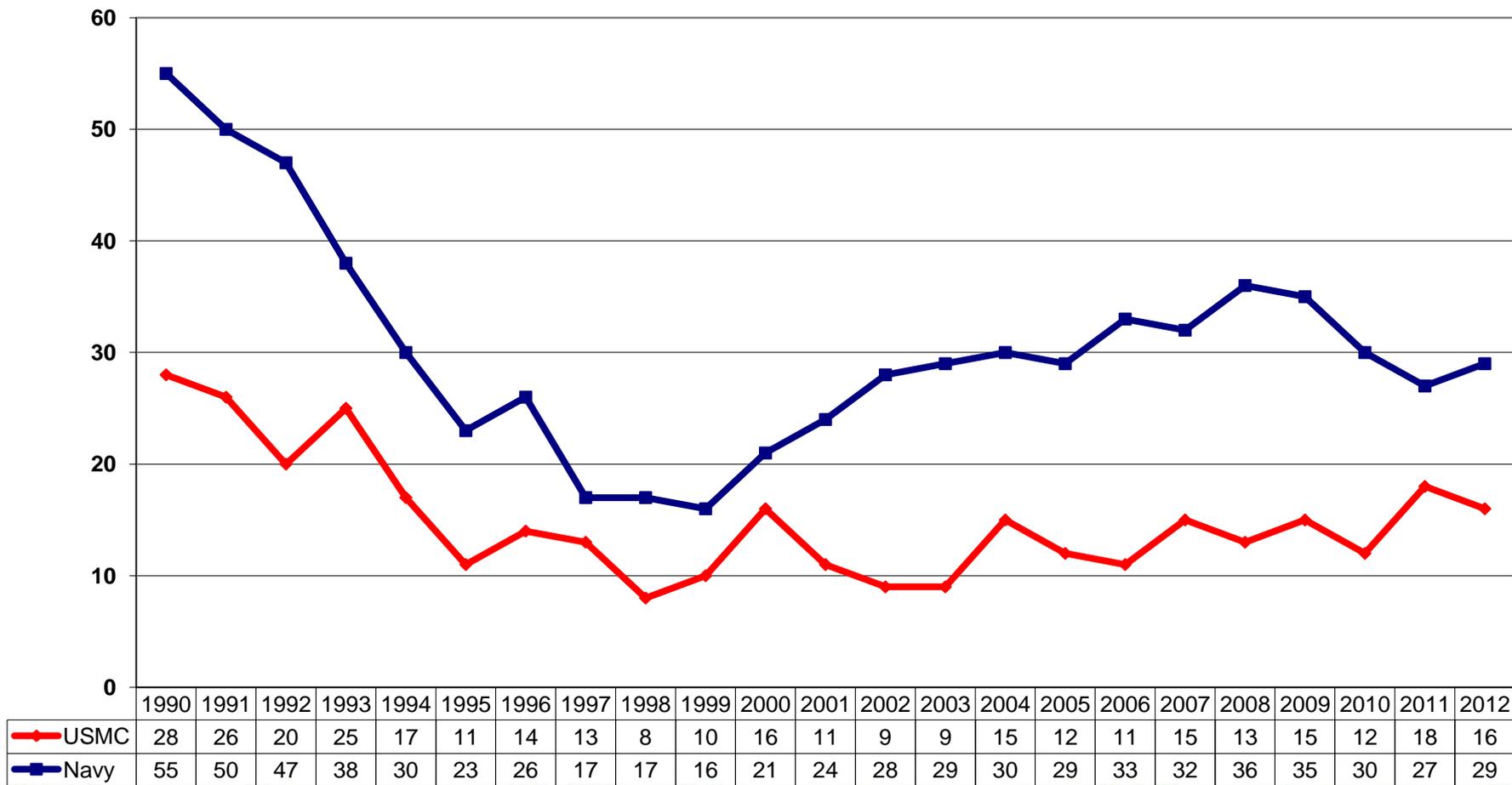
Navy and Marine Corps Public Health Center  
**Newly Identified HIV Positive Active Duty Sailors and Marines by Year**  
 source: Navy Bloodborne Infections Management Center unpublished data



