Bold Bugs, Broken Drugs, and Risky Sticks

Keeping Residents Safe when Care Presents Perils

Oregon Public Health Division
Healthcare-Associated Infections HAI Program

Oregon Health Authority

(Enter) DEPARTMENT (ALL CAPS)
(Enter) Division or Office (Mixed Case)

Objectives

- Public health roles
  - Oregon Health Authority (“the state”)
  - Local health departments (“the county”)
  - Individual facilities (you!)
- Our shared work
  - Surveillance
    - Required reporting: Infections & outbreaks
    - What’s around the bend for long-term care facilities?
    - Data for action at your facility
  - Prevention
    - Injection safety
    - Antimicrobial stewardship
    - Interfacility transfer communication
    - *Clostridium difficile* collaborative
- Future opportunities for collaboration

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What do you think the public health program does?

1. Helps my facility
2. Hinders my facility
3. Some of both
4. Something else

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What does public health do?

"We're the government,
but not *that* part of the government."

– Bill Keene
epidemiologist extraordinaire

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Our Partners

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We protect Oregonians' health

- Surveillance
  - Births, deaths, diseases, demographics, emerging infections
  - Carbapenem-resistant *Enterobacteriaceae* (CRE)
- Reporting
  - Communicable disease reporting
  - National Health Safety Network (NHSN) for healthcare-associated infections (HAIs)
- Support regulations to prevent disease
  - Tobacco, Environmental Health Code
- Prevention and response
  - Vaccines, collaborations, outbreaks, coordination, expertise

What is the role of Local Health Departments?

- Know their community
- Interview cases
- Investigate outbreaks
- Perform public health roles for the community
  - Vaccines, Women Infants & Children
  - Prevent chronic disease
  - Environmental health

What is the role of healthcare facilities and providers?

- Prevent
  - Be aware of best practices and current recommendations
  - Practice infection prevention
  - Practice antimicrobial stewardship
- Be alert
  - Eyes and ears of public health
  - Clusters of illness? Similar exposures?
  - Novel disease or presentation?
- Test
  - Cultures important to link cases
- Report
  - Reportable diseases
  - Outbreaks

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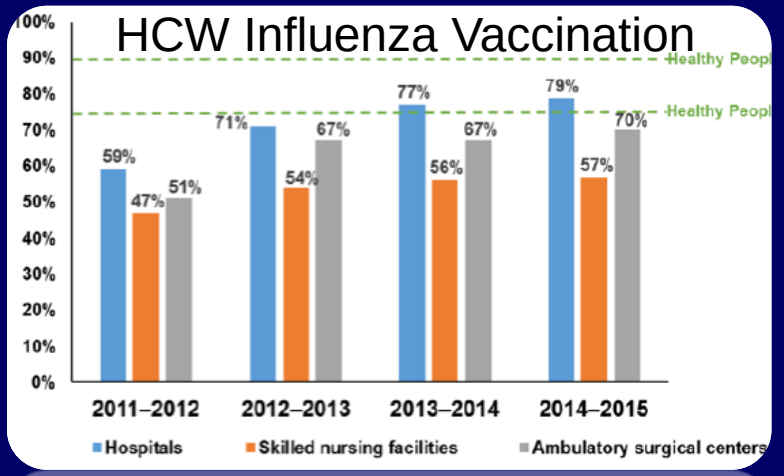
SURVEILLANCE

