Quiz!

Biomedical HIV Prevention Research

HIV prevention research consists of clinical studies assessing how well new medicines or medical devices help to prevent HIV. With regard to clinical studies, please indicate whether you believe the following statements to be true or false. If you are unsure, you may select, "don't know."

		True	False	Don't know
1.	Scientists test how well medicines and vaccines prevent HIV by encouraging study volunteers to engage in high-risk behavior. All clinical trial participants receive extensive counseling about what they can do to reduce their chances of contracting HIV. Participants are reminded that we do not know if the medication/product is effective, and they should not assume they are protected by it. Some participants may receive a placebo. Placebos are inactive substances used in studies to compare the effects of the tested product in one group of people against another group who did not get the test product. Even when HIV vaccines, microbicides, or other prevention tools are developed, education, condoms and lube, and other prevention efforts will still be needed.	T	**F**	DK
2.	Before participating in HIV prevention studies, study participants are given detailed information on the side effects they might experience. Some studies test new products or devices to evaluate their safety. In these cases, volunteers are told to report any side effects they experience. Participants in these studies are closely watched for all possible side effects. Studies that test whether a product or device works to prevent HIV (efficacy studies) are only conducted after determining that the product is safe. Even safe products may have some side effects (e.g. nausea, headaches, etc.). Volunteers are informed about known side effects that were seen in earlier studies, and they are also told that there may be side effects that the researchers don't know about. Participants are monitored for any side effects throughout their study participation and asked to report adverse events immediately to the clinical team.	**T**	F	DK
3.	The involvement of ethnically and racially diverse participants in clinical trials is a priority for researchers. Diverse representation among clinical trial volunteers is important to researchers for several reasons. Some biological characteristics may affect how well a medicine works. Sometimes these characteristics may differ based on ethnic heritage. For example, African Americans are more prone to the disease called Sickle Cell Anemia. Racial and ethnic groups may also differ in the environmental conditions in which they live. Diverse participation will help determine if these biological and environmental conditions influence how well new prevention methods work. Racial and ethnic diversity is important to helping researchers ensure that approaches are culturally appropriate, that any new discoveries will work for a diverse public, and that diverse racial and ethnic groups are aware of new research being conducted.	**T**	F	DK
4.	Scientists have already developed a vaccine that prevents HIV. Currently, there is **not** a vaccine to prevent HIV. Some HIV vaccine studies have been conducted that did not produce results needed to effectively prevent HIV. Ongoing research is being conducted to find a safe and effective preventive HIV vaccine. In order to find one, researchers will need thousands of volunteers to participate in clinical trials.	T	**F**	DK

