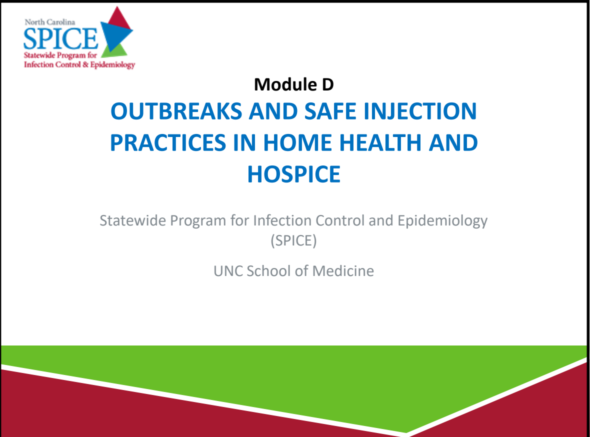


OBJECTIVES

1. Discuss the consequences of unsafe injection practices
2. Describe outbreaks
3. Discuss safe injection best practices
4. Describe One and Only Campaign

UNSAFE INJECTION PRACTICES CONSEQUENCES

Patient illness and death

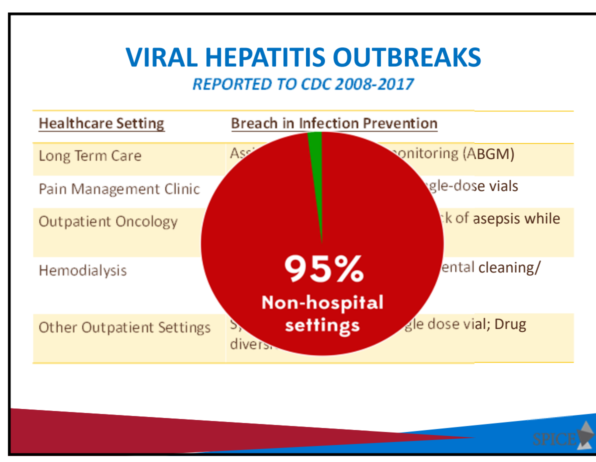
Post-Herald

OUTBREAK!

Loss of clinician license

Legal charges/ malpractice suits

Criminal charges



NC VIRAL HEPATITIS OUTBREAKS

REPORTED TO CDC 2001-2012

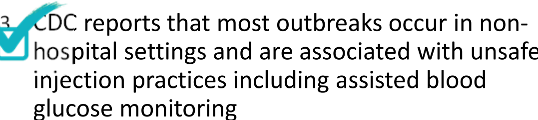
Healthcare Setting	Breach in Infection Prevention
Long Term Care	Assisted blood glucose monitoring (ABGM)
	Exposed - 504 Infections - 31 Deaths - 6
Cardiology Clinic	Syringe reuse and contaminating multi-dose vials
	Exposed - 1200 Infections - 5

North Carolina

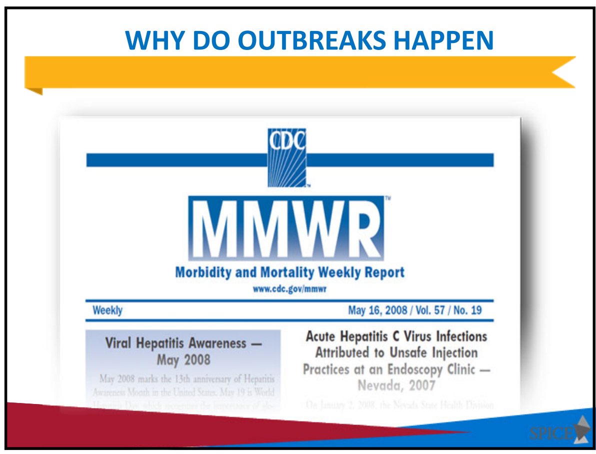
KNOWLEDGE CHECK

Which of the following statements is correct?

