



Jennifer MacFarquhar MPH BSN CIC  
Shilpa Bhardwaj MD MPH FACP

***SHARPPS Program***  
*The new face of healthcare associated infections*



# *Objectives*

- List key activities of SHARPPS Program
- Describe One & Only, Get Smart campaigns
- Describe role of the local health department in Infection Prevention activities

# *Objectives*

Program Overview

Program Activities

Campaigns

Future Activities

LHD Engagement

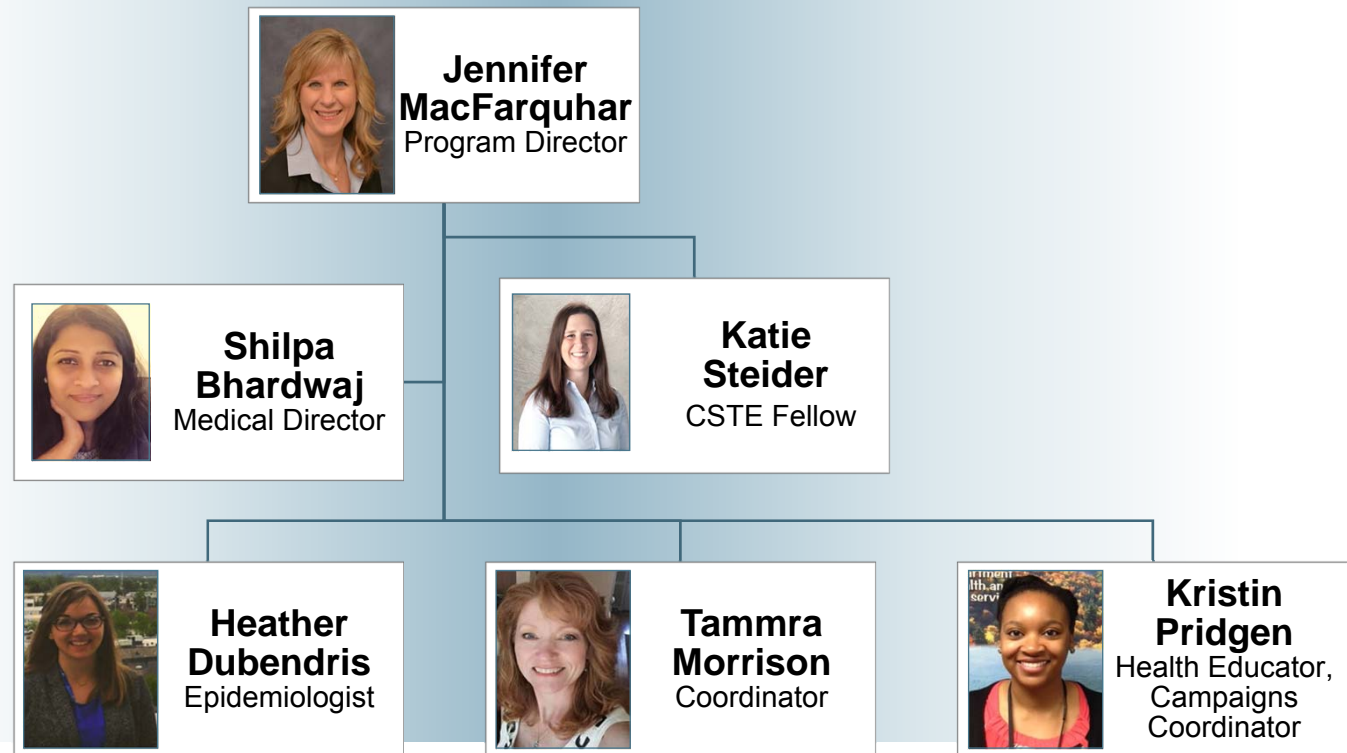
## **Mission**

To work in partnerships to prevent, detect, and respond to events and outbreaks of healthcare-associated and antimicrobial resistant infections in North Carolina.

# SHARPPS

*Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program*

## OVERVIEW



## ***Healthcare associated infection (HAI)***

Any infection acquired as a consequence of a healthcare intervention or that acquired by a healthcare worker in the course of duty

Can occur in any healthcare setting

## ***Burden of HAIs in USA***

HAI Prevalence survey published in 2014, estimated

- 722,000 HAIs in acute care hospitals in 2011
- 75,000 patient's died during their hospitalization

Estimates for overall annual direct medical costs attributable to HAI in U.S. hospitals

- Range from \$28.4 to \$45 billion

NC: Estimated costs \$124 - \$348 million

## ***Winnable Battle !!***

CDC identifies eliminating HAIs as a winnable battle.

With additional effort and support for evidence-based, cost-effective strategies, we can have a significant impact on our nation's health.



# ***SHARPPS***

*Surveillance for Healthcare Associated &  
Resistant Pathogens Patient Safety Program*

## ACTIVITIES

Surveillance,  
Investigation  
& Response

Prevention,  
Education  
& Training

Monitoring &  
Evaluation

Communication

[Click to go to next section](#)

# SHARPPS

*Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program*

## ACTIVITIES

Surveillance,  
Investigation  
& Response

HAI reporting to  
NHSN

CRE surveillance

DHSR Infection  
Prevention  
Breach reporting

Outbreak &  
Exposure  
management

Prevention,  
Education  
& Training

Monitoring &  
Evaluation

Communication

[Click to go to next section](#)

# SHARPPS

## Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program

### HAI REPORTING TO NHSN

Who

What

How

#### 10A NCAC 41A .0106 REPORTING OF HEALTH CARE-ASSOCIATED INFECTIONS

(a) The following definitions apply throughout this Rule:

- (1) "Hospital" means any facility designated as such in G.S. 131E-76(3).
- (2) "National Healthcare Safety Network" is an internet-based surveillance system managed by the Centers for Disease Control and Prevention. This system is designed to be used for the direct, standardized reporting of healthcare quality information, including health care-associated infections, by health care facilities to public health entities.
- (3) "Health care-associated infection" means a localized or systemic condition in the patient resulting from an adverse reaction to the presence of an infectious agent(s) or its toxin(s) with no evidence that the infection was present or incubating when the patient was admitted to the health care setting.
- (4) "Denominator or summary data" refers to referent or baseline data required to generate meaningful statistics for communicating health care-associated infection rates.
- (5) "The Centers for Medicaid and Medicare Services - Inpatient Prospective Payment System (CMS – IPPS) rules" are regulations promulgated for the disbursement of operating costs by the Centers for Medicare and Medicaid Services for acute care hospital stays under Medicare Part A based on prospectively set rates for care.

## HAI REPORTING TO NHSN

### Who

### What

### How

## Who reports HAIs?

### Licensed hospitals including:

- Acute care hospitals
- Long-term acute care hospitals
- Inpatient rehabilitation facilities
- Specialty hospitals including state-operated mental health facilities

### Exceptions to reporting

- Critical access hospitals
- Hospitals who have received Centers for Medicare & Medicaid Services (CMS) exemption from reporting

## HAI REPORTING TO NHSN

Who

**What**

How

### **What is reportable?**

#### **Reportable HAIs**

- Links reduction of HAIs to federal payment
- Mandates HAI surveillance and reporting in order for facility to receive a portion of their annual reimbursement
- Began in 2011

## HAI REPORTING TO NHSN

Who

What

How

### What is reportable?

#### Reportable HAIs

- Central line-associated bloodstream infections (CLABSI)
- Catheter-associated urinary tract infections (CAUTI)
- Surgical site infections (SSI) following abdominal hysterectomies and colon surgeries
- Ventilator-associated events (VAE)
- Methicillin-resistant *Staphylococcus aureus* (MRSA) bloodstream infections
- *Clostridium difficile* (*C. difficile*, CDI) infections positive lab report

# SHARPPS

*Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program*

## HAI REPORTING TO NHSN

Who

What

How

### How is it reported?

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

#### National Healthcare Safety Network (NHSN)

- Managed by CDC
- Web-based surveillance system, no cost
- Trainings and resources available on-line
- Hospitals report to CMS via NHSN



## CRE SURVEILLANCE

### **Public Health Significance of Carbapenem-resistant Enterobacteriaceae (CRE)**

- **Resistant to nearly all antibiotics**
- **>9,000 healthcare-associated infections each year**
- **Carbapenemase producing CRE (CP CRE)**
  - Potential to spread widely
  - High mortality rates
  - Ability to transfer resistance among bacteria

