



Nevada State Health Division Technical Bulletin



Topic: Hepatitis C Investigation
Bulletin Number: Epi February 2008

Section/Program:
State Epidemiologist, Dr. Azzam

TO: All Health Care Providers

Potential Exposure to Hepatitis C (HCV) in an Ambulatory Surgical Center in Las Vegas

This technical bulletin and provider update summarizes our findings and actions, and provides recommendations and advice

Through recent routine and active surveillance efforts, the Southern Nevada Health District Office of Epidemiology staff identified six cases of acute hepatitis C (HCV) infections. All six cases had undergone endoscopic procedures at the same ambulatory surgical center in Las Vegas in July and September 2007. Unsafe injection practices primarily reuse of syringes, and subsequent multi-use of single-dose medication vials, may have led to contamination of the vials and patient-to-patient transmission of the hepatitis C virus.

Health care related exposures are a well recognized but uncommon source of viral hepatitis transmission in the United States. Similar to this outbreak, the majority of outbreaks identified previously nationwide have been associated with unsafe injection practices, primarily reuse of syringes and needles or contamination of medication vials used for multiple patients. However, because of the long and variable incubation period and the fact that the majority of patients with HCV infection are asymptomatic, clusters of patients related to a specific healthcare setting might not be recognized.

When health care workers do not adhere to fundamental principles related to safe injection practices, it suggests that they fail to understand the potential for disease transmission. In addition, deficiencies related to oversight of personnel and failures to report breaches in infection-control practices result in delays in correcting the implicated practices. We believe that this outbreak could have been prevented by adherence to basic principles of aseptic technique for the preparation and administration of parenteral medications.

To prevent transmission of bloodborne pathogens, all healthcare workers should adhere to recommended standard precautions and fundamental infection control principles, including safe injection practices and appropriate aseptic techniques.

Injections are very safe when standard procedures are followed. Nevada State Health Division recommends the development of written up-to-date policies and procedures to prevent patient-to-patient transmission of bloodborne pathogens. Additionally these policies and procedures should be established and implemented among all staff involved in direct patient care.

Nevada State Health Division strongly advises that physicians and other health care providers in the state undergo mandated education periodically in proper infection control procedures. When

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renewing their licenses, physicians should acknowledge completing such training within the past four years.

Nevada State Health Division is partnering with professional organizations, advisory groups, and is working closely with SNHD and CDC to address these issues.

Injection safety

- Use a sterile, single-use, disposable needle and syringe for each injection and discard intact in an appropriate sharps container after use.
- Use single-dose medication vials, prefilled syringes, and ampules when possible. Do not administer medications from single-dose vials to multiple patients or combine leftover contents for later use.
- If multiple-dose vials are used, restrict them to a centralized medication area or for single patient use. Never re-enter a vial with a needle or syringe used on one patient if that vial will be used to withdraw medication for another patient. Store vials in accordance with manufacturer's recommendations and discard if sterility is compromised.
- Do not use bags or bottles of intravenous solution as a common source of supply for multiple patients.
- Use aseptic technique to avoid contamination of sterile injection equipment and medications.

Adapted from Transmission of Hepatitis B and C Viruses in Outpatient Settings — New York, Oklahoma, and Nebraska, 2000–2002. MMWR 2003;52(38):901-906. [MMWR](#).

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