1. CDC reports that most outbreaks occur in the hospital
2. Outbreaks of HIV are the most common type of outbreak
3. CDC reports that most outbreaks occur in non-hospital settings and are associated with unsafe injection practices including assisted blood glucose monitoring



WHY DO OUTBREAKS HAPPEN



CDC

MMWR

Morbidity and Mortality Weekly Report

www.cdc.gov/mmwr

Weekly May 16, 2008 / Vol. 57 / No. 19

Viral Hepatitis Awareness — May 2008

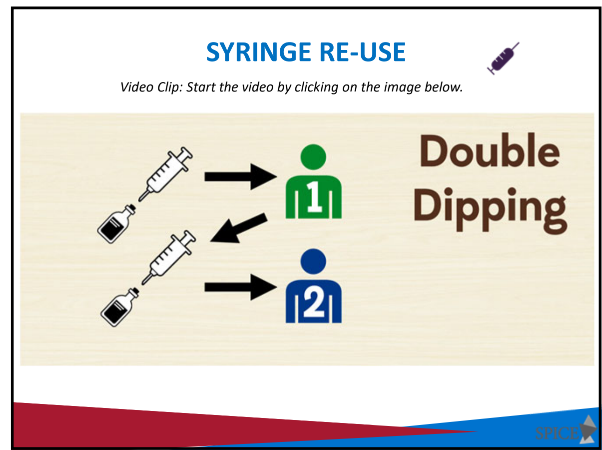
Acute Hepatitis C Virus Infections Attributed to Unsafe Injection Practices at an Endoscopy Clinic — Nevada, 2007

THE BIG FOUR

1. Syringe re-use, directly or indirectly
2. Inappropriate use of single dose or single use vials
3. Failure to use aseptic technique (contamination of injection equipment)
4. Unsafe diabetes care/ assisted blood glucose monitoring (ABGM)

SYRINGE RE-USE

- Most common cause of outbreaks in the outpatient setting is inappropriate use of syringes:
  - Direct reuse:
    - Using the same syringe to administer medication to more than one patient, even if the needle is changed or the injection was administered through an intervening length of tubing
  - Indirect reuse or “double dipping”:
    - Accessing a medication vial or bag with a syringe that has already been used to administer medication to a patient, then reusing the contents from the vial or bag for another patient



ENDOSCOPY CENTER, NEVADA (2008)

- 9 clinic-associated hepatitis C virus cases
- 106 possible clinic-associated cases
- 63,000 potential exposures
- $16–21 million total cost

CDC
MMWR
Morbidity and Mortality Weekly Report
Weekly May 16, 2008 / Vol. 57 / No. 19

Viral Hepatitis Awareness — May 2008

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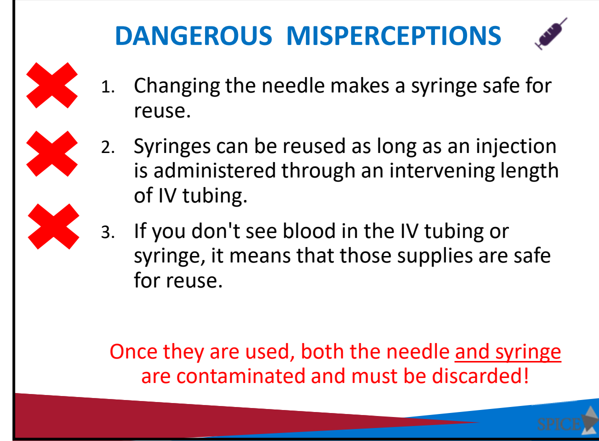
Endoscopy Center Of Southern Nevada, LLC



INAPPROPRIATE USE OF SINGLE-DOSE/SINGLE-USE VIALS

- Vials labeled as single use:
  - NO PRESERVATIVE
  - Can be accessed one time only and for one patient only and remaining contents must be discarded
- CDC is aware of at least 19 outbreaks involving single dose vial use
  - All occurred in outpatient setting with almost half in pain remediation clinics

