

## The Pitt Men's Study

News and Notes

Summer 2013

### The Pros and Cons of PrEP

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Approximately 50,000 new HIV infections occur in the United States every year, statistic that has а not changed since 2006. Despite efforts to promote safer sex education and expand access to condoms, the number of new infections in gay men is increasing, especially in young,

black gay men. To this end, research has focused on new ways to reduce the number of new HIV infections.

In 2011, a international study (called HPTN-052) that followed serodiscordant heterosexual couples (where one person was HIV positive and the other was HIV negative) showed that treating the HIV positive partner with HIV medication could reduce HIV transmission by 95%. This study proved that HIV treatment is an effective form of HIV prevention.

There has been interest in treating HIV negative people

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News and Notes is published by the Pitt Men's Study. All information and opinions are the sole responsibility of the Study and do necessarily reflect the policies or views of the University of Pittsburgh or the National Institutes of Health. to prevent HIV, also called pre-exposure prophylaxis or PrEP. In July 2012, the Food and Drug Administration approved Truvada, a medication used to treat HIV, for this use. The iPrEX study followed gay men and transgender women who received either daily Truvada (a medication used to treat HIV) or a sugar pill. There were 44% fewer HIV infections among people who took Truvada. One of the challenges of the study was that not everyone took the medication. In people who actually had measurable levels of medication in their blood (meaning that they took some of their medication), Truvada reduced HIV risk by over 90% This study also demonstrated that Truvada had few side effects and was considered safe for use in this population of gay men and transgender women.

Prior research has demonstrated that adherence to medication is critical and that these medications only work if people use them. The results of the VOICE study showed that neither daily Truvada nor a daily anti-HIV lubricant used vaginally, called tenofovir gel, were effective in reducing HIV infections in over 5,000 African women. Both of these products reduced HIV infections in prior studies. Further analysis revealed that less than half of the women were using the prevention products given to them. The findings suggest that we need to learn more about why people do not take their medication so that we can develop interventions that people at risk for HIV will use consistently. For example, there are studies looking at long-acting injectable medications which may be effective for several weeks to months.

PrEP has both advantages and disadvantages. PrEP offers another option that people can use to protect themselves from HIV. A pill can be taken far in advance of a potential risky exposure as opposed to condoms which need to be available and used just before the potential exposure. It is important to emphasize that PrEP is meant for use in addition to condoms, not as a substitute for condoms. Disadvantages of PrEP include the potential for side effects, cost of the medication, potential for development of resistant HIV, as well as the fact that it does not protect against other sexually

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transmitted infections. There is also the concern that people who take PrEP may be more likely to have unprotected sex which may then increase the risk of getting HIV. Fortunately, this behavior has not been seen in the major studies looking at PrEP, such as the iPrEX study. There are still many unanswered questions about how PrEP can best be used to prevent HIV and future research studies will help answer these questions.

The University of Pittsburgh is actively involved in HIV prevention research, and is recruiting study participants for several studies (outside of the Pitt Men's Study). HPTN-069 is a study looking at Truvada and another medication (called Maraviroc) as pre-exposure prophylaxis in HIV negative gay men and transgender women (male to female). This study is actively enrolling and looking for volunteers. MTN-017 is a study opening soon that will assess the safety and acceptability of rectal tenofovir gel (a lubricant containing the HIV medication tenofovir) in sexually active HIV negative men. HIV research will give us information on how we can keep our community safe and healthy.

For more information about the research at the University of Pittsburgh and to find out whether you may qualify to be a part of an HIV prevention study, please call our research recruiter at (412) 956-9686 or join our research registry at <u>www.hivregis.pitt.edu</u>. For information on studies for HIV-infected persons, please call 412-647-0322.

## Using Your WePay Card

When we pay you at your Pitt Men's Study visit, we recommend that you immediately withdraw the full amount from the card at a Citizen's Bank or PNC ATM.

There are a couple of reasons why we suggest this. One is that, while you are able to use your WePay card as a debit card and make purchases with it, you then have to keep track of your balance. It is possible to check your balance by calling 1-877-428-4733, or visiting the web site transcard.com, but getting the full balance in cash is the less-complicated option.



Another is that WePay cards expire. Usually the expiration date is a couple of years from the time that we issue the card. but if you happen to lose a card with money on it, and it expires, it's difficult for us to get you that money back.

Also if you let a card sit with a balance on it, after 390 days the card company will start to deduct money from it (two dollars a month). Don't let the bank take your money! Deduct the full balance from your card immediately after your appointment and you will be a-ok.

#### **This Month in AIDS History**

July 3, 1981: The New York Times reports on cases of Kaposi's Sarcoma affecting 41 gay men in New York and California.

July 25, 1983: San Francisco General Hospital opens the first dedicated AIDS ward in the U.S. It is fully occupied within days.

July 1990: The U.S. Congress enacts the Americans with Disabilities Act (ADA). The Act prohibits discrimination against individuals with disabilities, including people living with HIV/AIDS.



July 2002: UNAIDS (the Joint United Nations Programme on AIDS) reports that HIV/ AIDS is now by far the leading cause of death in sub-Saharan Africa, and the fourth biggest global killer. Average life expectancy in sub-Saharan Africa falls from 62 years to 47 years as a result of AIDS.

