



# Injection Safety; Mistaken Beliefs

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# Objectives

1. Understand three things every health care provider needs to know about Injection Safety.
2. Identify one discipline within a health-care institution that could benefit from safety injection education.
3. Identify two Injection Safety resources.



# Injection Safety

**Goal:** Ensure Injection equipment and injection practices do not transmit infectious pathogens to patients.

**Myth:** Injection safety is not a problem in US Healthcare.



# Epidemiology of Injection Safety Outbreaks in the US

- The Centers for Disease Control and Prevention (CDC) has reported nearly 50 outbreaks linked to unsafe injection practices, with more than 150,000 patients affected since 2001.

- These outbreaks have included transmission of hepatitis B and C, as well as bacterial infections.
- These events have occurred in many different kinds of healthcare facilities: hospitals, dialysis facilities, outpatient clinics, ambulatory surgery centers, and long-term care facilities.

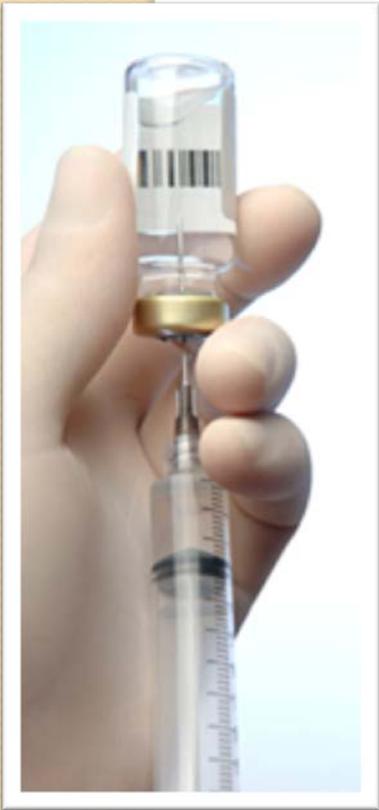


These outbreaks have resulted in one or more of the following:

- Transmission of blood borne viruses, including hepatitis C virus to patients
- Notification of thousands of patients of possible exposure to blood borne pathogens and recommendation that they be tested for HCV, HBV, and HIV
- Referral of providers to licensing boards for disciplinary action
- Malpractice suits filed by patients
- Hundreds of hours of State and Local Health Department personnel used for investigation, notification, testifying, and interviews.

# History of Injection Safety

- Since 2007 Injection safety has been a part of Standard Precautions.
- 2008 Nevada Hep C Outbreak discovered
- In 2010 HONOReform Foundation released its Compassionate Response Toolkit in Nebraska and Nevada.
- In 2011 Safe Practices Coalition- One and Only Campaign free continuing education on [Medscape.org](http://Medscape.org).
- October 2011 Nevada Safe Injection Law goes into effect.



# Ideal Injection Safety Process

- IV.H.1. Use aseptic technique to avoid contamination of sterile injection equipment. Category IA
- IV.H.2. 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. Category IA
- IV.H.3. 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. Category IB
- IV.H.4. Use single-dose vials for parenteral medications whenever possible. Category IA
- IV.H.5. Do not administer medications from single-dose vials or ampules to multiple patients or combine leftover contents for later use. Category IA
- IV.H.6. If multidose vials must be used, both the needle or cannula and syringe used to access the multidose vial must be sterile. Category IA
- IV.H.7. Do not keep multidose vials in the immediate patient treatment area and store in accordance with the manufacturer's recommendations; discard if sterility is compromised or questionable. Category IA
- IV.H.8. Do not use bags or bottles of intravenous solution as a common source of supply for multiple patients. Category IB



# Three Things Every Provider Needs to Know About Injection Safety

1. Needles and syringes are single use devices. They should not be used for more than one patient or reused to draw up additional medication.
2. Do not administer medications from a single-dose vial or IV bag to multiple patients.
3. Limit the use of multi-dose vials and dedicate them to a single patient whenever possible.

# CDC four Es for ensuring safe injections:

- Epidemiologic surveillance, reporting, monitoring, and investigation of outbreaks potentially related to unsafe injections
- Education initiatives to promote understanding and use of safe injection and basic infection control practices
- Enforcement and oversight by federal and state authorities
- Engineering of devices, equipment, and processes to reduce or eliminate disease transmission risks

# Injection Safety Regulations

- Centers for Medicare & Medicaid Services.
- The Joint Commission
- Position statements:  
APIC, SHEA, AORN, and many others

# Nevada Law ( SB 419)

- Nevada's safe injection law requires certain healthcare professionals applying for new or renewal licenses to:

“attest to knowledge of and compliance with the guidelines of the Centers for Disease Control and Prevention concerning the prevention of transmission of infectious agents through safe and appropriate injection practices.”

# Factors leading to Outbreaks

- **Injection Practices Among Clinicians in United States Health Care Settings:**

Pugliese et al conducted an online survey of 5,500 U.S multidisciplinary healthcare professionals:

1 percent “sometimes or always” reuse a syringe on a second patient

1 percent “sometimes or always” reuse a multidose vial for additional patients after accessing it with a used syringe

6 percent use single-dose/single use vials for more than one patient

# Factors leading to Outbreaks

- Providers accessing shared injectable medications with used syringes
- Reuse of syringes from one patient to another
- Reuse of IV administration sets
- Use of single-dose medication vials and bags of saline solution for multiple patients

A.Y. Guh, N.D. Thompson, M.K. Schaefer, P.R. Patel, J.F. Perz. Patient notification for bloodborne pathogen testing due to unsafe injection practices in the US health care settings, 2001-2011 | *Med Care*, 50 (9) (2012), pp. 785–791

