

**Saint Barnabas
Medical Center**

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HEALTH**

DRUG DIVERSION & CONTROLLED SUBSTANCE MONITORING IN THE HEALTHCARE SETTING

A Presentation for HealthTrust Members

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Speaker & Preceptor Disclosures

- The presenter and his preceptor have no conflicts of interest related to this presentation.
- Note: This program may contain the mention of suppliers, brands, products, services or drugs presented in a case study or comparative format using evidence-based research. Such examples are intended for educational and informational purposes only, and should not be perceived as an endorsement of any particular supplier, brand, product, service or drug.

Learning Objectives

- Pharmacists, Pharmacy Technicians & Nurses:
 - ▣ Define the extent of drug diversion in the healthcare setting
 - ▣ Describe methods to identify possible diverters in the workplace
 - ▣ Identify ways to monitor misuse of controlled substances and prevent diversion

Abbreviations

- CDC: Centers for Disease Control and Prevention
- CSDPP: Comprehensive Drug Diversion Prevention Program
- DEA: Drug Enforcement Agency
- ED: Emergency Department
- HCV: Hepatitis C Virus
- HCW: Health Care Worker
- LSD: Lysergic acid diethylamide

The Problem

Controlled Substances

- ❑ Medications classified as CI through CV as defined by the DEA & state statutes
- ❑ Classified based on 3 factors:
 - ❑ Do they have a currently-accepted medical use?
 - ❑ Does it have abuse potential?
 - ❑ Does it have dependence potential when abused?
- ❑ Examples:
 - ❑ CI (no accepted medical use; high abuse potential): marijuana, heroin, LSD
 - ❑ CV (low abuse potential): pregabalin, promethazine with codeine

Drug Diversion

- ❑ Transfer of a controlled substance from a lawful to an unlawful channel of distribution or use
- ❑ Can be performed by:
 - ❑ Family members, friends, neighbors
 - ❑ Businesses such as drug manufacturing companies
 - ❑ **Health care professionals**



Scope of the Problem

- About 10% of healthcare workers (HCWs) are abusing drugs
- About 10–15% of HCWs will misuse alcohol or drugs at some time during their career
- Among HCWs, about 15% of pharmacists, 10% of nurses & 8% of physicians are challenged with alcohol and/or drug dependency
- Diversion of opioids is seen across all levels of an organization
- Nearly 40,000 diversion incidents occur in U.S. facilities each year
- For a majority of hospitals, 80–93% of diversion is going undetected

Which Drugs?

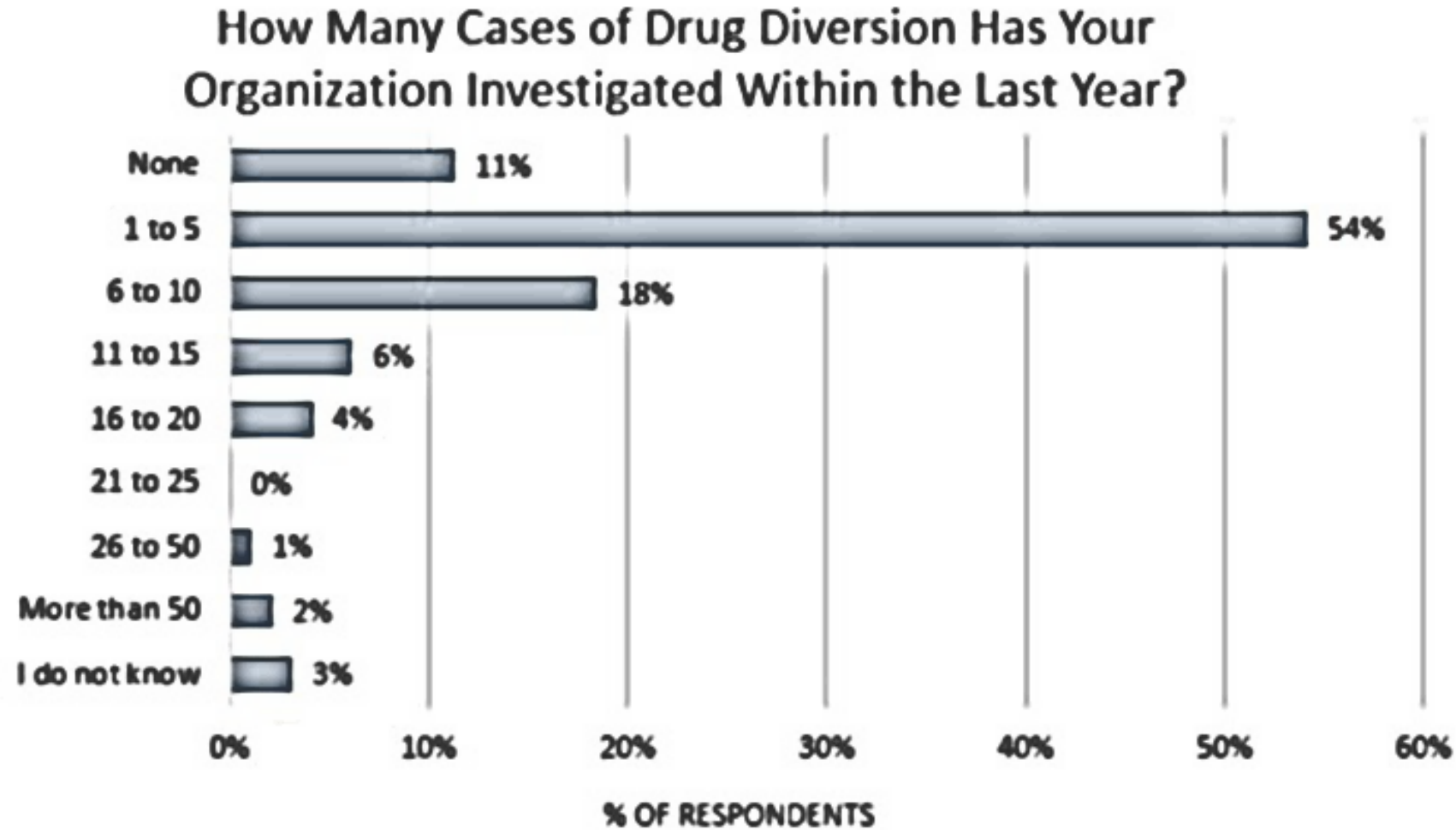
- ❑ Classes of drugs frequently abused (general population): opioids, depressants, hallucinogens, stimulants, anabolic steroids
- ❑ Opioids are the most common drugs diverted from healthcare facilities, especially fentanyl (CII opioid analgesic)
- ❑ Other at-risk, non-controlled substances:
 - ❑ Antiretrovirals
 - ❑ Psychotropics
 - ❑ Insulin