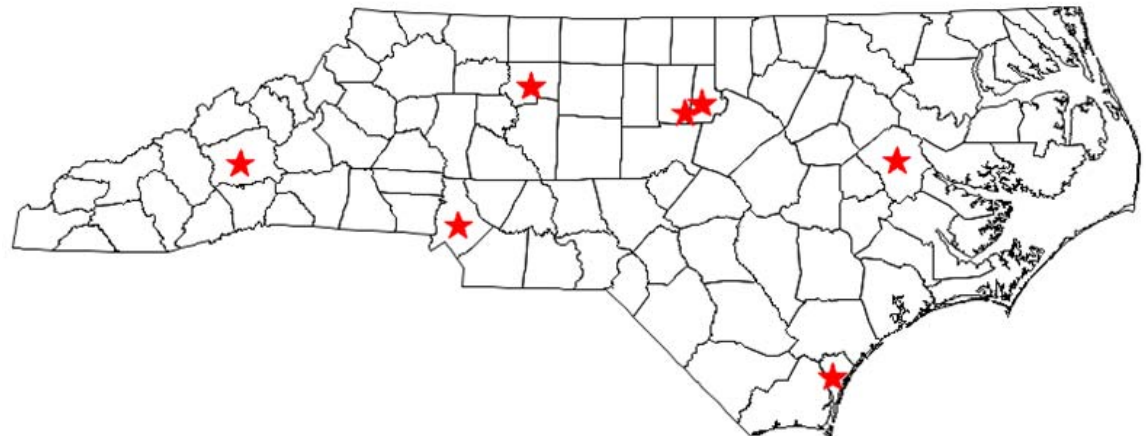




## CRE SURVEILLANCE

### CRE Sentinel Surveillance

- Conducted at PHE locations March 1, 2015- September 30, 2016
- PHEs:
  - Reviewed laboratory results
  - Submitted case report forms (CRFs)
  - Coordinated isolate submission
- State Laboratory of Public Health:
  - Molecular phenotyping



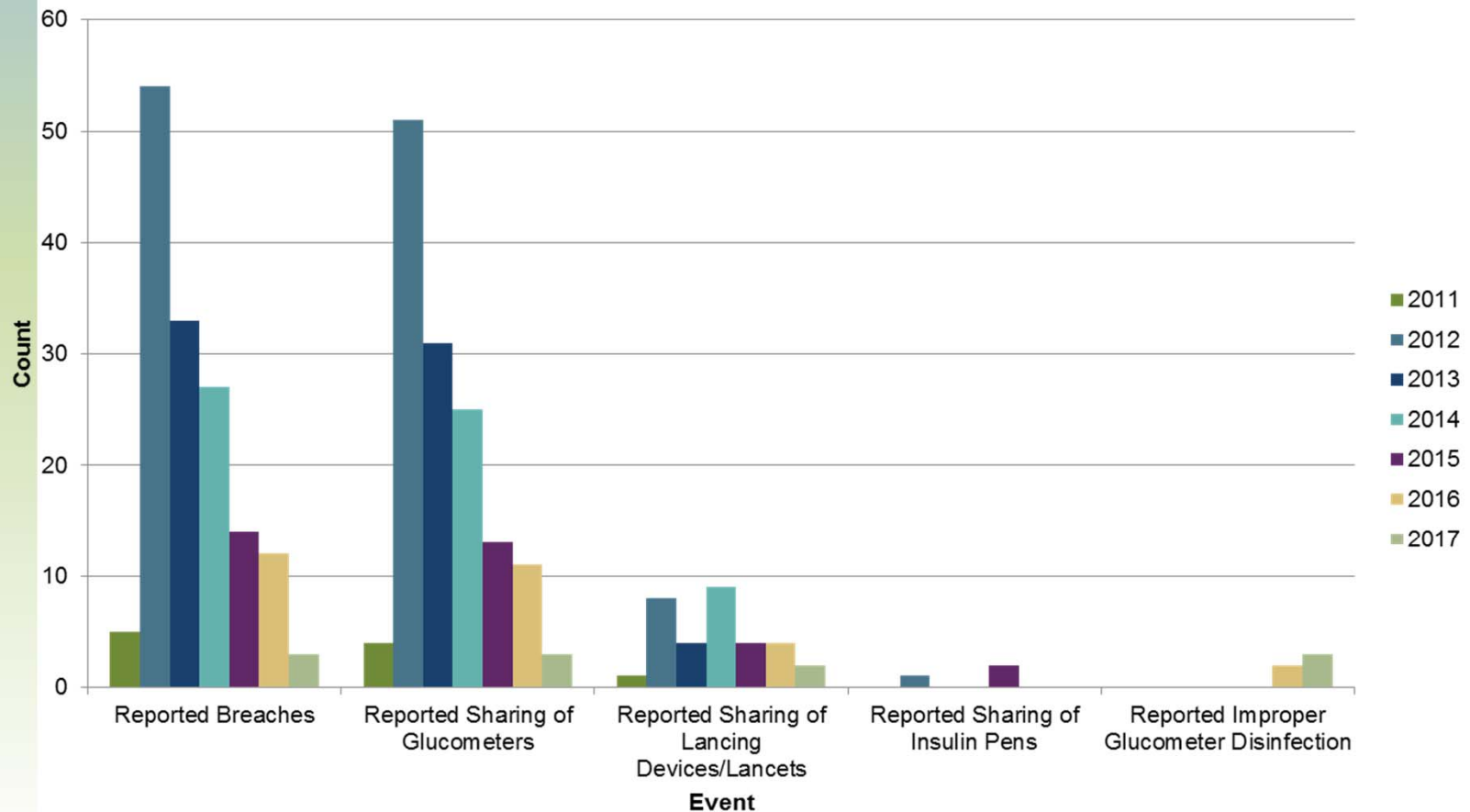
Sentinel Site Locations

## Important Findings & Next Steps

- **Most patients had recent healthcare exposures**
  - Indwelling devices
  - Antibiotics
- **Transfer between facilities is common**
- **57% of isolates were CP CRE**
- **What's Next?**
  - Regional control efforts
  - Expanded surveillance
    - Antimicrobial Resistant Laboratory Network
  - Statewide surveillance?

## INFECTION PREVENTION BREACHES

### Reported Infection Control Breaches, [2011-2017]



## OUTBREAKS & EXPOSURE MANAGEMENT

- TB in a NICU
- CRE (1)
- Multidrug Resistant Acinetobacter (1)
- Legionella (2)
- Group A strep (3)
- Scabies (19)
  
- Acute Hepatitis B (orthopedic clinic)
- Potential Hepatitis B transmission in dialysis facility
- National response to non-tuberculosis mycobacterium (NTM) and heater-cooler units
- National response to B. cepacia and liquid docusate

# SHARPPS

*Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program*

## ACTIVITIES

Surveillance,  
Investigation  
& Response

HAI reporting to  
NHSN

CRE surveillance

DHSR Infection  
Prevention  
Breach reporting

Outbreak &  
Exposure  
management

Prevention,  
Education  
& Training

Campaigns: One  
& Only, Get Smart

Drug Diversion

Antimicrobial  
resistance &  
stewardship

Infection Control,  
Assessment &  
Response (ICAR)

Partnerships

Monitoring &  
Evaluation

Communication

# SHARPPS

*Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program*

## C A M P A I G N S



# SHARPPS

*Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program*

## C A M P A I G N S

- A public health campaign, led by the CDC and the Safe Injection Practices Coalition (SIPC)
- To raise awareness among patients and healthcare providers about safe injection practices
- Aims to eradicate outbreaks resulting from unsafe injection practices



# SHARPPS

*Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program*

## C A M P A I G N S



**Patient illness  
and death**



**Loss of  
clinician license**



**Criminal charges**



**Legal charges/  
malpractice suits**

**Unsafe injection  
practices have  
devastating  
consequences**



# SHARPPS

*Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program*

## C A M P A I G N S

- Increasing problem
- Associated with unsafe use of diabetes testing equipment



**Hepatitis  
outbreaks in long  
term care facilities**

# SHARPPS

*Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program*

## C A M P A I G N S

- 17 in LTCF
- 14 (82%) linked to unsafe diabetes care



# SHARPPS

Surveillance for **H**ealthcare **A**ssociated &  
**R**esistant **P**athogens **P**atient **S**afety Program

## C A M P A I G N S

- 18 in hemodialysis settings
- 13 in outpatient facilities
- 2 associated with HCW drug diversion

