Injection Safety

Every Provider's Responsibility

Outline

- Safe Injection Practices
- The ONE and ONLY Campaign
- Outbreak History
- Mistaken Beliefs
- A Call to Action
- Resources and Information

Why Unsafe Injection Practices Are Unacceptable

- Injection safety is part of Standard Precautions
- Healthcare practices should not provide a pathway for transmission of life-threatening infections
- Patient protections regarding injection safety should be on par with healthcare worker safety

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.

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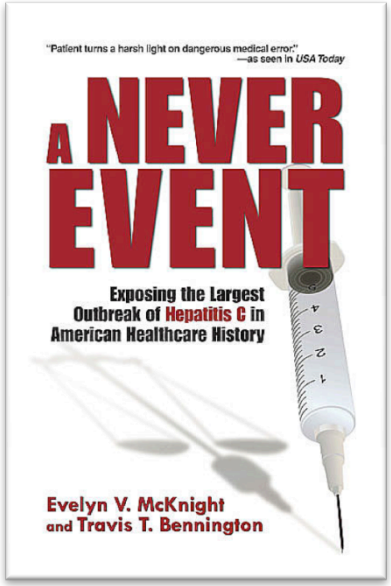
Safe Injection Practices Coalition
www.ONEandONLYcampaign.org

Evelyn McKnight's Story

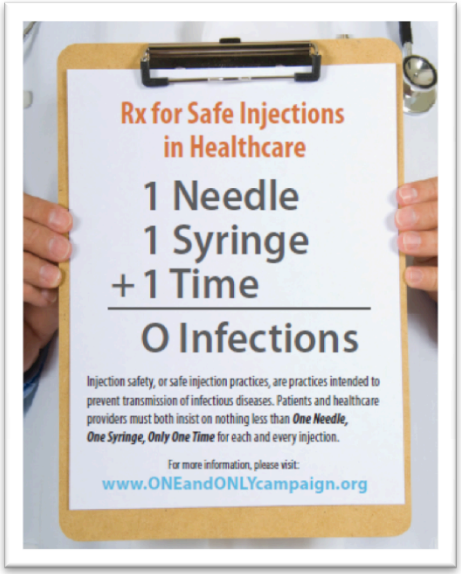
Dr. Evelyn McKnight, mother of three, was battling breast cancer and was infected with hepatitis C during treatment because of syringe reuse to access saline flush solution.

Along with Evelyn, a total of 99 cancer patients were infected in what was one of the largest outbreaks of hepatitis C in American healthcare history.

Evelyn co-founded HONOReform, a foundation dedicated to improving America's injection safety practices, and was the catalyst of the formation of the Safe Injection Practices Coalition.



The ONE and ONLY Campaign



- Launched in response to outbreaks resulting from unsafe injection practices
- Led by the Centers for Disease Control and Prevention (CDC) and the Safe Injection Practices Coalition
- Goals
  - Increase understanding and implementation of safe injection practices among healthcare providers
  - Ensure patients are protected each and every time they receive a medical injection