Awareness of the Issue

- National survey of 150 HCWs from over 140 health care systems by Porter Research (2017)
- Some key findings:
 - Most (96%) respondents acknowledge drug diversion is occurring in healthcare, with majority (65%) stating that most diversion goes undetected
 - Almost one-third (32%) felt their organization was at risk for fines, bad press or lawsuits due to drug diversion
 - Almost one-fourth (22%) reported their healthcare facility had no established diversion prevention program in place
 - For the respondents with a diversion program, 66% felt their program was neither efficient nor effective

Awareness of the Issue, *(continued)*



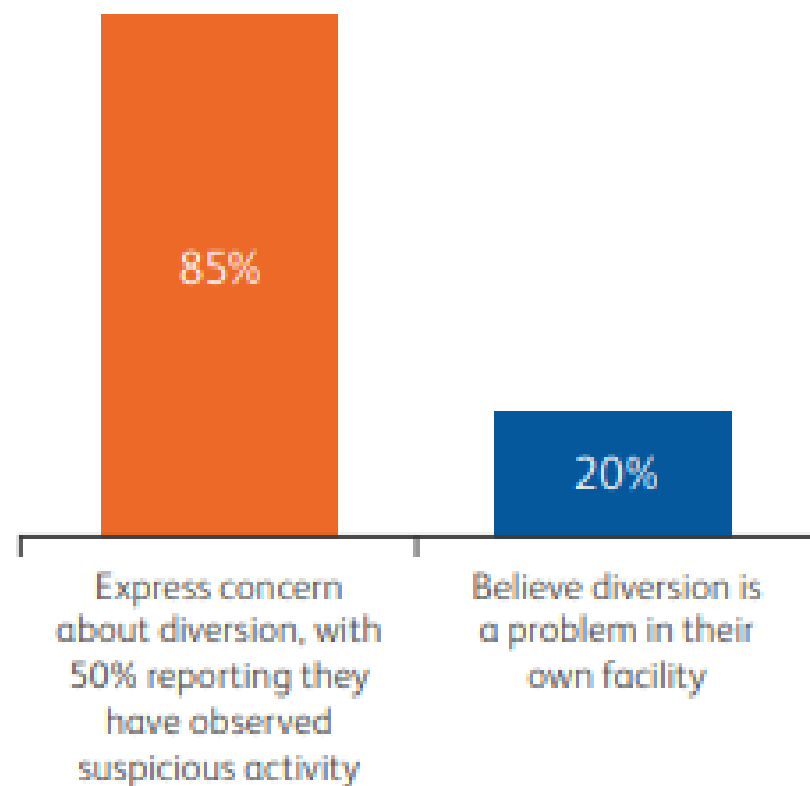
Survey Report: Drug Diversion in U.S. Health Systems