Source: NMCPHC



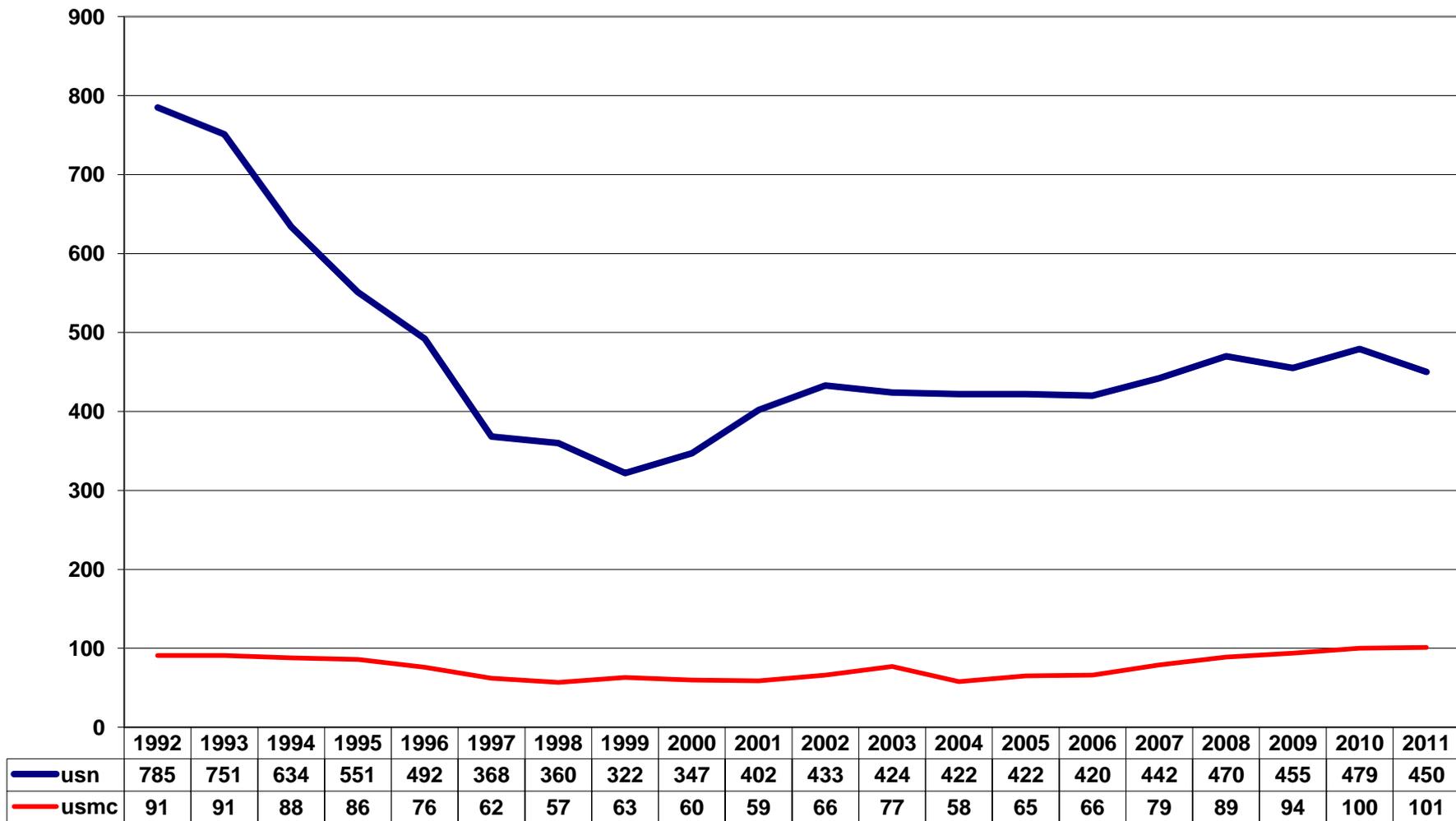
Navy and Marine Corps Public Health Center  
**HIV Seroconversion Rates per 100,000 Active Duty Sailors and Marines Tested**  
 source: Navy Bloodborne Infections Management Center, unpublished data



Source: NMCPHC



## Navy and Marine Corps Public Health Center HIV Positive Sailors and Marines on Active Duty by Year



Source: NMCPHC



# HIV (DoN) - 2012

- HIV sero-conversion rates among **all sailors** increased from 27 to 30 per 100K
  - 72 total cases
  - 3 females
  - 3 officers
  - Sero-conversion **rates; enlisted male sailors**, per 100K tested:
    - Black = 140
    - Hispanic = 4
    - White = 26
    - Other = 34
- HIV sero-conversion rates among **all marines** decreased from 18 to 16 per 100K
  - 25 total cases
  - 0 females
  - 0 officers
- HIV Home Testing Kit (OraQuick) now FDA approved – may help more at-risk people learn about their infection sooner. Confirmatory test needed.