# Nevada Infection Prevention Assessments

- Non- regulatory visits to every hospital and nursing home, **regulated** Physician Offices (17) over 2 year time period.
- Reuse of single dose vials on multiple patients
- Reuse/ misuse of insulin pens
- Pre-spiking IV bags ( not for immediate use)
- Improper cleaning of opened multidose prior to accessing

# Nevada Infection Prevention Assessments

- Accessing multidose vials in clinical areas
- IV tubing with no caps hanging on IV poles/floor (abx)
- Improper use of glucometers
- Not following own medication safety policies
- Many small or outpatient facilities do not have access to a pharmacist

# Impact of Nevada's Safety Injection Prevention Campaign

- Structured reporting response
- Memorandum of understanding between agencies
- Increased Awareness of Injection Safety among HCW

# Challenges with CDC four Es for ensuring safe injections:

- Epidemiologic surveillance, reporting, monitoring, and investigation of outbreaks potentially related to unsafe injections
- Education initiatives to promote understanding and use of safe injection and basic infection control practices
- Enforcement and oversight by federal and state authorities
- Engineering of devices, equipment, and processes to reduce or eliminate disease transmission risks

# How are we doing?

Nevada – increase in investigations/complaints



# Nationally

Here is the weekly media update with recent news related to injection safety. Also included are other items of interest focusing on slightly broader issues like quality improvement, patient safety, HAIs, etc.

## Injection Safety

### *Domestic*

- [Poor Infection Control Led to Elderly Woman's Suicide](#)  
(*Outpatient Surgery Magazine*, 7/17/13)
- [Dipak Desai's federal trial moved to February](#) (*Las Vegas Review-Journal*, 7/16/13)
- [A year later, most HaysMed patients tested for disease](#)  
(*The Hays Daily News*, 7/14/13)
- [Multidimensional approach to ensuring safe injection practices](#)  
(American Pharmacists Association, 7/12/13)
- [Injection safety: What you don't know can hurt you](#)  
(APIC Monthly Alerts for Consumers, 7/11/13)
- [Unsafe Injection Practices Remain All Too Common](#)  
(*Anesthesiology News*, July 2013)

# Summary : Key Points

- Healthcare practices should not provide a pathway for transmission of life-threatening infections.
- CDC four Es are Essential at the facility, local, state, and federal level.
- Many free resources are available for education of HCW and consumers.

# Resources

[www.cdc.gov/injectionsafety](http://www.cdc.gov/injectionsafety)

**New York Department of Health**

[http://www.health.ny.gov/professionals/patients/patient\\_safety/injection\\_safety/](http://www.health.ny.gov/professionals/patients/patient_safety/injection_safety/)

**One and Only Campaign**

<http://www.oneandonlycampaign.org/>

**HONOReform Foundation**

<http://www.honoreform.org/>

# Materials Available for Order

## One & Only Campaign Materials For Order Via CDC-INFO



**1 ONE NEEDLE, ONE SYRINGE, ONLY ONE TIME.**  
Safe Injection Practices Coalition  
www.CDCandOIG10campaign.org

Safe Injection Practices  
A DVD FOR HEALTHCARE PROVIDERS

**1 ONE NEEDLE, ONE SYRINGE, ONLY ONE TIME.**  
Safe Injection Practices Coalition  
www.CDCandOIG10campaign.org

Safe Injection Practices DVD  
Item 22-0087



**Rx for Safe Injections  
to Healthcare**  
1 Needle  
1 Syringe  
+ 1 Time  
= 0 Infections

Rx for Safe Injections Poster  
Item 22-0696



1 needle  
1 syringe  
+ 1 time  
= 0 infections  
It's elementary!

It's Elementary Poster  
Item 22-0697



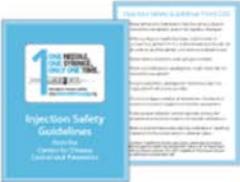
**INJECTION SAFETY**  
What Every  
Healthcare Provider  
Needs to Know

Provider Brochure  
Item 22-0702



**What Patients  
Need to Know  
About Safe  
Medical Injections**

Patient Brochure  
Item 22-0701



**1 ONE NEEDLE, ONE SYRINGE, ONLY ONE TIME.**  
Safe Injection Practices Coalition  
www.CDCandOIG10campaign.org

Injection Safety Guidelines  
Provider Version  
(Updated February)

Injection Safety Pocket Card  
Item 22-0713



To Prevent Transmission of Infections in Healthcare

**1 ONE NEEDLE, ONE SYRINGE, ONLY ONE TIME.**  
Safe Injection Practices Coalition  
www.CDCandOIG10campaign.org

Injection Safety is Every Provider's Responsibility

Logo Poster for Providers  
Item 22-0700



**1 ONE NEEDLE, ONE SYRINGE, ONLY ONE TIME.**  
Safe Injection Practices Coalition  
www.CDCandOIG10campaign.org

The One & Only Campaign is a public health campaign aimed at raising awareness among the general public and healthcare providers about safe injection practices.

Logo Poster for General Public  
Item 22-0699



**DANGEROUS MISPERCEPTIONS**  
A Public Health Campaign

Injection Safety Dangerous Misperceptions Flyer  
Item 22-1178



**INJECTION SAFETY CHECKLIST**  
A Public Health Campaign

Injection Safety Healthcare Provider Checklist  
Item 22-1176



**1 ONE NEEDLE, ONE SYRINGE, ONLY ONE TIME.**  
Safe Injection Practices Coalition  
www.CDCandOIG10campaign.org

Injection Safety Healthcare Provider Toolkit  
Item 22-1177

### How to Order



**SCAN**  
Scan with your Smartphone to access the ordering page

**CALL**  
1-800-CDC-INFO

**CLICK**  
<http://wwwn.cdc.gov/pubs/dhqp.aspx>

**1-800-CDC-INFO**

# Questions/Comments ?



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