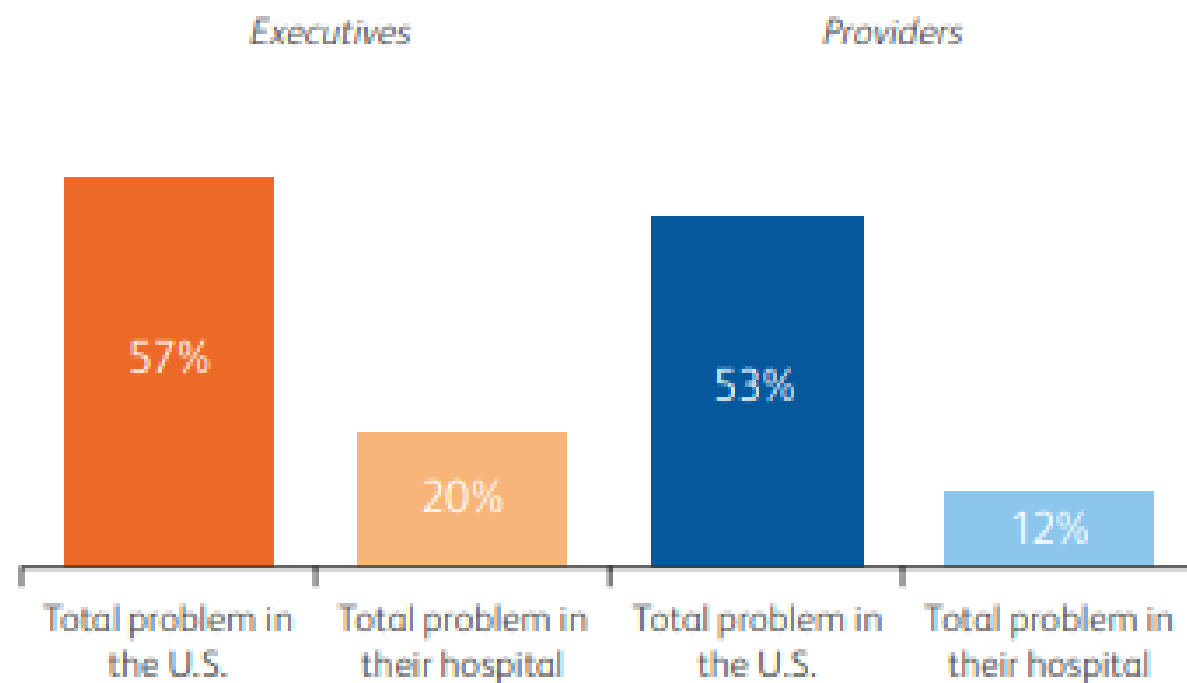
Awareness of the Issue, (*continued*)

- National survey of over 650 hospital executives & providers by the BD Institute for Medication Management & KRC Research (2019)
- Some key findings:
 - ▣ Despite evidence to the contrary, 26% of executives & 29% of providers surveyed believe substance use disorder is less prevalent among hospital employees than the general population
 - ▣ Though 85% of providers are concerned about hospital drug diversion & 50% report observing suspicious activity, only 20% believe it is a problem in their own facility
 - ▣ About 40% of providers report they have not had any formal drug diversion training.

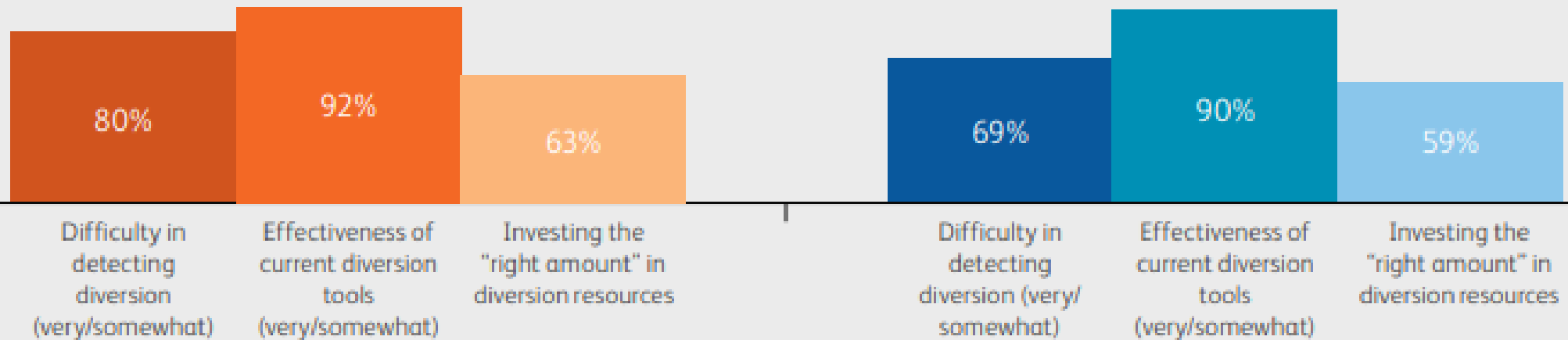
Diversion Recognised as Problem with Major Caveat