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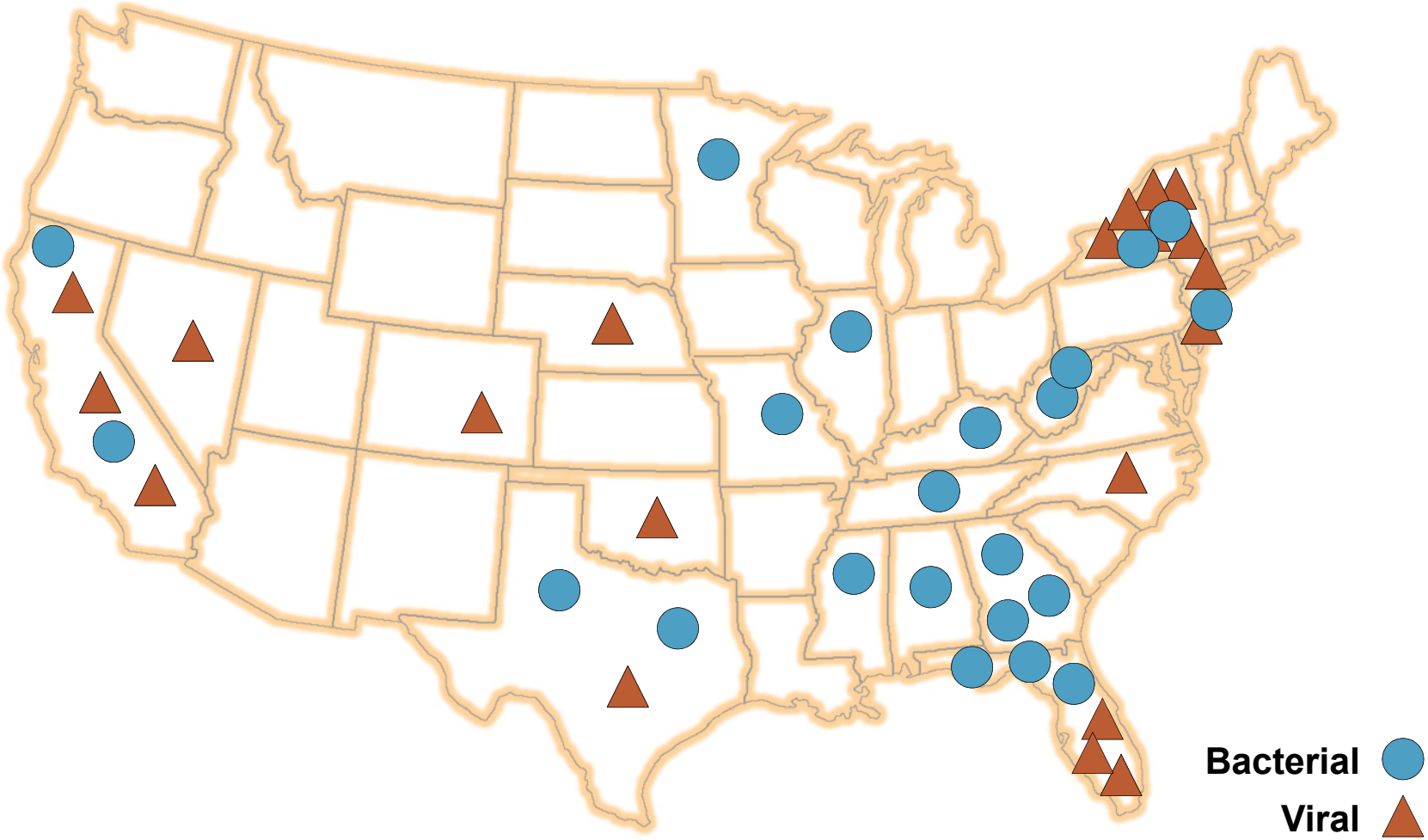
U.S. Outbreaks Associated with Unsafe Injection Practices, 2001-2011



Over 125,000 patients were notified as a result of incidents and outbreaks involving unsafe injections practices

City alerts 450 patients of Hylan Boulevard clinic to hepatitis C Concern

June 17, 2011

Parents' horror as they are told to test their infants for HIV after flu vaccine mix-up

April 13, 2011

Nurse accused of stealing pain meds gets probation

September 20, 2011

NJ doctor loses license after hepatitis B outbreak

September 15, 2011

Guh, A et al. "Patient Notification for Bloodborne Pathogen Testing Due to Unsafe Injection Practices in U.S. Healthcare Settings, 1999–2009." Fifth Decennial International Conference on Healthcare-Associated Infections. Centers for Disease Control and Prevention, Atlanta, GA. 20 March 2010. Retrieved from http://shea.confex.com/shea/2010/webprogram/Paper1789.html.