*All attributed to syringe reuse or other lapses in injection safety*



The Daily News  
WINDY CITY

# 33 HCV outbreaks

in ambulatory care settings during 2008-2015

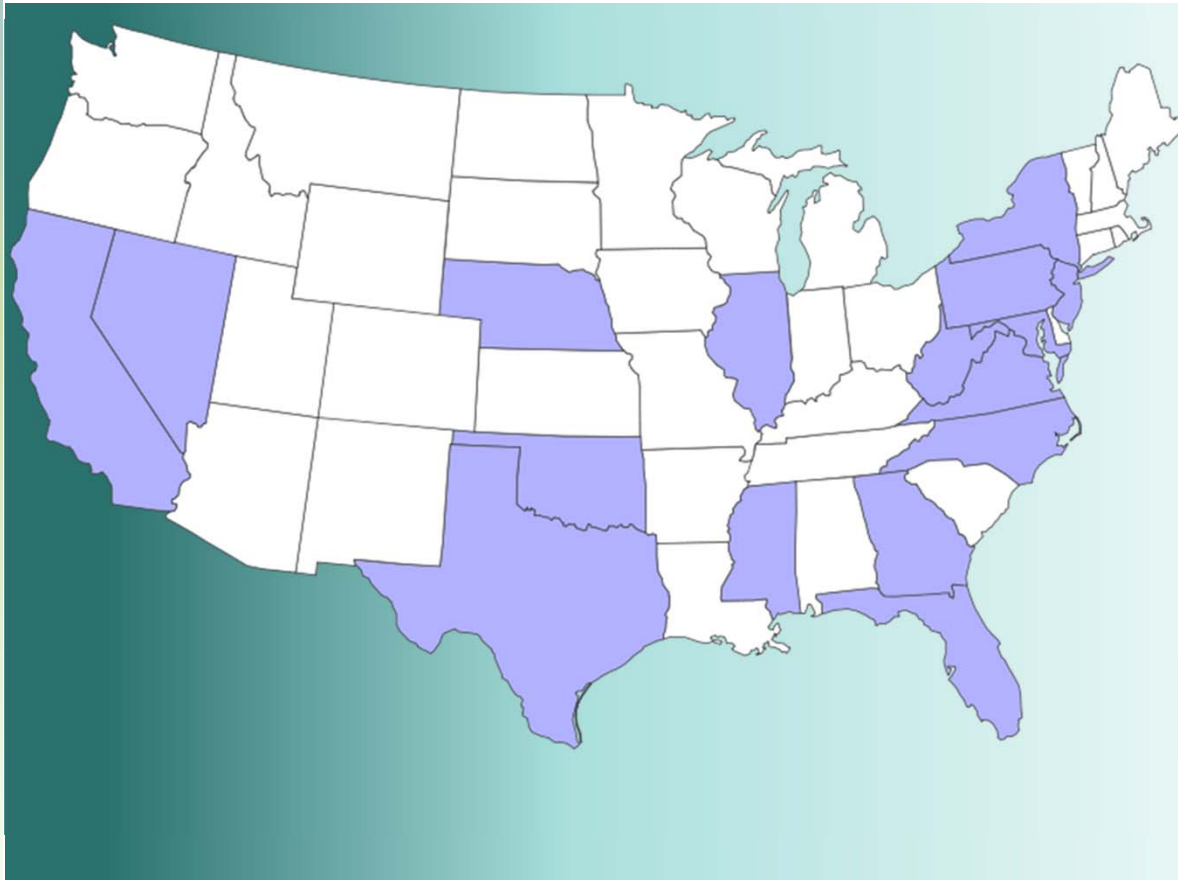
High fuel prices are pushing some drivers to the financial brink — and to the pump for gas. Money-losing drivers are feeling the most pain.

High fuel prices are pushing some drivers to the financial brink — and to the pump for gas. Money-losing drivers are feeling the most pain.

High fuel prices are pushing some drivers to the financial brink — and to the pump for gas. Money-losing drivers are feeling the most pain.

# *Hepatitis Outbreaks 2001-2015*

*Non-hospital settings*



- 4 HBV: 3 associated with assisted monitoring of blood glucose, 1 unknown
- 1 HCV: syringe reuse contaminating multi-dose vials used for >1 patient

North Carolina  
Outbreaks

# *Hepatitis Outbreaks 2001-2014*

*Long-term care settings*

**8** states

**19** outbreaks

- 18 Hepatitis B
- 1 Hepatitis C

**= 176** infections

# *Hepatitis Outbreaks 2008-2014*

*Outpatient Hemodialysis settings*

**10** states

**12** outbreaks

- 1 Hepatitis B
- 11 Hepatitis C

**= 79** infections

# *Hepatitis Outbreaks 2008-2015*

*Outpatient settings*

**10** states

**16** outbreaks

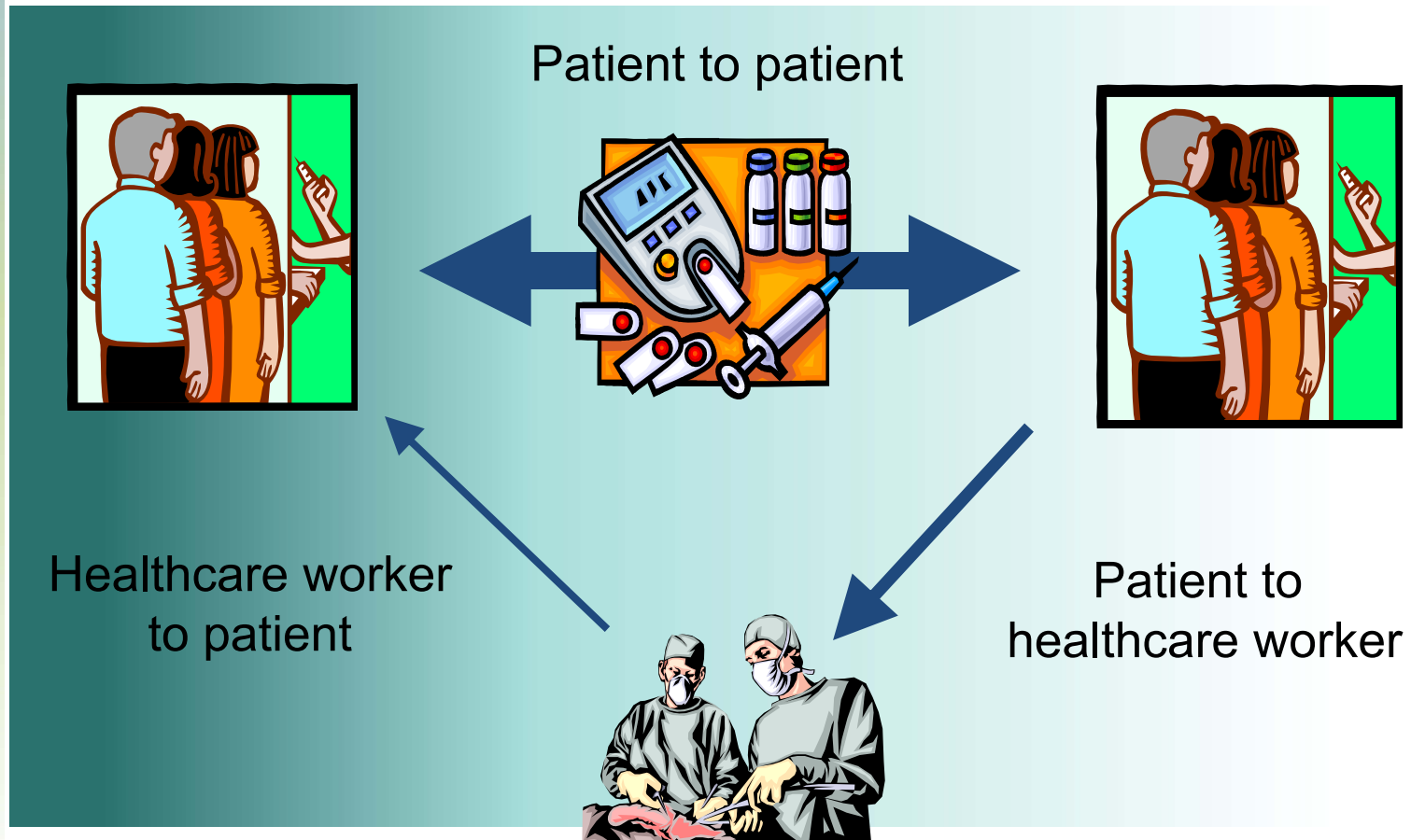
- 4 Hepatitis B
- 11 Hepatitis C
- 1 Hepatitis B & C

**= 109** infections

Clinic Types: Prolotherapy, Insulin Infusion, Pain Management, Cardiology, Hematology/Oncology, Alternative Medicine, Endoscopy, ASC, Free dental clinic, Home Health

# ***HBV and HCV Transmission***

*in Health Care Settings*





# SHARPPS

*Surveillance for Healthcare Associated &  
Resistant Pathogens Patient Safety Program*

## C A M P A I G N S

**DRUG DIVERSION**  
A GROWING RISK TO  
PATIENT SAFETY

**1** ONE NEEDLE,  
ONE SYRINGE,  
ONLY ONE TIME.  
Safe Injection Practices Coalition  
[www.ONEandONLYcampaign.org](http://www.ONEandONLYcampaign.org)

**What is  
Drug Diversion?**

# SHARPPS

Surveillance for **H**ealthcare **A**ssociated &  
**R**esistant **P**athogens **P**atient **S**afety Program

## C A M P A I G N S

Act of *illegally obtaining prescription medications* by a healthcare worker for his or her own use

**What is  
Drug Diversion?**

## C A M P A I G N S

Who are these healthcare workers?