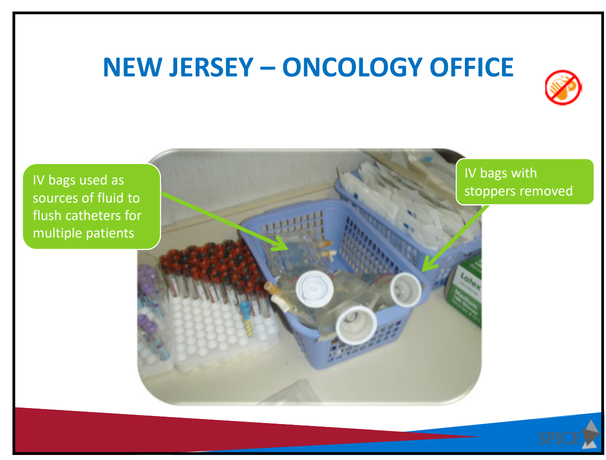
SINGLE DOSE VIALS: CDC POSITION STATEMENT, 2012

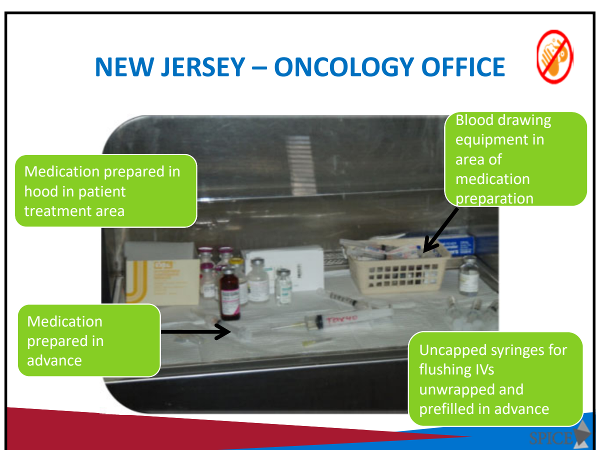
- Vials labeled by the manufacturer as “single dose” or “single use” should only be used for a single patient.
- Ongoing outbreaks provide ample evidence that inappropriate use of single-dose/single-use vials causes patient harm.
- Leftover parenteral medications should never be pooled for later administration
  - In times of critical need, contents from unopened single dose vials can be repackaged for multiple patients in accordance with standards in United States Pharmacopeia General Chapter ‹797›

www.cdc.gov/injectionsafety/CDCposition-SingleUseVial.html

WHEN FAILURE TO USE ASEPTIC TECHNIQUE HAPPENS!

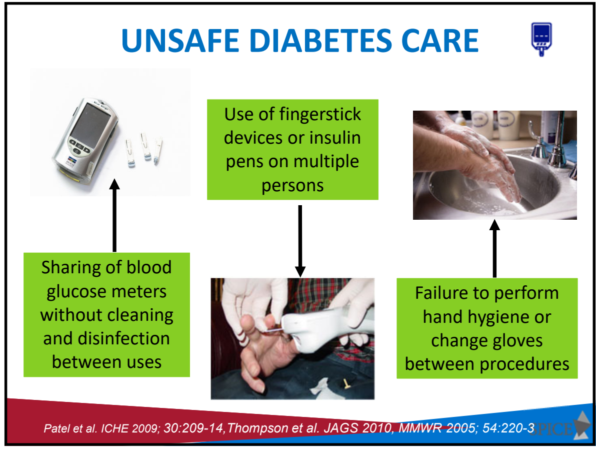
- Two women diagnosed with HBV infection, receiving chemotherapy at the same physician practice
- Multidisciplinary team investigation
- Office closed, physician license suspended
- 2,700 patients notified
- 29 outbreak-associated cases of HBV


NEW JERSEY – ONCOLOGY OFFICE
IV bags used as sources of fluid to flush catheters for multiple patients
IV bags with stoppers removed


NEW JERSEY – ONCOLOGY OFFICE
Medication prepared in hood in patient treatment area
Blood drawing equipment in area of medication preparation
Medication prepared in advance
Uncapped syringes for flushing IVs unwrapped and prefilled in advance

NEW JERSEY – ONCOLOGY OFFICE
Reused Vacutainer holders in contact with gauze
Blood contamination

UNSAFE DIABETES CARE



Patel et al. ICHE 2009; 30:209-14, Thompson et al. JAGS 2010, MMWR 2005; 54:220-3

SAFE INJECTIONS: BEST PRACTICES

Syringe reuse (direct and indirect)

- Never administer medications from the same syringe to multiple patients
- Do not reuse a syringe to enter a medication vial or solution
- Limit the use of multi-dose vials and dedicate them to a single patient whenever possible

Misuse of single-dose/single-use vials

- Do not administer medications from a single dose vial or IV solution bag to more than one patient, more than one time