Perceived Problem of Hospital Diversion in U.S. Hospitals vs. Their Own



Difficulty in Detecting Diversion, Tool Effectiveness and Appropriate Resource Investment



Risks to Worker

- ❑ Medication effects/overdose, ex: respiratory depression or arrest
- ❑ Infection from unsterile drugs & needles
- ❑ Unsanitary injection techniques
- ❑ Blood-to-blood transmission of pathogens
- ❑ Professional risks, such as:
 - ❑ Felony criminal prosecution & civil malpractice actions
 - ❑ Actions against professional licenses

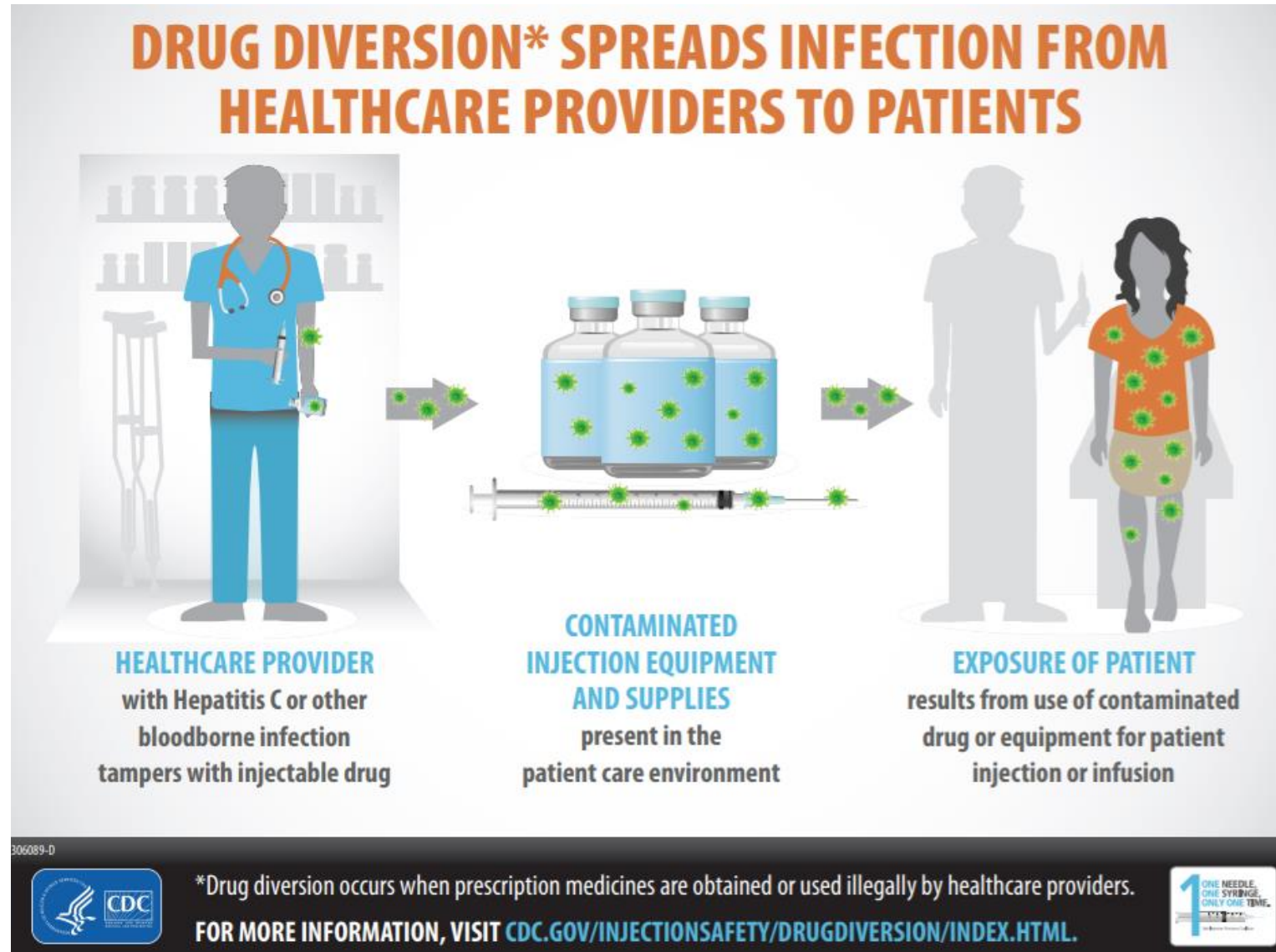
Risks to Other HCWs

- Mechanical injury & infection by bloodborne pathogens
- Shared patient care responsibilities places all team members at medical-legal liability
- Potential victims of manipulations by the diverter
 - ▣ Breaches of policies & procedures
 - ▣ Risk of disciplinary action for innocent colleagues