- 15% of pharmacists
- 10% of nurses
- 8% of physicians

**Drug Diversion has  
been labeled as an  
epidemic by CDC**

## C A M P A I G N S

- Substandard care delivered by an impaired healthcare provider
- Denial of essential pain medication or therapy
- Risks of infection
- Cost to healthcare

**What are damages associated with Drug Diversion?**

## C A M P A I G N S

- Estimated cost approximately **\$72.5 billion** a year\*
- **\$120 billion** in lost productivity
- **\$11 billion** in health care costs
- **\$61 billion** in criminal justice costs

**What is the financial cost of Drug Diversion?**



**Drug diversion can spread infection  
from provider to patient**

## **5 HCV outbreaks**

- 4 hospitals and 1 ambulatory surgery center
- 129 new infections
- >28,000 patients exposed

**4 bacterial outbreaks:** 63 patients with bacteremia

**Drug diversion can spread infection  
from provider to patient**

## C A M P A I G N S

- Most don't understand public health role
- Majority view diversion solely as a law enforcement issue
- <1/3 would notify public health of diversion involving injections
- Need for diversion education

**2016 North Carolina  
Infection Preventionists  
Drug Diversion  
Survey Results**



# SHARPPS

Surveillance for **H**ealthcare **A**ssociated &  
**R**esistant **P**athogens **P**atient **S**afety Program

## C A M P A I G N S



**What is the role  
of public health?**

<http://www.cdc.gov/injectionsafety/>

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

SEARCH

CDC A-Z INDEX ▾

### Injection Safety

- Injection Safety
- CDC's Role
- CDC Statement
- Information for Providers +
- Information for Patients +
- Preventing Unsafe Injection Practices +

CDC - Injection Safety

#### The One & Only Campaign



The *One & Only Campaign*™ is a public health effort to eliminate unsafe medical injections. Through targeted education and awareness efforts, the *One & Only Campaign* empowers patients and healthcare providers to insist on nothing less than safe injections - every time, for every patient.

#### Background

[www.OneandOnlyCampaign.org](http://www.OneandOnlyCampaign.org)

**ONE SYRINGE, ONLY ONE TIME.**

Safe Injection Practices Coalition  
[www.ONEandONLYcampaign.org](http://www.ONEandONLYcampaign.org)

- About the Campaign
- Safe Injection Practices
- Healthcare Provider Information
- Patient Information
- Campaign Resources
- News
- Contact Us

**HELP ENSURE PATIENT SAFETY.**  
**MAKE EVERY INJECTION A SAFE ONE.**



**ONE NEEDLE.**

#### About the Campaign

The *One & Only Campaign* is a public health campaign, led by the Centers for Disease Control and Prevention (CDC) and the Safe Injection Practices Coalition (SIPC), to raise awareness among patients and healthcare providers about safe injection practices. The Campaign aims to eliminate infections resulting from unsafe injection practices.

<http://epi.publichealth.nc.gov/cd/diseases/hai.html>

**NC** Health and Human Services

Epidemiology 

INDIVIDUALS & FAMILIES LOCAL HEALTH DEPTS HEALTHCARE PROVIDERS SCHOOLS, BUSINESSES & COMMUNITY GROUPS FACTS & FIGURES

- Communicable Disease HOME
- A-Z Diseases & Topics
- Injection Safety**
- Info. for Healthcare Providers
- Programs & Services
- Surveillance & Reporting
- Disease Laws & Rules

DHHS > DH > Epi > Communicable Disease > A-Z Diseases & Topics > Injection Safety

#### Diseases & Topics Injection Safety

Since 2001, more than 150,000 patients in the United States have been notified of potential exposure to hepatitis B virus (HBV), hepatitis C virus (HCV), and HIV due to lapses in basic infection control practices. Many of these lapses involved healthcare providers reusing syringes, resulting in contamination of medication vials or containers that were then used on subsequent patients. Over the past six years, 45 outbreaks of viral hepatitis related to healthcare in the United States

[View Info for Healthcare Providers](#)



# Campaign Resources

# SHARPPS

*Surveillance for Healthcare Associated &  
Resistant Pathogens Patient Safety Program*

## C A M P A I G N S



**What is the  
Get Smart  
Campaign?**

# SHARPPS

Surveillance for **Healthcare Associated & Resistant Pathogens Patient Safety Program**

## C A M P A I G N S

**Improve patient safety** through better treatment of infections.

**Reduce the emergence** of antimicrobial resistant pathogens and *Clostridium difficile*.

**Heighten awareness** of the challenges posed by antimicrobial resistance in healthcare and encourage better use of antimicrobials as one solution.

## What is the Get Smart Campaign?



***SHARPPS***

*Surveillance for Healthcare Associated &  
Resistant Pathogens Patient Safety Program*

C A M P A I G N S

**Why do we need to  
Get Smart?**

# Antimicrobial Resistance

AN INTRODUCTION

More than **2 million** people  
in US get resistant infections every  
year

# Antimicrobial Resistance

AN INTRODUCTION

**Inappropriate** antibiotic use is the main reason for emergence of antimicrobial resistance.

# Antimicrobial Resistance

AN INTRODUCTION

## **Acute Respiratory infection**

is most common reason adults receive an antibiotic



# Antimicrobial Resistance

## AN INTRODUCTION

**25%** prescriptions for adult outpatients are for conditions for which antibiotics are not needed.

Even when antibiotics are indicated, the wrong drug is frequently prescribed

# Antimicrobial Resistance

## AN INTRODUCTION

Providers in the **SOUTH**  
are more likely to prescribe antibiotics for  
conditions for which they are not warranted

# Antimicrobial Resistance

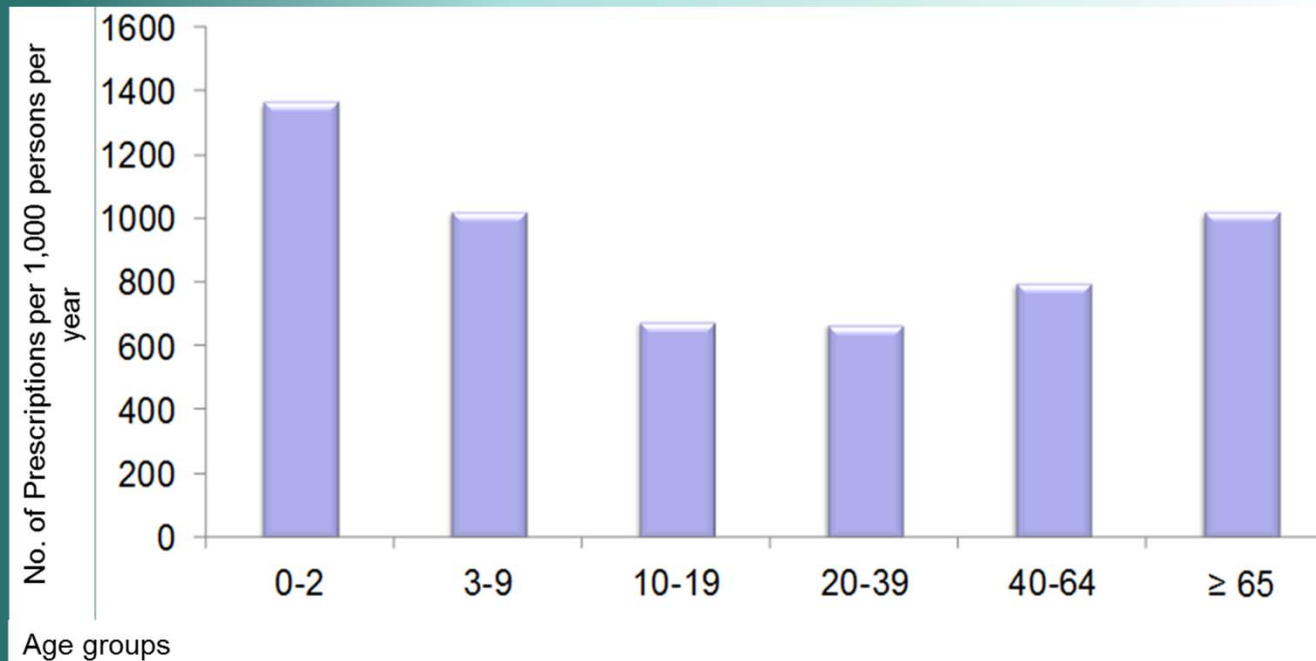
AN INTRODUCTION

**WRONG**  
**WRONG**  
**WRONG**  
**WRONG**

**Indication**  
**Dose**  
**Duration**  
**Antibiotic**  
**Spectrum**

# Antimicrobial Resistance

## AN INTRODUCTION



Volume of Antibiotic Prescriptions, 2010

# Antimicrobial Resistance

## AN INTRODUCTION

### Why is this a big deal?

- MDROs
- Toxic Side Effects
- Clostridium *difficile* infection
- Increased healthcare costs

