

(this article appeared in the Times of Swaziland, June 4, 2010; see <http://www.times.co.sz/index.php?news=17107> for the online version)

Series title: HIV from Blood and Punctures

Article title: Tiny amounts of HIV outside the body are a threat, wet or dry

Blood outside the body is dangerous. Almost every adult Swazi knows that large, visible amounts of blood from an HIV infected person can transmit HIV. In the 2006-2007 Swaziland Demographic and Health Survey, 96% of those interviewed said that people could get infected from the open wounds or sores of an HIV infected person.

However, Swazis are generally unaware that sharing sharp instruments, such as razor blades, is a risk. Some blood often stays on the sharp instrument after it has been used. If the blood is infected with HIV, the next person who uses the sharp instrument could get infected.

It doesn't take much HIV infected blood to cause infection once it enters another person's bloodstream. Even an amount of infected blood so small that it cannot be easily seen with the naked eye can cause infection.

HIV can also survive for a long period outside the body. Since 1985, research has shown that HIV in blood can stay infectious for a week or more at room temperature, whether wet or dry.

Wiping, rinsing with water, and cleaning with common disinfectants do not kill HIV. Only high heat (such as boiling) and special chemicals kill HIV.

Other blood-borne viruses that cause serious disease, such as hepatitis C virus, can also stay infectious for long periods outside the body in small amounts of either wet or dried blood.

Medical and public health experts from rich countries continue to misinform healthcare providers and health officials in poor countries about how long HIV survives outside the body. For example, Johns Hopkins University in the USA teaches healthcare providers in poor countries that HIV in blood cannot survive for more than one minute when exposed to the air. This message has even been spread in HIV prevention materials in Zimbabwe and perhaps elsewhere, too. Our colleague, David Gisselquist, has called such messages “not only dead wrong, they are deadly.”

In rich countries, health care providers and public health officials approach blood outside the body differently. They treat all blood contaminated surfaces and instruments as possibly infectious, even if the blood has been dry for a long period.

The risk of HIV from blood and previously used sharp instruments is especially high in Swaziland because many Swazis are infected. By recent estimates, 19% of Swazis age 2 and older (and 26% of those ages 15 to 49) are HIV infected. The risk is extremely high in Swazi hospitals, with 70% of in-patients estimated to be HIV positive.

People who know that HIV outside the body stays infectious for a long period probably are more careful around blood and sharp instruments. In western Kenya, adults in the Kisii ethnic group are much more aware of how long HIV survives outside the body than adults in the Luo ethnic group. The Kisii are also much less likely to be HIV infected than the Luo.

In this series of articles over the next several months, we will give specific advice on how to avoid HIV infection from blood and punctures. You can find more information related to this article, read previous articles in this series, and ask us questions about how HIV spreads at www.hivrisk.info.

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[box to appear near the beginning of the article, ideally as a sidebar]

Protect Yourself

- Tiny amounts of HIV contaminated blood can be infectious.
- HIV in blood can stay infectious for weeks, wet or dry.