Risks to Health Care Organization

- ❑ Loss of revenue from diverted drugs & follow-up care for affected patients
- ❑ Poor work quality or absenteeism of diverting HCWs
- ❑ Civil liability
- ❑ Investigations
- ❑ Reduced morale of employees
- ❑ Reduced trust of patients & families

Risks to Patients



STAT

FIRST OPINION

**A hospital staffer diverted drugs,
which gave me hepatitis C. That
happens more often than you think**

By LAUREN LOLLINI / DECEMBER 20, 2019

***For HCV, drug diversion has emerged as the leading cause of
health care transmission between infected health care
professionals and patients.***

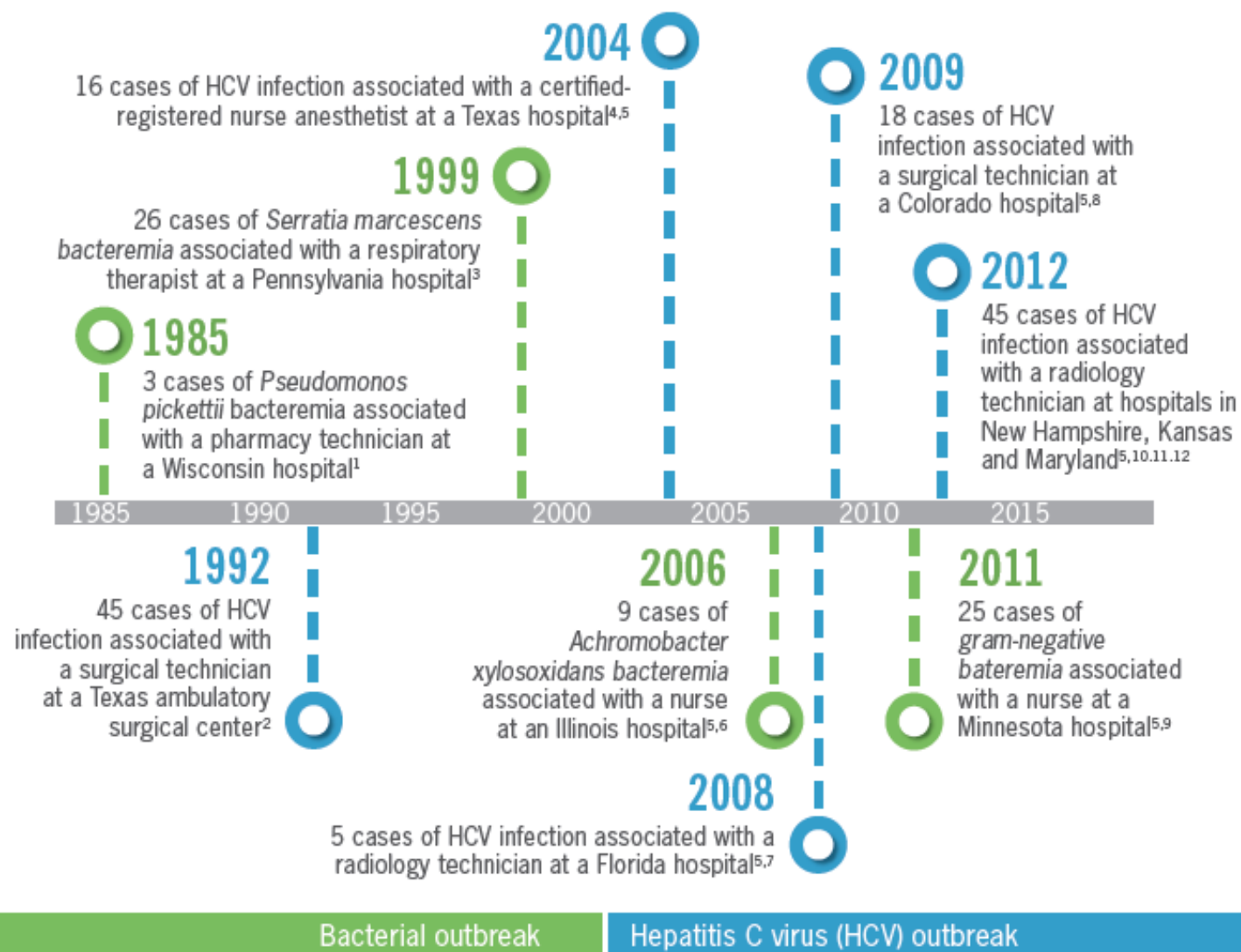
U.S. Outbreaks Associated with Drug Diversion by Healthcare Providers, 2011-2018



Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

Year	Cases	Outbreak
2018	12	HCV infections - ED nurse at a hospital in WA
2018	6	<i>Sphingomonas paucimobilis</i> bacteremia - nurse at a cancer center in NY
2015	7	HCV infections - nurse at a hospital in UT
2014	5	<i>Serratia marcescens</i> bacteremia - nurse in a PACU at hospital in WI
2012	45	HCV infections - radiology technician at hospitals in NH, KS & MD
2011	25	Gram (-) bacteremia – nurse at a Minnesota hospital

Infectious Outbreaks Resulting from Drug Diversion Activities Involving Healthcare Workers Tampering with Injectable Drugs 1983-2013



“Hospitals and healthcare facilities must change their view of drug diversion and elevate it to the level of both a patient safety violation and an infection prevention event...Healthcare culture must change for hospital staff to accept and understand that the patient is the primary victim of diversion.”

Maryland Department of Health and Mental Hygiene (2013)

POLLING QUESTION 1:

Which of the following statements is accurate regarding the prevalence of drug diversion among healthcare workers?

- A. Similar prevalence is seen in the general population
- B. About 10–15% of HCWs will misuse drugs or alcohol at some time during their career
- C. More than 50 outbreak cases have been associated with workplace drug diversion since 2011
- D. All of the above

POLLING QUESTION 1 RESPONSE:

Which of the following statements is accurate regarding the prevalence of drug diversion among healthcare workers?

- A. Similar prevalence is seen in the general population
- B. About 10–15% of HCWs will misuse drugs or alcohol at some time during their career
- C. More than 50 outbreak cases have been associated with workplace drug diversion since 2011
- D. **All of the above**

Responsibilities & Signs

Responsibilities of a Health Care Worker

Legal
Ethical
Professional
Personal

Recognizing an Impaired Co-Worker

- ❑ Work absenteeism
- ❑ Frequent disappearances from work site
- ❑ Excessive amount of time near drug supply
- ❑ Unreliability in keeping appointments & keeping deadlines
- ❑ Oscillating work performance
- ❑ Confusion, memory loss, difficulty concentrating
- ❑ Sloppy recordkeeping
- ❑ Heavy “wastage” of drugs not adequately addressed
- ❑ Personality changes

OPIOIDS AT WORK

EMPLOYER TOOLKIT



SIGNS OF POTENTIAL IMPAIRMENT

Physical	Mental	Performance
<ul style="list-style-type: none">• Rapid shift in physical appearance (hygiene, weight loss or gain)• Tremors• Unsteady gait, loss in manual dexterity, working in an unsafe manner• Odor of alcohol or other drugs	<ul style="list-style-type: none">• Inappropriate verbal or emotional responses or behaviors• Irritability• Memory loss• Unusual isolation from colleagues• Lack of concentration, confusion, forgetfulness• Lying	<ul style="list-style-type: none">• Calling in sick frequently• Unexplained tardiness, early departure, extended breaks• Errors in judgment• Deterioration in performance and quality of work• Testing positive on a drug screen

Signs of Drug Diversion

- ❑ Removing controlled substances without an order
- ❑ Product containers are compromised
- ❑ Unverified verbal orders of controlled substances
- ❑ Volume removed from premixed infusion
- ❑ Multi-dose vial overfill
- ❑ Late documentation of certain meds



Signs of Drug Diversion, (*continued*)

- ❑ Drug dispensing machines show excessive discrepancies/overrides
- ❑ Excess pulls for as-needed meds vs. other HCWs
- ❑ Patients continue to complain about excessive pain, despite documented administration of pain medication
- ❑ Frequent/unusual efforts to help administer pain meds to a patient
- ❑ Controlled substance waste tampering
- ❑ Controlled substance waste in a syringe is replaced with saline

Tampering is the most serious type of drug diversion because it is most likely to result in patient harm



Prevention & Detection

Steps to Prevention

- ❑ 1. Identify where diversion occurs in the healthcare environment
- ❑ 2. Identify workers at risk for drug diversion
- ❑ 3. Define a comprehensive drug diversion program
- ❑ 4. Engage leadership
- ❑ 5. Tap into technology
- ❑ 6. Incorporate approach into culture & training

Prevention: Where Diversion Occurs

Common points of risk & methods of drug diversion in healthcare's controlled substance lifecycle

- 1) Procurement**
- 2) Preparation and Dispensing**
- 3) Prescribing**
- 4) Administration**
- 5) Waste and Removal**

Prevention: Healthcare Workers

- Recognize certain risk factors
- Human resources screening & assessment
- Monitor risky employee behaviors
- Provide diversion training

