**TABLE**
COMPARISON OF MATCHED-PAIR RESPONSES ON PRE- AND POST-USE QUESTIONNAIRES (N=17)*

| Item | Median Pre-Use Score | Median Post-Use Score | P† |
|---|---|---|---|
| Overall perception and satisfaction | 8 | 5 | .000 |
| Ease of use | 8 | 5 | .001 |
| Ease of filling | 6 | 5 | .019 |
| Accuracy of delivery | 6 | 4.5 | .011 |
| Location of dose markings | 6.5 | 3.5 | .003 |
| Ease of locking and unlocking | 7 | 4 | .002 |
| Patient safety and comfort | 6 | 5 | .695 |
| Personal safety | 10 | 8 | .012 |

*Comparison of pre-use and post-use responses to the questions, "Compared to the syringes you normally use, how would you rate the safety syringe?" Answers were selected from a 10-point Likert scale, with 1=poor, 5=average, and 10=excellent.
† Wilcoxon Signed Rank Test.

uated engineering controls for several devices.[3] Of the 390 syringes collected from the needle disposal boxes during our study period, only 59.5% were activated.

Our study of this new safety syringe had several limitations, including a small sample size, such that the expected number of needlestick injuries during the study period was nil. Thus, we did not expect to measure an actual decrease in the number of needlestick injuries as a result of the new syringe. Underreporting of needlesticks is common in the medical field as a whole,[4-6] and so it would be naive to think that it did not affect this study as well. It is possible that a needlestick injury did occur with the safety syringe and never was reported.

We cannot clearly establish that the safety syringes in fact were activated immediately after use. It is possible the safety device was not activated immediately after use, but only upon disposal, which would not protect the HCW and other staff from accidental needlestick injuries while the uncapped needle was transported to a distant disposal site or was put down on the bed or adjacent table while the patient was stabilized.

Finally, this study relied on self-reported data, which may not be entirely accurate.

We have demonstrated that the correct use of this safety syringe was at most 60%, even after an educational presentation to a group of experienced nursing personnel. The weakest link in any active safety device clearly is the need for the user to activate the safety feature through one or more additional steps that take time, effort, and remembering to perform the task each time. Based on our results, we would suggest that passive rather than active safety products be developed.

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# HIV Origins

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The link between human immunodeficiency virus (HIV) and simian immunodeficiency virus (SIV) has been debated for years. In a recent article in *Lancet,* Dr. Francoise Barre-Sinoussi, of the Pasteur Institute in Paris, suggests that SIV may be a valuable model for studying HIV and AIDS. Human immunodeficiency virus shows extensive genetic diversity, even within patients. Evolution of viral isolates increases as the clinical disease progresses, allowing HIV-1 to develop resistance to antiviral drugs quickly. Genetic analysis has found two distinct groups of HIV-1 isolates—the M group and the O group. The M group, which contains most HIV-1 isolates, is subdivided into at least 10 strains.

The discovery of HIV-1 in West Africa and its similarity to SIV has raised the possibility of a link between human and nonhuman primate lentiviruses. The divergence between HIV-1 group M subtypes and SIV suggests that chimpanzee viruses may have been introduced into the human population 30 to 50 years ago. The origin of HIV-1 group O remains to be explained, however. While genetically similar to HIVs, SIVs do not cause disease in their natural hosts, although cross-species transmission may result in pathogenic infections. Barrie-Sinoussi concludes that nonhuman lentiviruses from Old World primates can provide useful models for studying the interaction between the human host and viral factors that cause AIDS.

FROM: Barre-Sinoussi F. HIV as the Cause of AIDS. *Lancet* 1996; 348:31-32.

National AIDS Clearinghouse. AIDS Daily Summary, Bethesda, MD, July 11, 1996.