

## An Outbreak of Acute Hepatitis C in an Ambulatory Setting – Nevada

In early January 2008, a Southern Nevada Health District (SNHD) Outbreak Investigation Team was deployed to investigate a cluster of two cases of acute hepatitis C, both reporting having undergone procedures at a local endoscopy center. Epidemiologic assistance was requested from the Centers for Disease Control and Prevention (CDC). The investigation revealed that unsafe injection practices had placed patients at risk for exposure to bloodborne pathogens, and that these practices had been undertaken in the clinic since March of 2004. The decision was made to notify patients of their risk and recommend testing for hepatitis C, hepatitis B, and HIV. Approximately 40,000 patients were notified; to date a total of six cases of acute hepatitis C have been identified among clinic patients.

In late February 2008, the SNHD investigation revealed all six cases had undergone endoscopic procedures at the same ambulatory surgical center between July and September 2007. Through the combination of observation, interviews, and evaluation of records, the investigation team determined that the reuse of syringes to re-dose a patient, combined with the reuse of single use vials for multiple patients was the most likely source of transmission during the outbreak.

This outbreak of acute hepatitis C underscores the importance of Standard Precautions in the ambulatory setting. Universally adopted, Standard Precautions are based on the principle that blood, body fluids, secretions, excretions (except sweat), non-intact skin, and mucous membranes may contain transmissible infectious agents. Standard Precautions include safe injection practices. Education and training on the principles and rationale for recommended practices are critical elements of Standard Precautions, facilitating appropriate decision-making and promoting adherence, especially when health care workers are faced with new situations. The Vermont Department of Health encourages all medical care providers to take this opportunity to review their needle, syringe and multi-dose vial procedures to be certain there is no possibility for cross-contamination and transmission of bloodborne pathogens.

### The Centers for Disease Control and Prevention recommends the following Safe Injection Practices in the use of needles, cannulae, and intravenous delivery systems:

- Use aseptic technique to avoid contamination of sterile injection equipment.
- Do not administer medications from a syringe to multiple patients, even if the needle or cannula on the syringe is changed. Needles, cannulae and syringes are sterile, single-use items; they should not be reused for another patient nor to access a medication or solution that might be used for a subsequent patient.
- Use fluid infusion and administration sets (i.e., intravenous bags, tubing and connectors) for one patient only and dispose appropriately after use. Consider a syringe or needle/cannula contaminated once it has been used to enter or connect to a patient's intravenous infusion bag or administration set.
- Use single-dose vials for parenteral medications whenever possible.
- Do not administer medications from single-dose vials or ampules to multiple patients or combine leftover contents for later use.
- If multi-dose vials must be used, both the needle or cannula and syringe used to access the multi-dose vial must be sterile.
- Do not keep multi-dose vials in the immediate patient treatment area and store in accordance with the manufacturer's recommendations; discard if sterility is compromised or questionable.
- Do not use bags or bottles of intravenous solution as a common source of supply for multiple patients.

**Excerpted from:** [Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings 2007.](#)

For further questions, please contact the Vermont Department of Health at (802)863-7240.

The *Infectious Disease Bulletin* can be viewed at:

<http://healthvermont.gov/pubs/IDB/index.aspx>

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