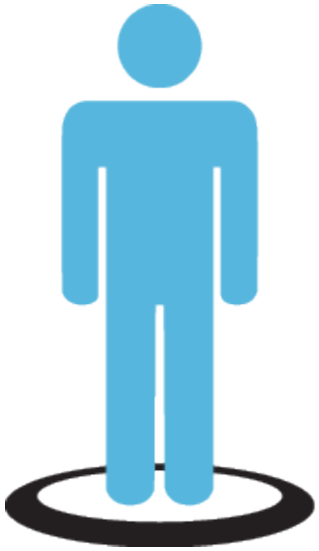
Injection Practices Among Clinicians in United States Health Care Settings

- Survey of 5,500 U.S. 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

Pugliese G., Gosnell C., Bartley J., & Robinson S. (December 2010). Injection practices among clinicians in United States health care settings. *American Journal of Infection Control, 38* (10), 789-798. Retrieved from http://www.ajicjournal.org/article/PIIS0196655310008539/abstract.

When Safe Practices are Used…

Each Patient is an Island



SOURCE

Infectious person,
e.g. chronic, acute

HOST

Susceptible,
non-immune person

Unsafe Injection Practices Can Lead to Transmission of Life-Threatening Infections

SOURCE
Infectious person,
e.g., chronic, acute

CONTAMINATED NEEDLE OR MEDICATION

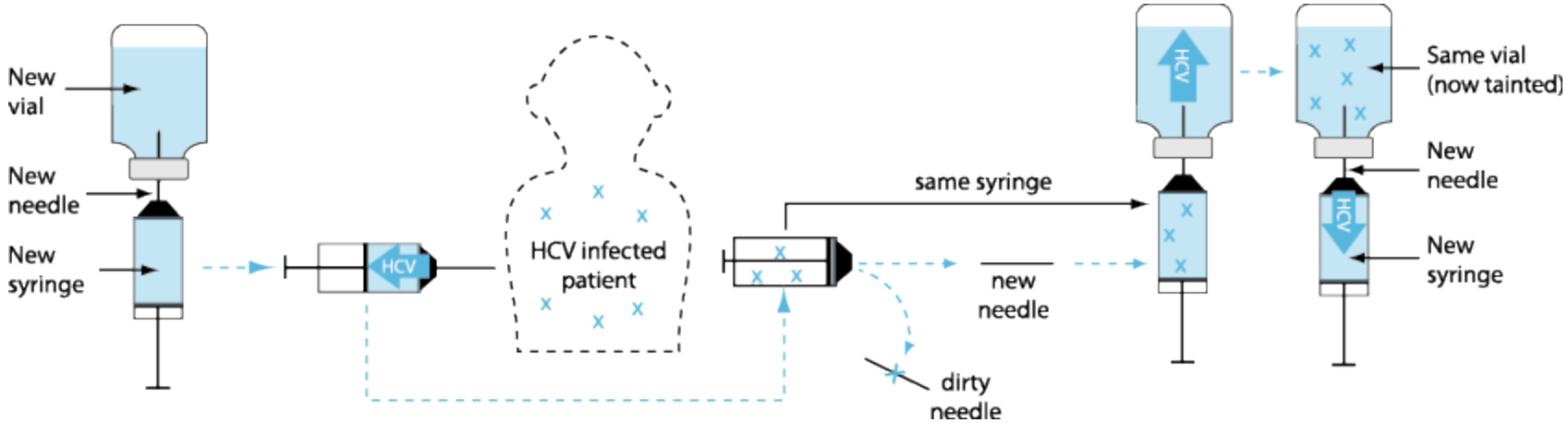
HOST
Susceptible,
non-immune person

LIMIT OR ELIMINATE REUSE

Las Vegas, Nevada Outbreak, 2008

- Cluster of three acute HCV infections identified in Las Vegas
- All three patients underwent procedures at the same endoscopy clinic during the incubation period
- Two breaches contributed to transmission:
  - Re-entering vials with used syringes
  - Using contents from these single-dose vials on more than one patient