# HIV Prevention Strategies/Options and Messages

A = Abstain or Delay (or Outer-course)

B = Be Faithful (monogamy)

C = Condoms / Contraception

D = Decrease number of partners

E = Evade high risk sexual **acts** and **partners**

- Unprotected Receptive anal sex = highest risk
- Unprotected Withdrawal = riskier than condom use
- Sero-sorting not a recommended strategy

F = Find and refer sexual partners for testing

G = Get tested for HIV / STIs routinely

H = HAART reduces but does not eliminate infectivity (Highly Active Anti-retrovirals)

- Post-exposure prophylaxis with 72 hrs
- Pre Exposure Prophylaxis

I = Injecting drugs / sharing needles can harm you and partners

J = Junk like alcohol / drugs harms your health / can cloud judgment

K = Know and Tell HIV status - ask partner; tell partner

L = Let them know you can't donate blood

V = Vaccination for HAV, HPV, HPV



# Condom Effectiveness

“Latex condoms, when used consistently and correctly, are highly effective in preventing the sexual transmission of HIV, the virus that causes AIDS.

In addition, consistent and correct use of latex condoms reduces the risk of other sexually transmitted diseases, including diseases transmitted by genital secretions, and to a lesser degree, genital ulcer diseases.

Condom use may reduce the risk for genital Human Papillomavirus (HPV) infection and HPV-associated diseases, e.g., genital warts and cervical cancer” (CDC, 2009)



**Condoms and STDs:**  
Fact Sheet for Public Health Personnel

Consistent and correct use of male latex condoms can reduce (though not eliminate) the risk of STD transmission. To achieve the maximum protective effect, condoms must be used both consistently and correctly. Inconsistent use can lead to STD acquisition because transmission can occur with a single act of intercourse with an infected partner. Similarly, if condoms are not used correctly, the protective effect may be diminished even when they are used consistently. The most reliable way to avoid transmission of sexually transmitted diseases (STDs), including human immunodeficiency virus (HIV), are to abstain from sexual activity or to be in a long-term mutually monogamous relationship with an uninfected partner. However, many infected persons may be unaware of their infectious because STDs are often asymptomatic or unrecognized.

The following presents evidence concerning the male latex condom and the prevention of STDs, including HIV, based on information about how different STDs are transmitted, the physical properties of condoms, the anatomic coverage or protection that condoms provide, and epidemiologic studies assessing condom use and STD risk. You may find this update previous CDC fact sheets on male condom effectiveness for STD prevention by incorporating additional evidence-based findings from published epidemiologic studies.

**Sexually Transmitted Diseases, Including HIV Infection**

Latex condoms, when used consistently and correctly, are highly effective in preventing the sexual transmission of HIV, the virus that causes AIDS. In addition, consistent and correct use of latex condoms reduces the risk of other sexually transmitted diseases (STDs), including diseases transmitted by genital secretions, and to a lesser degree, genital ulcer diseases. Condoms may also reduce the risk for genital human papillomavirus (HPV) infection and HPV-associated diseases, e.g., genital warts and cervical cancer.

There are two primary ways that STDs are transmitted. Some diseases, such as HIV infection, gonorrhea, chlamydia, and trichomoniasis, are transmitted when infected secretions from genital, anal, or rectal mucous membranes (such as the urethra, vagina, or cervix), in contact, genital ulcer diseases (such as genital herpes, syphilis, and chancroid), and human papillomavirus (HPV) infection are primarily transmitted through contact with infected skin or mucosal surfaces.

Laboratory studies have demonstrated that latex condoms provide an essentially impermeable barrier to provide the ease of STD pathogen.

**Chemical and mechanical basis for protection.** Condoms can be expected to provide different levels of protection for various STDs, depending on differences in how the diseases are transmitted. Condoms block transmission and acquisition of STDs by preventing contact between the condom-wearer's penis and a partner's skin, mucosa, and genital secretions. A greater level of protection is provided for the diseases transmitted by genital secretions. A lower degree of protection is provided for genital ulcer diseases and HPV, because these infections also may be transmitted by exposure to skin (e.g., infected skin or mucosal surfaces) that are not covered or protected by the condom.

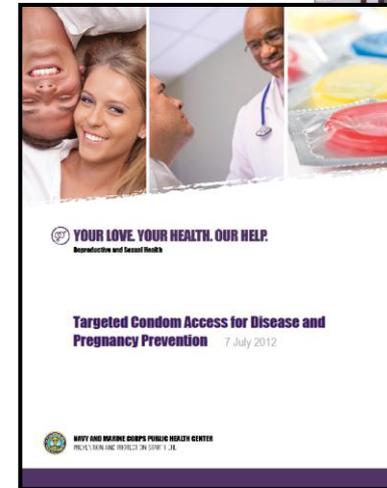
Epidemiologic studies seek to measure the protective effect of condoms by comparing risk of STD transmission among condom users with users who are engaging in sexual intercourse. Accurately estimating the effectiveness of condoms for prevention of STDs.

