Injection Drug Equipment Can Harbor Hepatitis C, Sometimes for Weeks

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The equipment used for injecting drugs, including water, filters and water containers, effectively incubates hepatitis C, raising the risk of transmitting the virus among drug users who share these materials, HIVandHepatitis.com reports. Publishing their findings in The Journal of Infectious Diseases, researchers used state-of-the-art cell culture methods in order to detect how the virus can endure among drug preparation items and thus pose a risk of transmission.

The scientists set up experiments to replicate the practices used by injection drug users (IDUs). In order to ascertain how stable hepatitis C virus (HCV) is in water, they introduced the virus into bottles of water and allowed the bottles to remain at room temperature for several days. To study how the virus survives in different varieties of containers, they filled containers with water, added virus, emptied the water, and then refilled the container with fresh water. They found that the virus can survive for up to three weeks in water, even after a container has been washed. Aluminum cans and plastic containers were the most effective at harboring the virus.

In order to test how filters may harbor the virus, the researchers drew HCV through filters, wrapped them in foil, and then incubated them in order to release infectious particles of the virus. About 10 percent of the virus was still detectable 24 to 48 hours after this procedure.

In their conclusion, the study authors write, “These findings add strong evidence to the high transmission rate of HCV among individuals who share these drug preparation materials and should help in the design of prevention strategies aimed at reducing HCV transmission.”

To read the HIVandHepatitis.com story, click here.

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