# SHARPPS

*Surveillance for Healthcare Associated &  
Resistant Pathogens Patient Safety Program*

**1** PREVENTING INFECTIONS,  
PREVENTING THE SPREAD OF  
DISEASE

**2** TRACKING

**3** IMPROVING ANTIBIOTIC  
PRESCRIBING AND USE,  
AKA "STEWARDSHIP"

**4** DEVELOPING NEW DRUGS



**Four Core  
Actions for  
Prevention**



Know When Antibiotics Work

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

# PATIENT COMMUNICATION & EDUCATIONAL TOOLS



Know When Antibiotics Work

Cold or Flu.  
Antibiotics Don't  
Work for You.



**A VECES,  
EL REMEDIO ES  
PEOR QUE LA  
ENFERMEDAD**



Campaña para promover el  
uso correcto de los antibióticos.



**BE SMART**

Antibiotics Will Not Help a Cold or the Flu.



**Snort.  
Sniffle.  
Sneeze.**  
No Antibiotics  
Please.

Treat colds and flu with care. Talk to your doctor. For more information, visit [www.cdc.gov/getsmart](http://www.cdc.gov/getsmart). #NoAntibioticsPlease

For more information, visit [www.cdc.gov/getsmart](http://www.cdc.gov/getsmart). #NoAntibioticsPlease



FOR PARENTS



Know When Antibiotics Work

Snort. Sniffle.  
Sneeze.  
No Antibiotics  
Please.





# HEALTHCARE PROVIDER TOOLS



A Commitment to Our Patients

Antibiotics only fight infections caused by bacteria. Bacteria are harmful and should only be used when necessary. A virus can do more harm than good: you will still feel sick and the antibiotic will give you a skin rash, diarrhea, a yeast infection, and more.

Antibiotics also give bacteria a chance to become stronger. This can make future infections harder to treat. It means you will need more antibiotics when you really do need them. Because of this, we only prescribe antibiotics when it is necessary to treat your illness.

How can you help? When you have a cough, sore throat, or other symptoms, your doctor only wants an antibiotic if it is really necessary. Ask your doctor what you can do to avoid giving you antibiotics when they might not be needed.

Your health is important to us. As your healthcare provider, we will explain this to you and will offer you the best possible treatment for your condition. We are dedicated to prescribing antibiotics only when it is necessary to avoid giving you antibiotics when they might not be needed. If you have any questions, please feel free to ask.

Sincerely,

Rx Name: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

**Diagnosis:**

<input type="radio"/> Cold	<input type="radio"/> Middle ear fluid (Otitis Media with Effusion, OME)
<input type="radio"/> Cough	<input type="radio"/> Viral sore throat
<input type="radio"/> Flu	<input type="radio"/> Other: _____

You have been diagnosed with an illness caused by a virus. Antibiotics do not cure viral infections. If given when not needed, antibiotics can be harmful. The treatments prescribed below will help you feel better while your body's own defenses are fighting the virus.

**General instructions:**

- Drink extra water and juice.
- Use a cool mist vaporizer or saline nasal spray to relieve congestion.
- For sore throats, use ice chips or sore throat spray; lozenges for older children and adults.

**Specific medicines:**

- Fever or aches: \_\_\_\_\_
- Ear pain: \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Use medicines according to the package instructions or as directed by your healthcare provider. Stop the medication when the symptoms get better.

**Follow up:**

- If not improved in \_\_\_\_ days, if new symptoms occur, or if you have other concerns, please call or return to the office for a recheck.
- Other: \_\_\_\_\_

Signed: \_\_\_\_\_

For More Information call 1-800-CDC-INFO or visit www.cdc.gov/getsmart

A Commitment to Our Patients about Antibiotics

only fight infections caused by bacteria. Bacteria are harmful and should only be used when necessary. A virus can do more harm than good: you will still feel sick and the antibiotic will give you a skin rash, diarrhea, a yeast infection, and more.

Antibiotics also give bacteria a chance to become stronger. This can make future infections harder to treat. It means you will need more antibiotics when you really do need them. Because of this, we only prescribe antibiotics when it is necessary to treat your illness.

How can you help? When you have a cough, sore throat, or other symptoms, your doctor only wants an antibiotic if it is really necessary. Ask your doctor what you can do to avoid giving you antibiotics when they might not be needed.

Your health is important to us. As your healthcare provider, we will explain this to you and will offer you the best possible treatment for your condition. We are dedicated to prescribing antibiotics only when it is necessary to avoid giving you antibiotics when they might not be needed. If you have any questions, please feel free to ask.

Sincerely,

**Guide for symptomatic treatment**

**Symptomatic prescribing pad**

**Continuing education opportunities**

**Patient education handouts**

**Medical School curricula**

**Clinical Practice Guidelines**

**Is it Really a Penicillin Allergy?**

Professionals

Did you know? 5 Facts About Penicillin Allergy

Approximately 10% of patients with self-reported penicillin allergy lose their sensitivity after 10 years.<sup>1</sup>

Broad-spectrum antibiotics are often used as an alternative to penicillins. The use of broad-spectrum antibiotics in patients with a self-reported penicillin allergy is associated with higher healthcare costs, increased risk for antibiotic resistance, and suboptimal clinical outcomes.<sup>2</sup>

Penicillin challenge can decrease unnecessary use of broad-spectrum antibiotics.<sup>3</sup>

Approximately 90% of the population reports a penicillin allergy but <1% of the whole population is truly allergic.

Characteristics of self-reported Type I reactions

Reactions that occur immediately or usually within one hour

When Multiple self-reported based items of items that are normally self-reported (e.g., penicillin allergy) without having allowing the following items: penicillin, ampicillin, amoxicillin, amoxicillin-clavulanate, piperacillin, ticarcillin, ticarcillin-clavulanate, and other penicillin derivatives

Amplified reactions signs or symptoms in at least two of the following system: skin, mucous, respiratory, and/or gastrointestinal (as reported on next page)



# Antimicrobial Stewardship

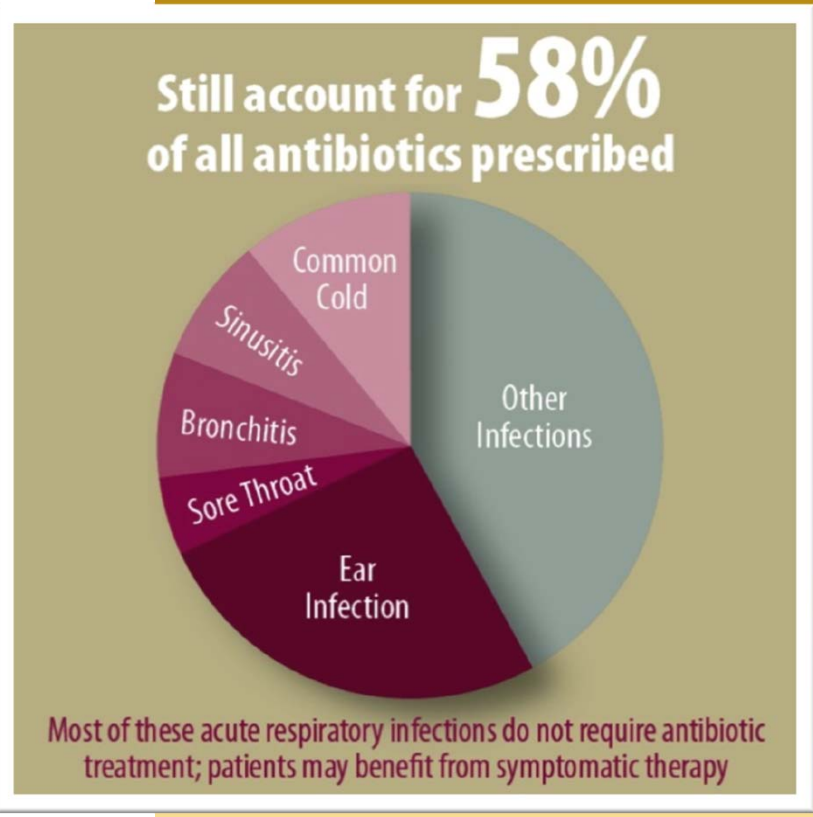
## AN INTRODUCTION

Processes designed to measure and optimize the appropriate use of antimicrobials

Achieved by selecting the appropriate agent, dose, duration of therapy and route of administration