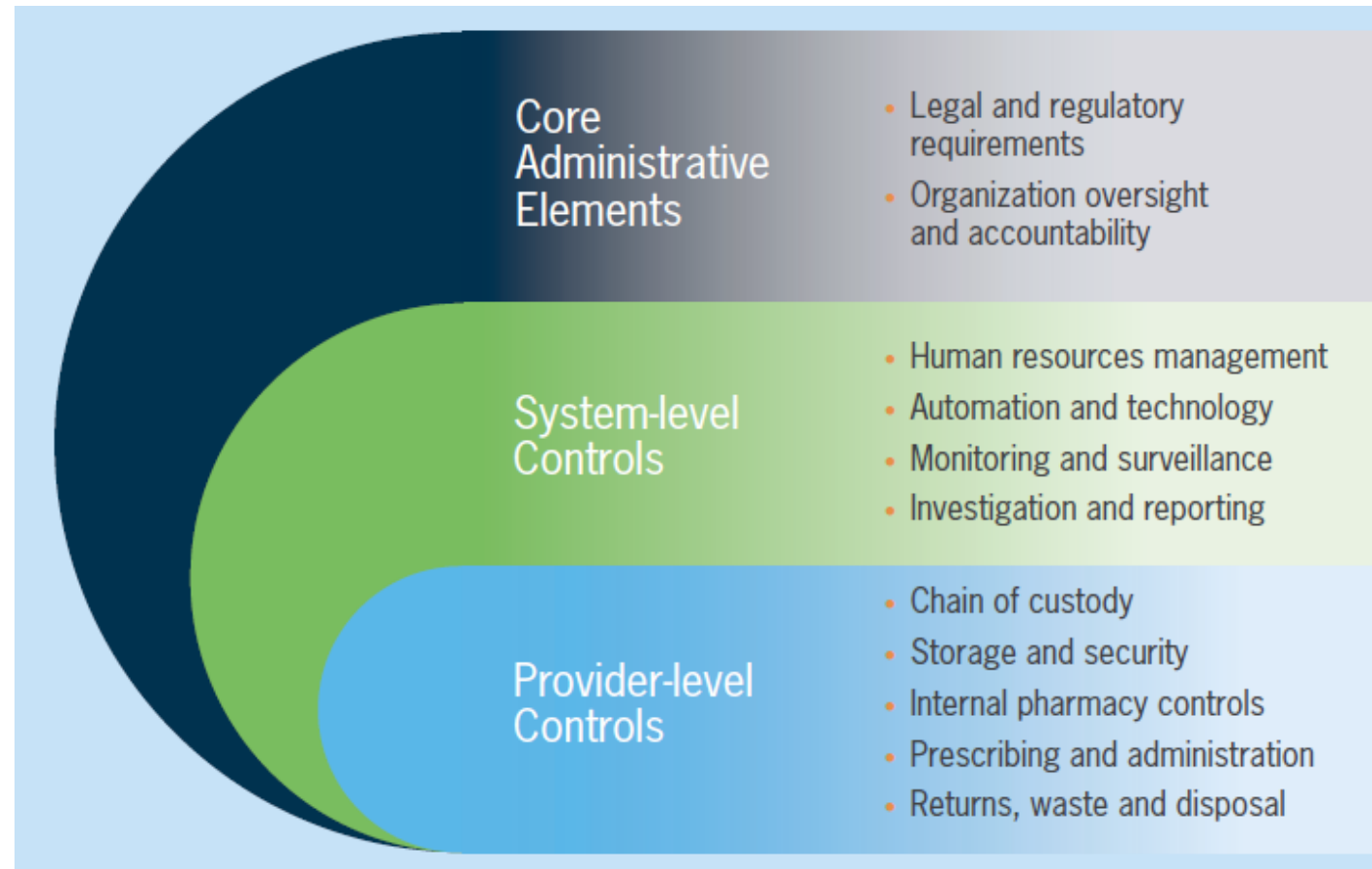


Prevention: Healthcare Workers, *(continued)*

- Six best practices:
 - ▣ 1. Establish drug screening policy
 - ▣ 2. Conduct random drug tests
 - ▣ 3. Match specimen & testing method to business needs
 - ▣ 4. Customize drug testing by industry or job function
 - ▣ 5. Document the process
 - ▣ 6. Check with your insurance provider for discounts

Prevention: CSDPP

Key components of a comprehensive controlled substance diversion prevention program (CSDPP):



Prevention: Leadership

- ❑ Build strong, interdisciplinary CSDPP leadership team
- ❑ Train supervisors & workers
- ❑ Assess existing controls
- ❑ Actively monitor systems
- ❑ Surveillance
- ❑ Timely & routine reporting on results of the program
- ❑ Designate a drug diversion officer

Prevention: Technology

- Electronic health records, automated distribution devices & prepackaging devices
- Ensure entire medication lifecycle supports diversion control, monitoring, surveillance & regulatory needs
- Disclaimer: diverters can use technology to their advantage
 - ▣ “Too much data, too many gaps”