Las Vegas, Nevada Outbreak, 2008



Adapted from MMWR (May 16, 2008 / 57(19);513-517)

Insulin Pen Reuse Incidents

- Reuse of insulin pens for multiple patients, reportedly after changing needles has resulted in large notifications
  - NY hospital, 2008: 185 patients notified
  - TX hospital, 2009: 2,114 patients notified
  - WI hospital and outpatient clinic, 2011: 2,401 patients notified

Infection Prevention during Blood Glucose Monitoring and Insulin Administration (2012). Retrieved March 9, 2012 from http://www.cdc.gov/injectionsafety/blood-glucose-monitoring.html
Important Patient Safety Notification (2011). Retrieved March 9, 2012 from http://www.deancare.com/about-dean/news/2011/important-patient-safety-notification/

True or False?

"I'm preventing contamination and infection transmission as long as I'm…"

"…changing the needle between patients." → **FALSE**

"…injecting through intervening lengths of intravenous tubing." → **FALSE**

"…maintaining pressure on the plunger to prevent backflow of body fluids." → **FALSE**

"…not able to observe contamination or blood." → **FALSE**

Unsafe Injection Practices Result In…

- Patients placed at risk for life-threatening infections
- Referral of providers to licensing boards for disciplinary action
- Legal actions such as malpractice suits filed by patients
- CMS and The Joint Commission have begun assessing injection practices as part of facility inspections

A Call to Action

- Injection practices should not provide a pathway for transmission of life-threatening infections
- Injection safety is every provider's responsibility
- Safe injection practices should be discussed and reviewed frequently among colleagues

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Injection Safety Checklist

INJECTION SAFETY CHECKLIST

The following Injection Safety checklist items are a subset of items that can be found in the *CDC Infection Prevention Checklist for Outpatient Settings: Minimum Expectations for Safe Care.*

The checklist, which is appropriate for both inpatient and outpatient settings, should be used to systematically assess adherence of healthcare personnel to safe injection practices. (Assessment of adherence should be conducted by direct observation of healthcare personnel during the performance of their duties.)

Injection Safety	Practice Performed?	If answer is No, document plan for remediation
Injections are prepared using aseptic technique in a clean area free from contamination or contact with blood, body fluids or contaminated equipment	Yes No	
Needles and syringes are used for only one patient (this includes manufactured prefilled syringes and cartridge devices such as insulin pens)	Yes No	
The rubber septum on a medication vial is disinfected with alcohol prior to piercing	Yes No	
Medication vials are entered with a new needle and a new syringe, even when obtaining additional doses for the same patient	Yes No	
Single dose (single-use) medication vials, ampules, and bags or bottles of intravenous solution are used for only one patient	Yes No	
Medication administration tubing and connectors are used for only one patient	Yes No	
Multi-dose vials are dated by HCP when they are first opened and discarded within 28 days unless the manufacturer specifies a different (shorter or longer) date for that opened vial Note: This is different from the expiration date printed on the vial.	Yes No	
Multi-dose vials are dedicated to individual patients whenever possible.	Yes No	
Multi-dose vials to be used for more than one patient are kept in a centralized medication area and do not enter the immediate patient treatment area (e.g,. operating room, patient room/cubicle) Note: If multi-dose vials enter the immediate patient treatment area they should be dedicated for single-patient use and discarded immediately after use.	Yes No	

RESOURCES

Checklist: **http://www.cdc.gov/HAI/pdfs/guidelines/ambulatory-care-checklist-07-2011.pdf**

Guide to Infection Prevention for Outpatient Settings: Minimum Expectations for Safe Care:
http://www.cdc.gov/HAI/pdfs/guidelines/standatds-of-ambulatory-care-7-2011.pdf