# Good News



# Bad News

# Infection Control, Assessment & Response (ICAR)

## AN INTRODUCTION

- Goal: Prepare for / mitigate existing or emerging infectious diseases
- Partner with NC SPICE
- Full time certified infection preventionists conduct on-site assessment and education activities

### Healthcare Infection Control and Response (ICAR) Assessment



May 2016

**FREE**

Opportunity For Nursing Homes, Hospitals, Outpatient Clinics and Dialysis Centers:

- *SPICE Nurse Consultant Infection Control Site Visit*
- *CDC Assessment Tool Reflective of Evidence Based Guidelines*
- *Site Visit Summary Report with Identified Resources*
- *Educational Opportunities Based on Identified Gap Analysis*

A 3-year collaborative between N.C. Department of Public Health (NCDPH) and N.C. Statewide Program for Infection Control and Epidemiology (SPICE). Funded by CDC, to prepare for and mitigate existing or emerging infectious diseases.

*Don't wait for a recruitment call...  
request a visit from a SPICE Nurse Consultant today!*



Wanda Lamm, RN, BSN, CIC



Heather Ridge, RN, BSN, CIC



Julie Hernandez, RN, BSN, CIC



To request a visit or for more information:  
<http://spice.unc.edu/ICAR>



# Infection Control, Assessment & Response (ICAR)

## AN INTRODUCTION

- Since April 2016, 132 visits conducted:
  - 81 nursing homes,
  - 28 acute care facilities,
  - 23 outpatient facilities
- Online self assessments tools – provide additional infection control data

# SHARPPS

## Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program

### ACTIVITIES

#### Surveillance, Investigation & Response

HAI reporting to  
NHSN

CRE surveillance

DHSR Infection  
Prevention  
Breach reporting

Outbreak &  
Exposure  
management

#### Prevention, Education & Training

Campaigns: One  
& Only, Get Smart

Drug Diversion

Antimicrobial  
resistance &  
stewardship

Infection Control,  
Assessment &  
Response (ICAR)

Partnerships

#### Monitoring & Evaluation

Data validation

TAP reports

Identification,  
evaluation of  
aberrant data  
(CLABSI, CDI)

#### Communication

# SHARPPS

*Surveillance for Healthcare Associated &  
Resistant Pathogens Patient Safety Program*

## DATA VALIDATION

- Ensure completeness and accuracy
- Identify opportunities for improvement
- Review a subset of positive labs from select hospitals
- Apply case definitions using standardized medical record abstraction tools

### **Validation Activities:**

- ✓ 2014 central line associated bloodstream infections (CLABSI)
- ✓ 2014 laboratory identified C difficile (LabID CDI)
- ☐ 2016 Catheter Associated Urinary Tract Infections (CAUTI)

## TAP REPORTS

### Targeted Assessment for Prevention (TAP) Reports

- Cumulative Attributable Difference Metric
  - The number of infections needed to prevent to meet an SIR goal
- Identify facilities or units with high burden of HAIs
  - Prioritize and target prevention efforts
- Individualized reports and follow-up calls to any outlier facility



# SHARPPS

## Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program

### ACTIVITIES

#### Surveillance, Investigation & Response

HAI reporting to  
NHSN

CRE surveillance

DHSR Infection  
Prevention  
Breach reporting

Outbreak &  
Exposure  
management

#### Prevention, Education & Training

Campaigns: One  
& Only, Get Smart

Drug Diversion

Antimicrobial  
resistance &  
stewardship

Infection Control,  
Assessment &  
Response (ICAR)

Partnerships

#### Monitoring & Evaluation

Data validation

TAP reports

Identification,  
evaluation of  
aberrant data  
(CLABSI, CDI)

#### Communication

HAI data reports

Newsletters

Monthly webinar  
updates

Drug Diversion  
tabletop

[Click to go to next section](#)



# SHARPPS

*Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program*

## HAI DATA REPORTS

### *Publication of HAI data*

#### Quarterly Reports

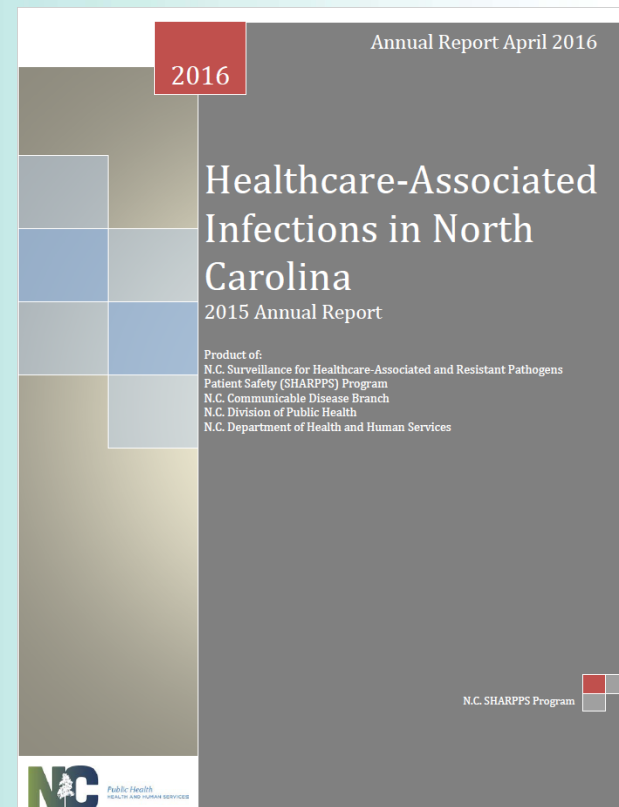
- Published one quarter behind the data

#### Annual Reports

- Published in April

Online location:

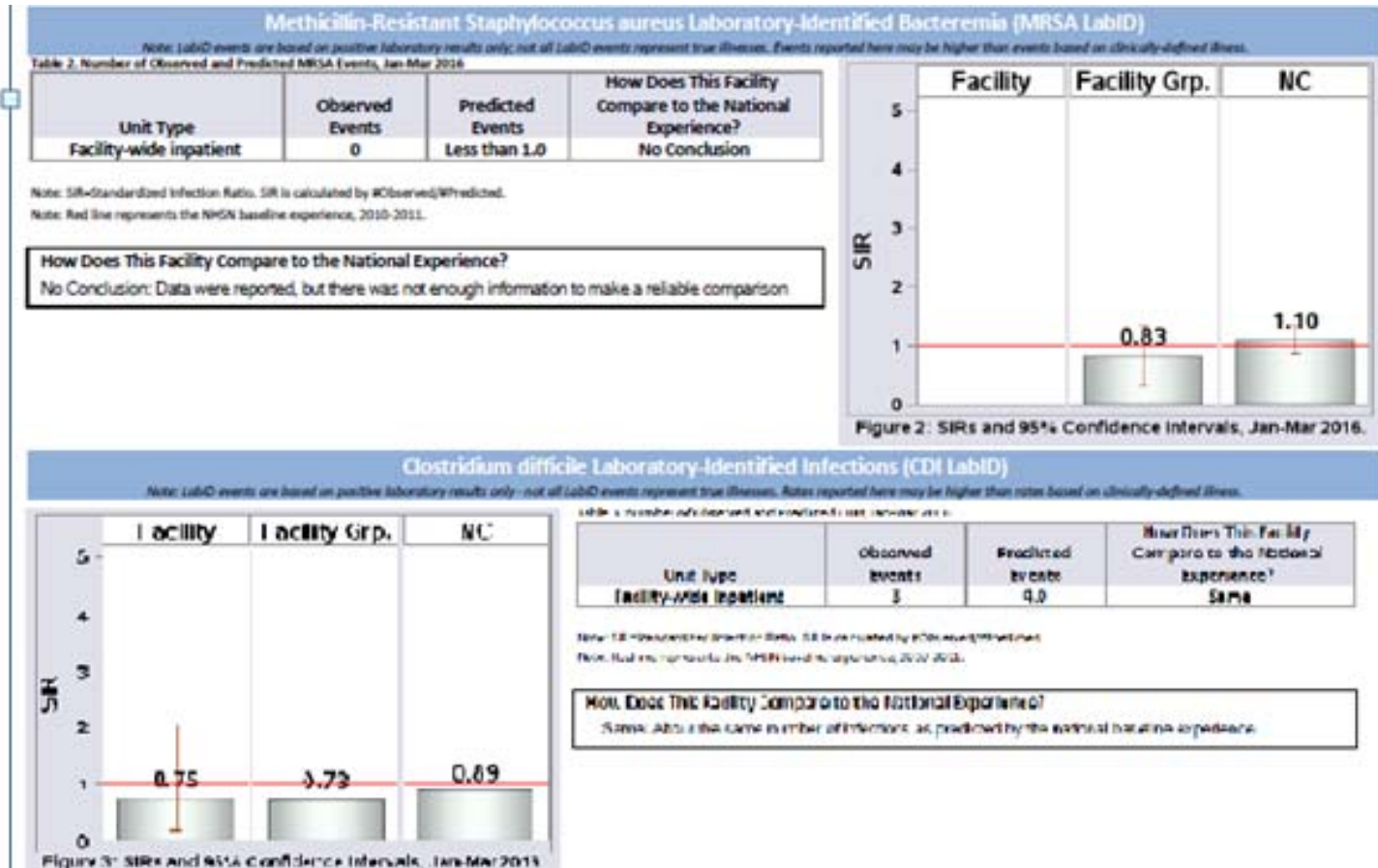
<http://epi.publichealth.nc.gov/cd/hai/figures.html>