	True	False	Don't know
5. Volunteers for preventive HIV vaccine trials cannot get HIV from the vaccines being tested.	**T**	F	DK
The HIV vaccines used in clinical trials cannot cause people to contact HIV or AIDS, and volunteers are not exposed to HIV through the study. Just like anyone else, however, volunteers in clinical trials can contract HIV from other people through behaviors like condomless/PrEP-less sex or injection drug use.			
6. HIV vaccines under study would train the body to recognize HIV if a person is exposed to the virus.	**T**	F	DK
Vaccines would teach the body to recognize the virus, sounding an internal "alarm" which would call fighter cells into action and ultimately help prevent or control an HIV infection.			
7. HIV vaccines do not contain live human immunodeficiency virus (HIV).	**T**	F	DK
HIV vaccines do not contain either live or killed forms of the virus. The vaccines are synthetic (lab-made) compounds designed to look like pieces from real HIV, triggering the body's immune responses that would help your body recognize and fight the virus should it enter your system. There is no whole virus, real virus, or infected material in the vaccine, so there is no way that it could give a study participant HIV.			
8. PrEP is a way to prevent HIV by taking HIV medication after exposure to the virus.	T	**F**	DK
Among the many ways to prevent HIV, two strategies sound very similar but are quite different: *PrEP* versus *PEP*. *PrEP* stands for Pre-Exposure Prophylaxis. It involves prescribing anti-HIV medications to people who are HIV-negative before they are exposed to HIV. People who are vulnerable to contracting HIV who take PrEP every day as prescribed greatly lower their likelihood of contracting HIV. *PEP* stands for Post-exposure prophylaxis. This involves taking antiretroviral medicine after being potentially exposed to HIV to prevent the virus from establishing itself in the body. PEP must be started within 72 hours after a possible exposure to HIV.			
9. Daily oral PrEP has been shown to reduce the likelihood of contracting HIV among gay men, transgender women, and in couples where one person has HIV and the other does not.	**T**	F	DK
Daily oral PrEP has been shown to help reduce people's chances of contracting HIV in multiple studies, including in gay men and other men who have sex with men, transgender women, and couples where partners have different HIV statuses. Oral PrEP is highly effective with daily use, with some studies demonstrating a more than 90 percent reduction in HIV acquisition.			
10. PrEP is an HIV prevention method intended for use by people living with HIV.	T	**F**	DK
PrEP is an HIV prevention strategy in which HIV-negative people are prescribed antiretroviral medication to reduce their chances of contracting HIV. However, PrEP is meaningful for people living with HIV too; it has been shown to be an effective HIV prevention method for mixed-status partners to help HIV-negative partners stay negative. Truvada® and Descovy® were the first two pills approved by the U.S. Food and Drug Administration as PrEP, and other medications are being researched.			

		True	False	Don't know
11.	Microbicides refer to pills taken orally to prevent people from contracting HIV. Microbicides are being developed to reduce a person's likelihood of contracting HIV or other sexually transmitted infections when applied topically inside the vagina or rectum. Vaginal microbicides are primarily being tested as rings, while rectal microbicides are being tested as gels, douches, and suppositories. Unlike microbicides, oral pre-exposure prophylaxis (PrEP) is an HIV prevention approach that involves the use of an antiretroviral pill by people who are HIV-negative.	T	**F**	DK
12.	Microbicides are only being tested among women. Microbicides are being tested among women and men--transgender and cisgender alike--and gender non-binary people. Within these populations, microbicides research is being conducted on products for use during vaginal sex as well as anal sex. According to estimates, 5 to 10 percent of the world's population engages in anal sex, including cisgender and transgender women and men and gender non-binary people.	T	**F**	DK
13.	Most microbicides tested today contain HIV antiretroviral drugs which are used to treat people living with HIV. Different types of microbicides are being tested in clinical trials, but those that incorporate antiretroviral (ARV) drugs are furthest along in development and testing. The idea behind ARV-based microbicides is that some of the same drugs used to treat HIV may also help prevent people without HIV from contracting it.	**T**	F	DK
14.	There are possible health risks associated with participating in biomedical HIV prevention studies. There are risks involved in participating in any clinical trial. Researchers in the HIV prevention field strive to minimize these risks by incorporating a multi-tiered safety review process into clinical studies, engaging in the informed consent process to ensure that participants understand the risks associated with the study, and by conducting them under the watchful eye of regulatory and research authorities.	**T**	F	DK
15.	Many people living with HIV around the world are *virally suppressed*, meaning their medications have succeeded in reducing the amount of HIV in the body to levels such that a regular HIV test can no longer detect the virus. People with *viral suppression* cannot transmit HIV to their sex partners, even if they don't use a condom. When people living with HIV take anti-retroviral medications, they can become *virally suppressed*. Viral suppression means that the medications are working to reduce the amount of HIV in the body to undetectable levels. Estimates indicate that more than 40% of the world's people living with HIV are virally suppressed. Studies have shown that people with viral suppression cannot transmit HIV to their sex partners—not even through acts of condomless sex. Because anti-retroviral treatment for people living with HIV can prevent HIV transmission in this way, we call it "Treatment as Prevention" (TasP). Many scientists around the world, including those at the National Institutes of Health and the Centers for Disease Control and Prevention, agree that there is zero chance of HIV transmission through sex under conditions of viral suppression.	**T**	F	DK