DEPARTMENT OF HEALTH AND HUMAN SERVICES | Centers for Disease Control and Prevention | Page 1



# Condom Distribution as a Structural Level Intervention

- Structural-level condom distribution interventions or programs (CD programs) are efficacious in increasing condom use, increasing condom acquisition or condom carrying, promoting delayed sexual initiation or abstinence among youth, and reducing incident STIs.
- Interventions that combined CD programs with additional individual-, group- or community-level activities showed the greatest efficacy. One possible reason for this is that these different modalities address different behavioral determinants as well as other prevention needs of individuals in affected communities.
- CD programs were efficacious in increasing condom use among a wide range of populations, including youth, commercial sex workers, adult males, STI clinic patients, and populations in high risk areas.
- SHARP Guideline is available





Health Providers and Professionals    Service Members, Families and Retirees

Deployment Health    Wounded, Ill and Injured    Health Promotion and

Navy and Marine Corps Public Health Center > Health Pro    Wellness

**REPRODUCTIVE AND SEXUAL HEALTH**

**Key Products and Services**

- ▶ Sexual Health and Responsibility Program (SHARP)
  - DoN Sexual Health Indicators
- ▶ Sexual Health Resources
  - Centers for Disease Control and Prevention (CDC) Guidelines
  - Clinical Resources: Treatment, Testing and Screening
  - Condoms
  - Contraception
  - Environmental Health Officers and Preventive Medicine Representatives
  - Family Planning
  - Gay and Bisexual Mens Sexual Health
  - Healthy People 2020 Objectives
  - HIV Evaluation and Treatment Units (HETU)
  - HIV Prevention Resources
  - Human Papillomavirus (HPV) Prevention
  - Lesbian and Bisexual Womens Sexual Health
  - Long Acting Reversible Contraception (LARC)
  - Policies of the Uniformed Services
  - PMT Student Resources
  - Sexually Transmitted Infections
  - STI Patient Management
- ▶ Sexual Health Month

**HIV PREVENTION RESOURCES**

**Facts**

- HIV In-Home Test Kit
- HIV in the U.S.
- HIV - Basic Information Update
- HIV among Women
- HIV among gay and bisexual men
- HIV among youth
- HIV among African Americans
- HIV among Hispanics/Latinos

**Posters**

- HIV Prevention
- HIV Happens
- HIV: Every 4 Days
- HIV Protect Yourself - 1
- HIV Protect Yourself - 2

**Reducing Risk**

- Choosing Safer Options Reduces Risk
- Oral Sex and HIV Risk

**HIV / AIDS Awareness Events**

- National HIV Testing Day (27 June) (AIDS.gov)
- World AIDS Day (1 December) (AIDS.gov)

**Briefings**

- HIV in the DoN - This PowerPoint slide set is intended for all-hands audiences (Navy and U.S. Marine Corps). It addresses the risk of acquiring HIV, impacts of HIV on a person's life, and risk-reduction. The briefing is 20 minutes.
- HIV in the Workplace - This fully-scripted presentation targets "All Hands". Risk of transmission in the workplace is discussed along with official policies when employees are HIV positive. The briefing is 20 minutes.

**Film**

Every 4 days...  
another sailor gets HIV

...since 1985,  
over 4,700  
active duty sailors  
have been infected  
with HIV...



The most common way HIV is spread is through sex. You can't tell for sure if a person has HIV just by looking at them. You can avoid HIV by having no sex, or delaying sex until you are ready. You can avoid HIV by having sex with only one, faithful partner. You can greatly reduce risk by using a condom every time you have sex.

Protect yourself from HIV. We need you to stay healthy.

Learn more - <http://www.nmcpbc.med.navy.mil/healthyliving>



HIV happens...

**HIV** ...Sailors and Marines should know.

**HIV happens...**

**4**  
...every 4 days,  
another active duty  
Sailor or Marine  
is diagnosed with HIV.



...to women:  
in the U.S., about 1 of 5 people  
that got HIV last year is a  
woman.



...to men.  
Men who have unprotected sex  
with men are at highest risk  
of getting HIV.  
Men who have unprotected sex  
with women can also get HIV.

**But it doesn't have to...**



Saying no to sex, or finding one, long-term, HIV-free, monogamous partner can protect you from HIV.

Condoms used correctly and every time greatly reduce your risk.



Just pulling out, or just asking your partner if they have HIV are NOT safe strategies.



Ask for an HIV test every year if you are a man who has sex with men, or if you have sex without a condom with casual partners.



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Sexual Health and Responsibility Program (SHARP)  
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<http://www.med.navy.mil/sites/nmcphc/health-promotion/reproductive-sexual-health/Pages/hiv-prevention-resources.aspx>