# SHARPPS

## Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program

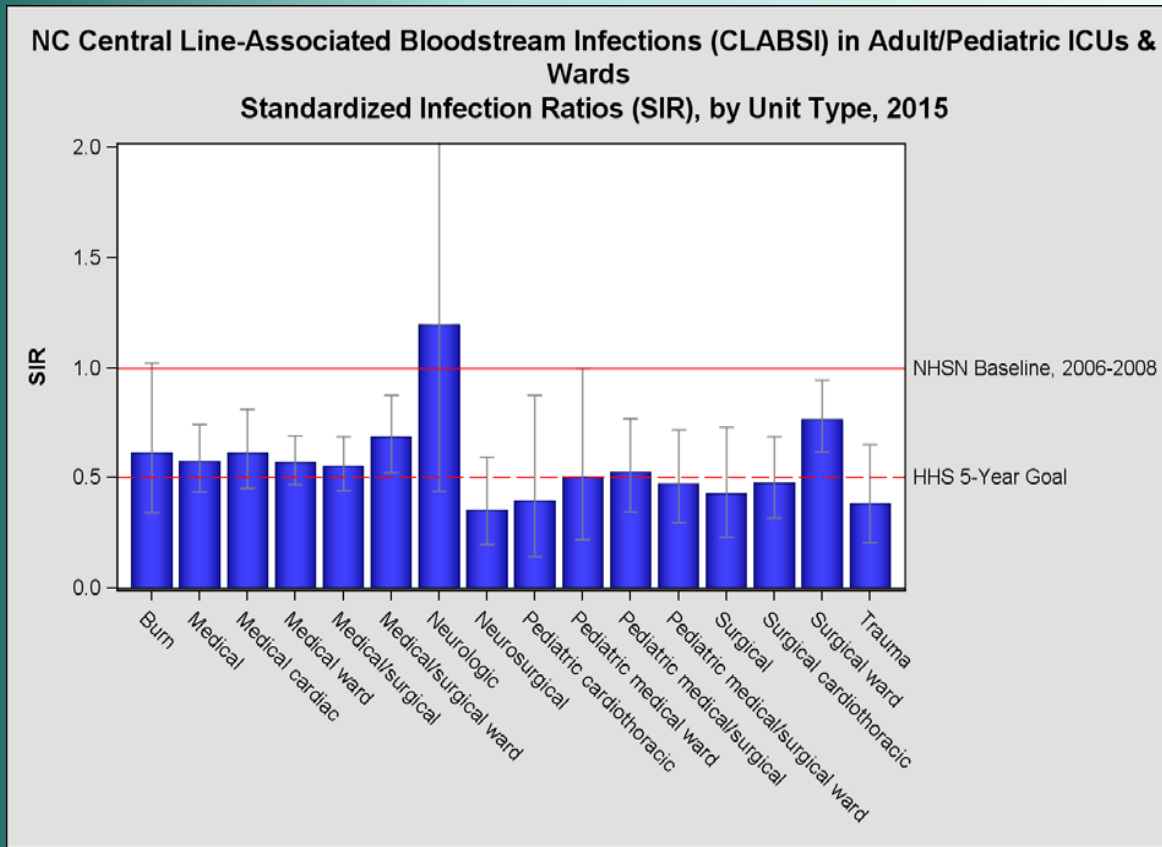
### QUARTERLY, HOSPITAL SPECIFIC REPORT



# SHARPPS

## Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program

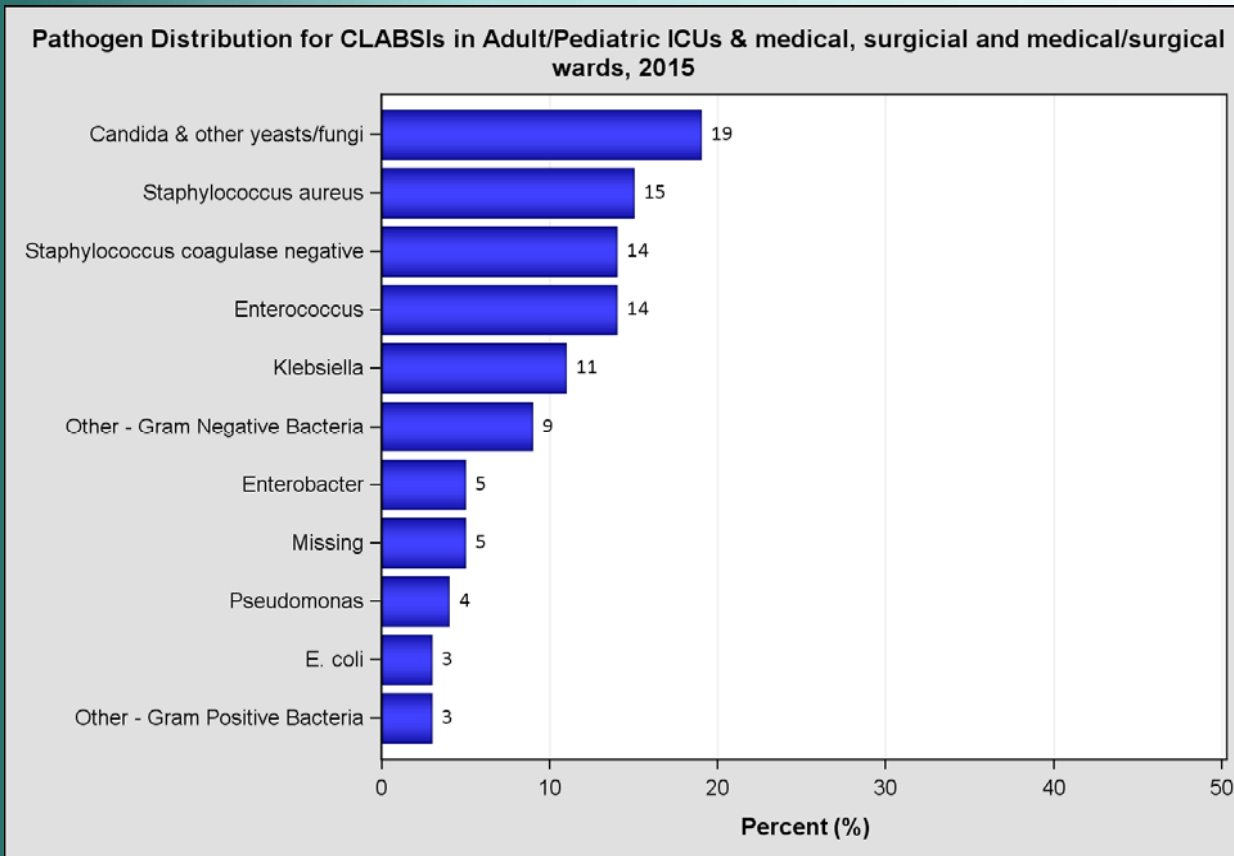
### ANNUAL REPORT



# SHARPPS

## Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program

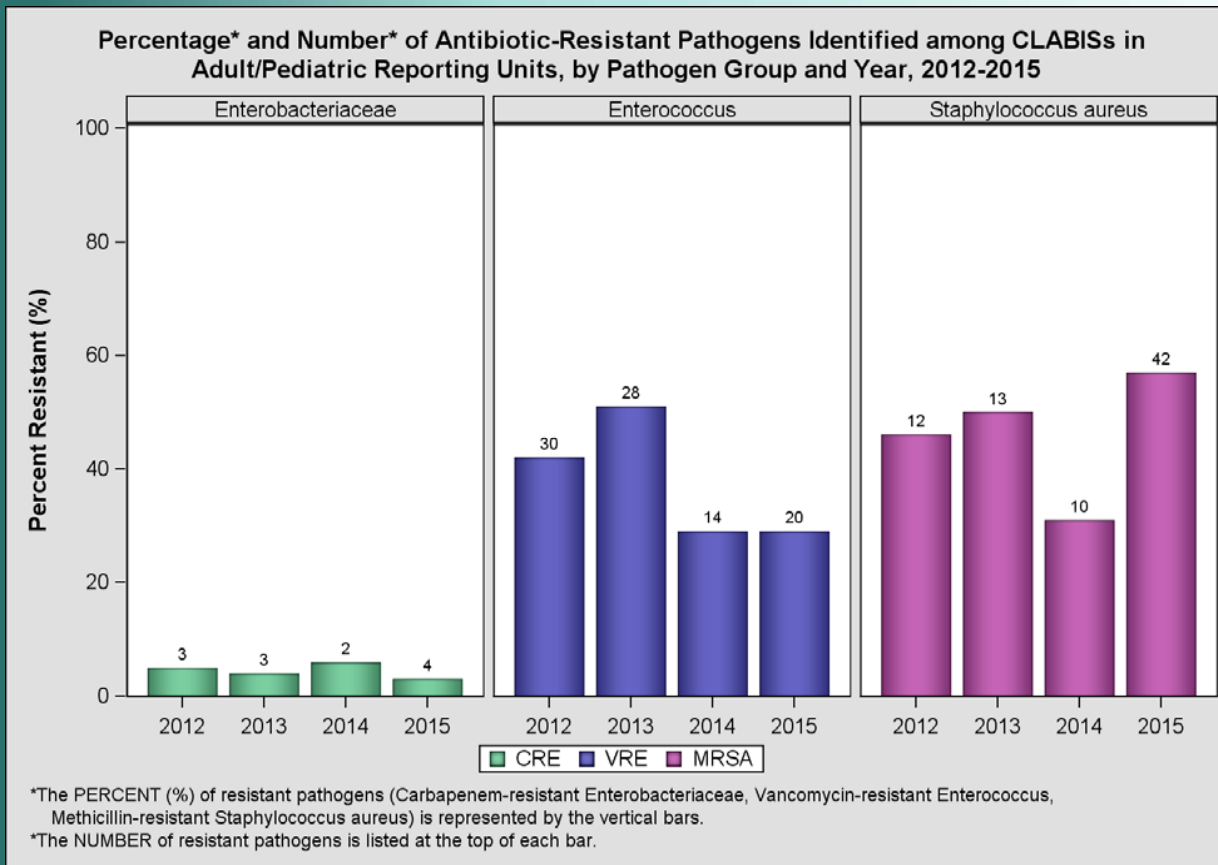
### ANNUAL HAI REPORT



# SHARPPS

## Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program

### ANNUAL REPORT

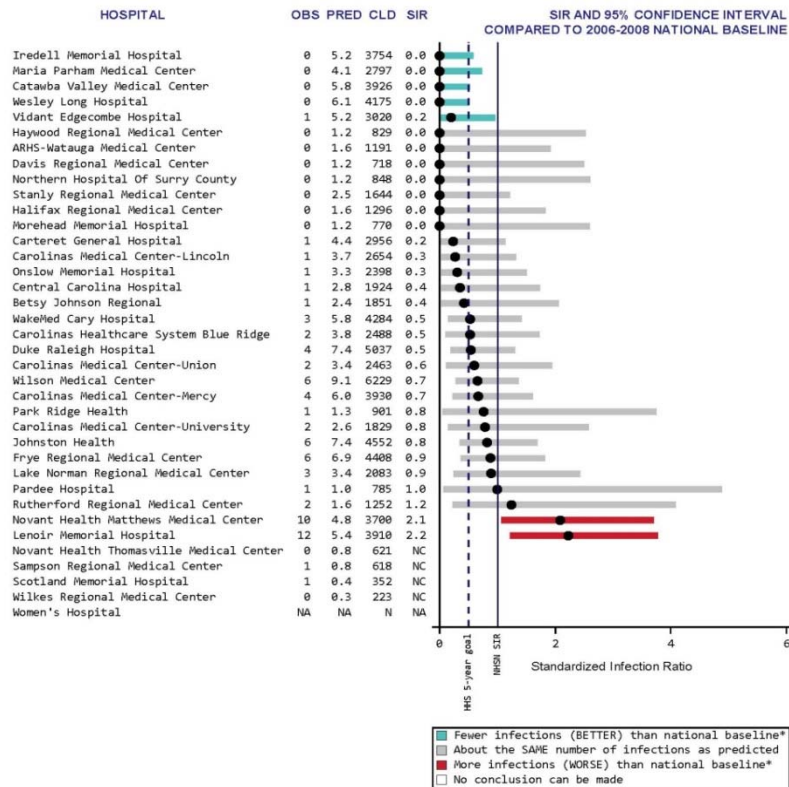


# SHARPPS

## Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program

### ANNUAL REPORT

CLABSI in Adult/Pediatric Medical, Surgical, and Medical/Surgical Wards and ICUs  
Standardized Infection Ratios: January 1 – December 31, 2015  
Hospital Group: Hospitals with 100 to 199 Beds



Data reported from adult/pediatric units as of March 14, 2016.  
OBS = # infections observed  
PRED = # infections statistically 'predicted' by national baseline  
CLD = # central line days  
SIR = Standardized infection ratio (OBS/PRED # of infections)  
NA = Data not shown for hospitals with <50 catheter days  
NC = SIR not calculated for hospitals with <1 predicted infection  
\*Significantly different than 2009 national baseline

# SHARPPS

Surveillance for Healthcare Associated & Resistant Pathogens Patient Safety Program

## SHARPPS NEWSLETTER

NC Division of Public Health,  
Communicable Disease Branch

July 2016  
Volume 1, Issue 2

# SHARPPS Newsletter

## NC ONE & ONLY CAMPAIGN PARTICIPATES IN CDC WEBINAR

On July 26, 2016, the SHARPPS Program will participate in a webinar on injection safety and the One & Only Campaign. The CDC Division of Healthcare Quality Promotion will host the webinar, "Unsafe Injection Stories from the Field." Dr. Zack Moore, SHARPPS Medical Director, will discuss one example of unsafe injection practices that occurred in North Carolina. To register for the free webinar, please visit, <http://ow.ly/1R1F302qCyc>. Continuing education credits will be available to healthcare providers.