SAFE INJECTIONS: BEST PRACTICES

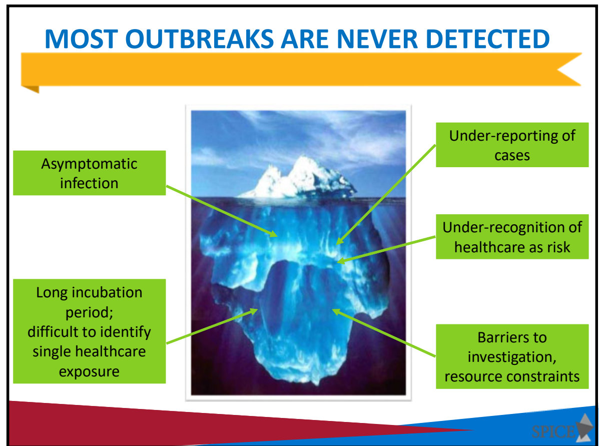
Failure to use aseptic technique

- Use aseptic technique when preparing or administering medications

Unsafe diabetes care

- Use insulin pens and lancing devices for only one patient
- Dedicate glucometers to a single patient. If they MUST be shared, clean and disinfect after each use

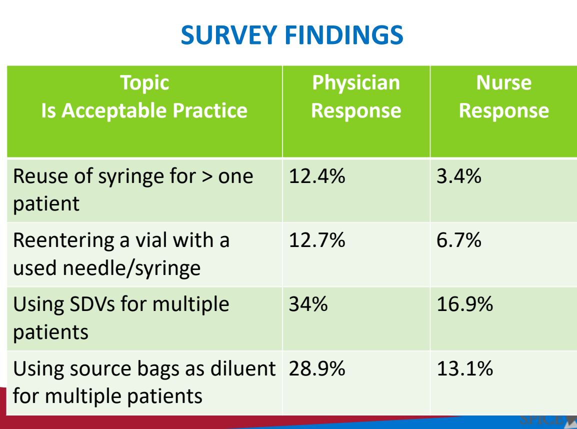
MOST OUTBREAKS ARE NEVER DETECTED



SURVEY OF PHYSICIAN AND NURSE PRACTICES AROUND INJECTION SAFETY

- 370 Physicians
- 320 Nurses
- Eight States Included
  - NC, NY, NJ, Nevada, Colorado, Tennessee, Wisconsin, Montana
- Types of healthcare settings:
  - Acute care, long term care, outpatient settings

SURVEY FINDINGS

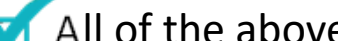


Topic Is Acceptable Practice	Physician Response	Nurse Response
Reuse of syringe for > one patient	12.4%	3.4%
Reentering a vial with a used needle/syringe	12.7%	6.7%
Using SDVs for multiple patients	34%	16.9%
Using source bags as diluent for multiple patients	28.9%	13.1%

KNOWLEDGE CHECK

- Which of the following statements is false?

1. Syringes can be used on more than one patient if the needle is changed.
2. Single dose vials can be used more than one time if it has not been contaminated
3. Blood glucose meters do not have contact with patients and do not need to be cleaned
4. If there is no visible blood the syringe is safe to reuse.



All of the above

KNOWLEDGE CHECK

True or False

Because there have been so many outbreaks, ALL healthcare providers do the right thing every time with safe injection practices.

True

False

BEST PRACTICE

- Designate someone to provide ongoing oversight
- Develop written infection control policies
- Provide training
- Conduct quality assurance assessments

Speak Up!

ONE AND ONLY CAMPAIGN
HELP ENSURE PATIENT SAFETY.
MAKE EVERY INJECTION
A SAFE ONE.
About the Campaign
Become a Member
Featured Content
Spread the Word
Translated Campaign Resources

CAMPAIGN RESOURCES
Print Materials
Audio & Visual
Social Media
Toolkits

North Carolina
News & Events
Patient Safety Awareness Week
CONTACT INFORMATION
TAKE THE ONE & ONLY PLEDGE!
DRUG DIVERSION POST ON CDC SAFE HEALTHCARE BLOG
YOU CAN PROTECT YOURSELF FROM HAIs BY BEING A SAFE, INFORMED PATIENT
(HEALTHCARE-ASSOCIATED INFECTIONS)
SPEAK UP
KEEP HANDS CLEAN
BE ANTIBIOTICS AWARE
KNOW INFECTION SIGNS
CHECK FOR DIARRHEA
PROTECT YOURSELF
WWW.ONEANDOHTTP://WWW.ONEANDONLYCAMPAIGN.ORG/PARTNER/NORTH-CAROLINALYCAMPAIGN.ORG
30

QUESTIONS?