Prevention: Culture & Training

- ❑ Support a “see something, say something” culture
- ❑ Patient safety is paramount
- ❑ Non-diverting HCWs are first-line defense in protecting patients
- ❑ Education for employees to detect suspicious coworker behavior
- ❑ Empower employees to act immediately



Reporting Drug Diversion

- ❑ Do NOT intervene on your own
- ❑ Report incident to HCW's supervisor or employee
- ❑ If drugs are missing, contact the DEA; fill out and send Form 106 within 24 hours of discovery
 - ❑ Also notify hospital security & local police
- ❑ Report the HCW to his/her state professional licensure board
- ❑ If patients may have been infected, report incident to state public health authority
- ❑ If drug tampering has occurred, report to the FDA Criminal Investigations Unit

Comprehensive Audit Approach

- ❑ Evaluate all relevant data for trends, variances & improvement opportunities
- ❑ Include compliance reviews with federal & state regulations, as well as organizational policies & procedures
- ❑ Identify & assess surveillance reporting, metrics & thresholds
- ❑ Determine frequency of reviews, audits & responsibilities
- ❑ Document & assess investigations, completeness & reporting
- ❑ Audit all systems of control: procurement → disposal

Comprehensive Audit Approach, (*continued*)

- Consider all of the following examples:
 - ▣ Segregation of duties
 - ▣ Blind count documentation & reviews
 - ▣ Discrepancy reviews
 - ▣ Nursing medication administration audits
 - ▣ Discrepancy management
 - ▣ Scheduling & diversion management
 - ▣ Paper-based workflow
 - ▣ Resources & diversion prevention program management

Examples of Best Practices: Procurement

- ❑ Separation of duties
- ❑ Orders received are dated & signed by at least two witnesses
- ❑ Procurement orders are verified for complete & accurate documentation
- ❑ Audit of controlled substance purchases against products added to inventory is performed at least quarterly
- ❑ Unit dose packages, whenever possible

Examples of Best Practices: Storage

- ❑ Biometric fingerprint scan is used for vault access
- ❑ Blind counts used when removing/adding controlled substances to inventory
- ❑ Cameras in controlled substance storage areas
- ❑ Personal belongings are banned from drug storage areas
- ❑ Controlled substance pharmacy vault inventory is conducted monthly
- ❑ Controlled substance packing is routinely inspected for evidence of tampering or alteration

Examples of Best Practices: Dispensing

- ❑ Inventory conducted at end of every shift for controlled substances not stored in an automated vault
- ❑ Controlled substance infusions stored in a secured lock box & no-port tubing
- ❑ Controlled substances are never left unattended outside of the pharmacy vault
- ❑ Delivery & receipt are documented by pharmacy staff & a licensed staff member in the receiving department
- ❑ All discrepancies are investigated to resolution or reported

Examples of Best Practices: Return, Wasting & Disposal

- ❑ Pharmacy returns are verified & documented
- ❑ Returns are inspected for package integrity
- ❑ Witness & documentation is required for wasting
- ❑ Random audits of unused controlled substances
- ❑ Chain of custody is maintained & documented
- ❑ Waste containers render controlled substances irretrievable or unusable

POLLING QUESTION 2:

Which is NOT a best practice for detecting drug diversion?

- A. Random audits are conducted of unused CSDs to verify the content
- B. Personal belongings are allowed in CSD storage areas
- C. Define a comprehensive drug diversion program
- D. CSDs are purchased in unit dose packages whenever possible

POLLING QUESTION 2 RESPONSE:

Which is NOT a best practice for detecting drug diversion?

- A. Random audits are conducted of unused CSDs to verify the content
- B. **Personal belongings are allowed in CSD storage areas**
- C. Define a comprehensive drug diversion program
- D. CSDs are purchased in unit dose packages whenever possible

POLLING QUESTION 3:

Strategies for monitoring misuse of controlled substances and prevention of diversion include which of the following?

- A. Reporting all suspected incidents of diversion through the appropriate channels
- B. Educate staff members about signs of drug diversion
- C. Implementing a comprehensive audit approach
- D. All of the above

POLLING QUESTION 3 RESPONSE:

Strategies for monitoring misuse of controlled substances and prevention of diversion include which of the following?

- A. Reporting all suspected incidents of diversion through the appropriate channels
- B. Educate staff members about signs of drug diversion
- C. Implementing a comprehensive audit approach
- D. **All of the above**

Key Points

- ❑ Drug diversion among healthcare workers is an issue that is prevalent, serious, and under-addressed
- ❑ Drug diversion poses significant risks to the employee, colleagues, healthcare organization, and—most importantly—patients
- ❑ It is a healthcare worker's duty to detect and report suspected or confirmed acts of diversion among colleagues
- ❑ Health systems must implement comprehensive preventative and detective tools to reduce drug diversion in the workplace

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THANK YOU!

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