## NC 2015 HAI REPORT



NC 2015 HAI Report,

This year-end summary from the NC SHARPPS Program provides state-level data and hospital-specific data from North Carolina short-term acute care hospitals. This report includes data on Central line-associated bloodstream infections (CLABSI), Catheter-associated urinary tract infections (CAUTI), Surgical site infections (SSI) post abdominal hysterectomy and post colon surgery, Methicillin-resistant *Staphylococcus aureus* (MRSA) laboratory-identified (LabID) events, and *Clostridium difficile* infection (CDI) LabID events from January 1 through December 31, 2015, as well as an



# SHARPPS

Surveillance for **H**ealthcare **A**ssociated &  
**R**esistant **P**athogens **P**atient **S**afety Program

## FUTURE ACTIVITIES

- Engage in partnerships to reduce HAIs, promote patient safety
- Antimicrobial resistance / stewardship initiative(s)
- Infection prevention, assessment, and response (ICAR)
- Evaluation through data validation and assessing trends of time
- Drug Diversion tabletop
- SHARPPS specific outbreak training (targeting congregate living settings)
- *C. diff* long-term care regional collaborative
- Facilitating long-term care facilities as a user group within NHSN



# ***SHARPPS***

*Surveillance for Healthcare Associated &  
Resistant Pathogens Patient Safety Program*

## LHD ENGAGEMENT

- Facilitate Infection Prevention breach reporting
- Assist with outbreak investigations
- Become familiar with reports, newsletter, campaigns
- Participate in Infection Control, Assessment, and Response (ICAR) visits



***Thank you.***  
***Any questions?***