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www.cdc.gov/injectionsafety

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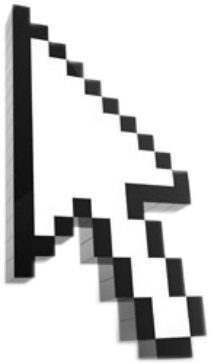
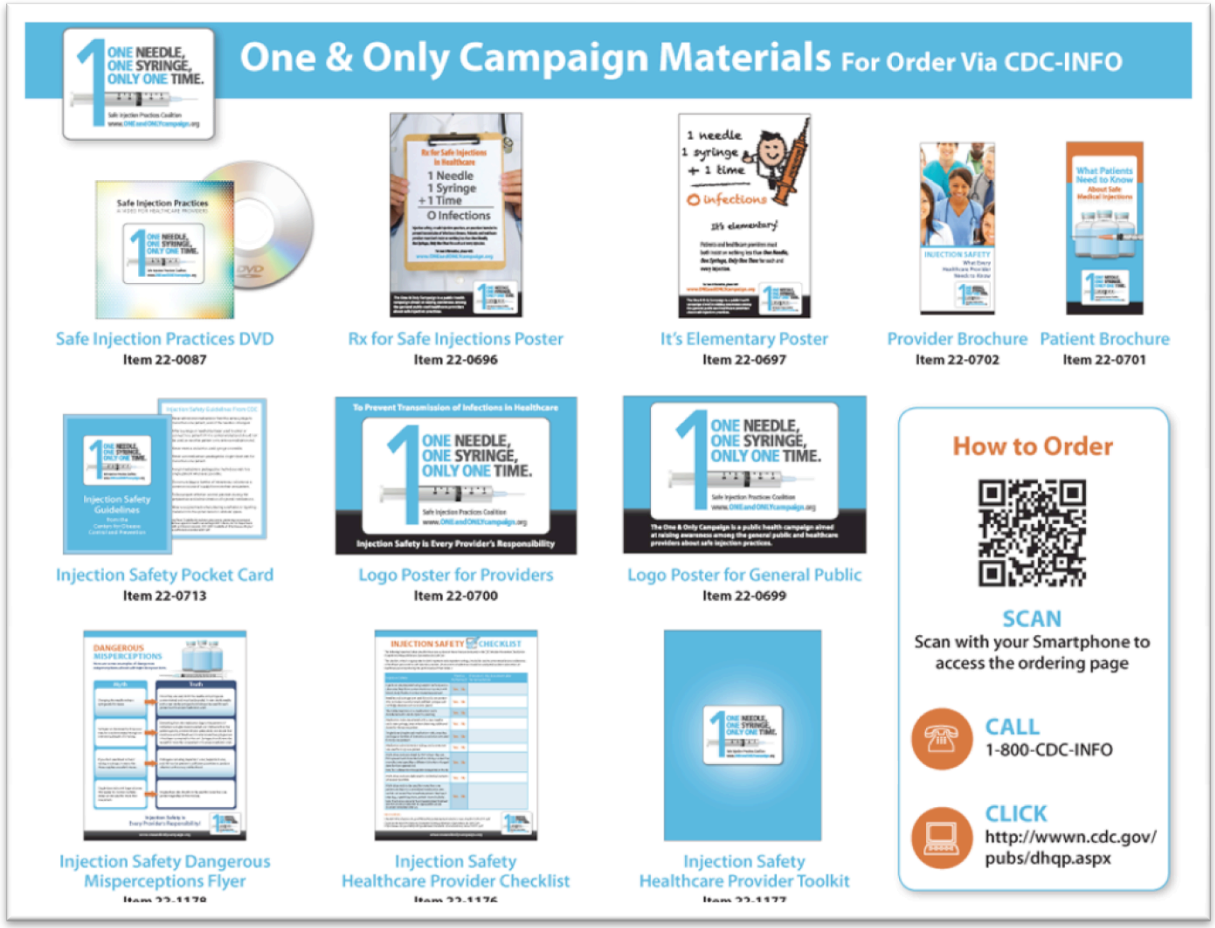


Materials Available for Order



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