July 2010: The Obama Administration releases the first comprehensive National HIV/AIDS Strategy for the United States.

## You & Your Data

Questions, blood, urine, mental tests, even cups full of spit - we collect a lot from our volunteers at Pitt Men's Study appointments. So where does all that info go and what do we do with it? Below are some recent articles that appeared in scientific journals using data that you provided for us. The results aren't always groundbreaking or newsworthy - science generally moves in baby steps rather than strides - however without you and your data, none of these articles would exist.

Title of Article	Journal & Publication Date	The Gist of It
Joint effects of alcohol consumption and high-risk sexual behavior on HIV seroconversion among men who have sex with men.	AIDS. 2013 Mar 13.	The study looked at alcohol consumption and number of unprotected receptive anal intercourse partners in MACS men, and their effect on HIV seroconversion. The findings suggest that interventions to reduce heavy drinking among men who have sex with men should be integrated into existing HIV prevention activities.
Lipodystrophy and Inflammation Predict Later Grip Strength in HIV-Infected Men: The MACS Body Composition Substudy.	AIDS Research and Human Retroviruses. 2013 May 2. [Epub ahead of print]	Body fat changes (lipodystrophy) in HIV- infected persons are associated with increased systemic inflammation and increased mortality. This study looked at whether lipodystrophy is associated with declines in physical function. Its findings suggest that inflammation may contribute to declines in functional performance, independent of age.
The impact of HAART on the respiratory complications of HIV infection: longitudinal trends in the MACS and WIHS cohorts.	PLoS One. 2013 Mar 12. [Epub ahead of print]	This study looked at the incidence of respiratory conditions and their effect on mortality in men both in the era before effective HIV meds, and after. It found that HIV infection remained a significant risk for infectious respiratory diesease after HIV meds came on the scene, and that infectious respiratory diseases were associated with an increased risk of mortality.
Incident hepatitis C virus infection in men who have sex with men: a prospective cohort analysis, 1984-2011.	Clinical Infectious Diseases. 2013 Mar 26. [Epub ahead of print]	This study looked at hepatitis C transmission over the entire HIV epidemic. It concluded that the spread of Hep C among men who have sex with men in the United States has been ongoing since the beginning of the HIV epidemic.

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- Important health information for men
- Published research articles using Study data
- Explanation of Study tests and test results
- Photos and writings from 29 years of the Study's history
- Parking information for Study volunteers

#### Meningitis Outbreak in Gay Men



You may have heard about the recent cases of bacterial meningitis gay men in among in New York and LA County. Meningitis is inflammation an of the membranes surrounding your brain and spinal cord. The swelling associated with meningitis often triggers

the "hallmark" signs and symptoms of this condition, including headache, fever and a stiff neck.

Most cases of meningitis in the U.S. are caused by a viral infection, but bacterial and fungal infections can also cause the disease. The recent cases of meningitis in New York and LA County were caused by a bacteria called meningococcus. This bacteria can spread through intimate contact such as sharing eating utensils, kissing, and close physical contact (including all forms of sex, of course).

Viral meningitis usually gets better on its own. However, bacterial infections require immediate medical treatment with antibiotics and can result in serious illness and death. It is also worth noting that persons with immune system deficiencies are particularly susceptible to the disease.

Initially, meningitis symptoms may resemble the flu, with worsening headache, vomiting, and a sudden high fever (over 101.3). People may also often develop neck stiffness and sensitivity to light. If left untreated, people often progress to confusion, coma, and ultimately death.

There are vaccinations to prevent the deadly forms of meningitis and the Pitt Men's Study recommends that if you are traveling to New York City or Los Angeles, and plan to be in close quarters with other gay men, you might want to consider getting vaccinated with the meningococcal vaccination. It is recommended that one get vaccinated three to four weeks before travel.

For more information about meningitis, visit the Centers for Disease Control and Prevention Website: <u>http://www.cdc.gov/meningitis/bacterial.html</u>. To read past Health Alerts, go to our Website: <u>www.</u> <u>pittmensstudy.com</u>

### **Know Your Meds**

In our MACS study we ask a lot of questions about the use of prescription drugs, those that are HIV-related as well as those that are not. To facilitate this, we mail to you a sheet on which to record any medications used since the last visit that we hope men will fill out and bring with them to their appointments. It's surprising how many men cannot recall their medications, even those for conditions such as HIV, heart disease, diabetes, etc. Our study is most effective when we collect detailed and accurate information, and we ask all of our men in the MACS study to please make the effort to do this – it really helps.

There's another reason for knowing what meds you take: the real likelihood of suddenly being taken ill or being involved in an accident. Anyone who is taking medications routinely for a specific medical condition should carry a list of them in his wallet including the drug name, the dose and the frequency taken. In case you require emergency medical care, such a list alerts doctors to medical conditions you have that could influence exactly how they treat you. You should also list the name and phone number of your primary care physician as well as any doctors treating you for any chronic conditions. This knowledge could make your recovery easier and possibly save your life.

It's another bothersome task (and perhaps a reminder of something you'd just as soon not dwell on), but it sure helps us, and, most importantly, it might help you in case of an emergency.