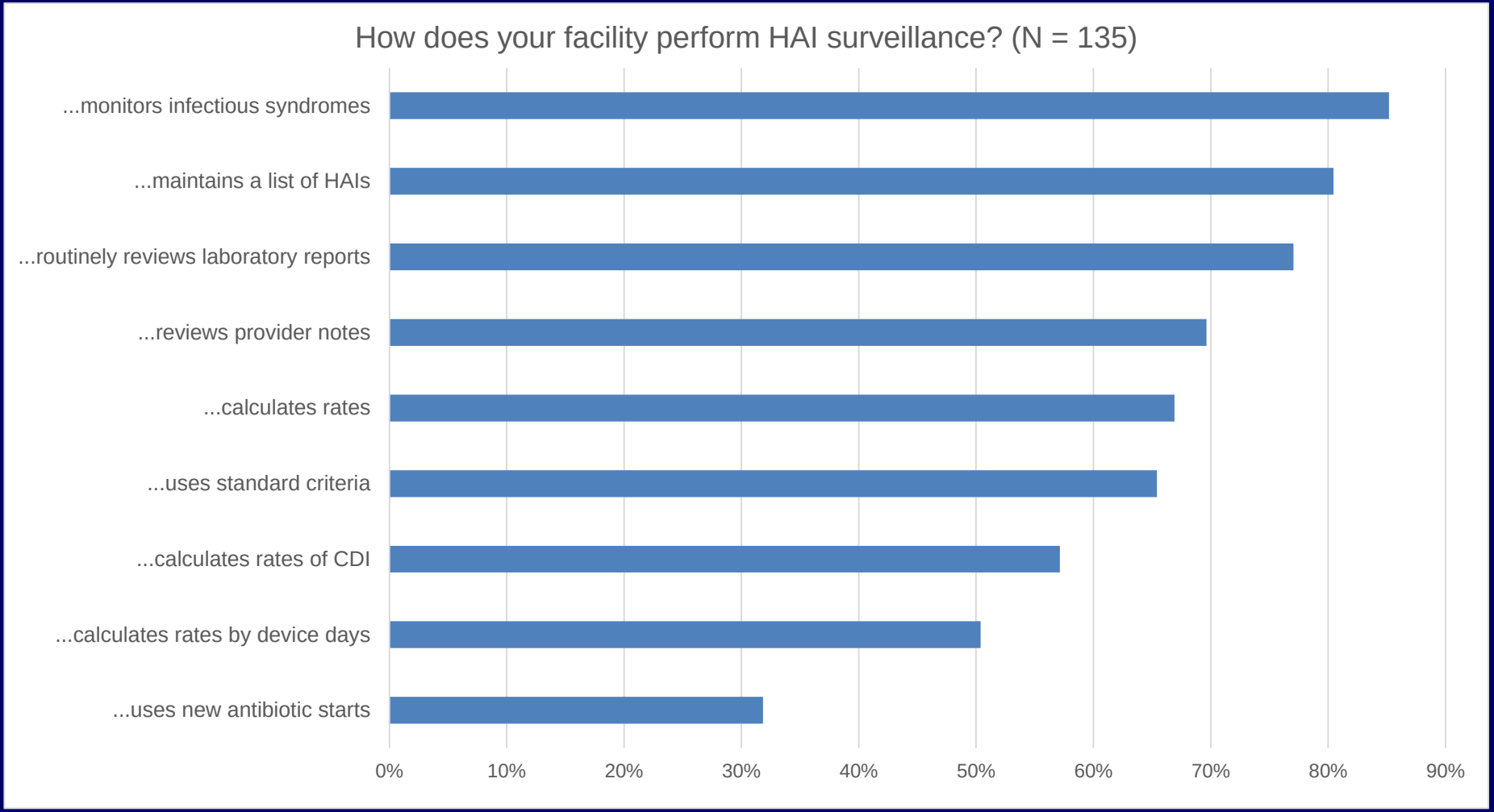


What types of surveillance does your facility currently do?

Surveillance = to keep close watch over something or someone

- ✓ Gastrointestinal illness
- ✓ Respiratory illness
- ✓ Catheter-associated urinary tract infections
- ✓ Catheter use
- ✓ Falls
- ✓ Medical errors
- ✓ Antibiotic use
- ✓ Staff illness
- ✓ *C. difficile* infections
- ✓ Residents with multi-drug resistant organisms (MDROs)

Fun fact #1



Source: 2015 Oregon HAI Survey of SNFs

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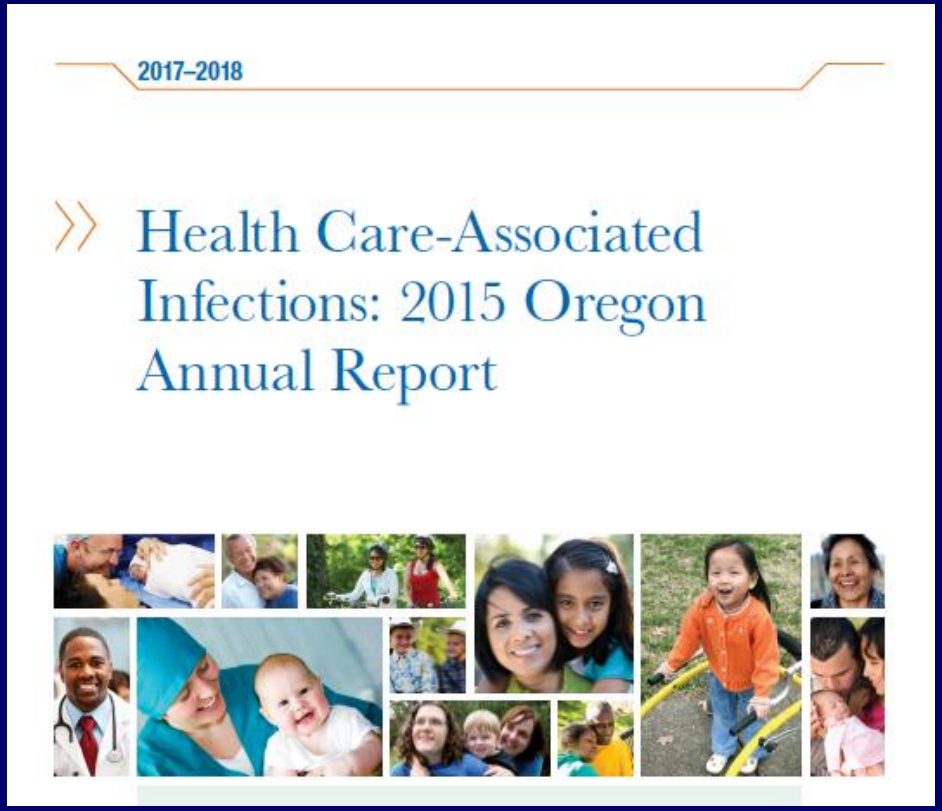
Surveillance saves lives

It matters what we count; what we count matters



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Examples of surveillance in action

- Invasive candidemia (yeast in blood)
  - Added injection drug use to data collection following an outbreak
- Carbapenem-resistant *Enterobacteriaceae*
  - Reviewed and education more than 400 cases since December 2011
  - Performed in-depth investigation on 18 carbapenemase-producers
  - Performed surveys to assess for transmission
- Non-tuberculous mycobacteria
  - Identified clusters of surgical site infections associated with poor aseptic technique
  - Identified clusters associated with tattoo artists using water cooler water
- Carbapenem-resistant *Acinetobacter baumannii*
  - Identification led to trace-back to super-spreader patient and establishment of interfacility transfer communication process

What can I do to improve surveillance?

- Add to your daily huddles: New illnesses? Antibiotic starts/stops?
  - Map healthcare-associated infections by room to catch trends
- Get to know who does your pharmacy reviews
  - Do they review antibiotic starts, stops, doses, and indications?
- Get to know your providers
  - Do they use criteria for symptomatic urinary tract infection?
  - Are they ruling out asymptomatic bacteriuria?
  - Are they sending cultures prior to antibiotics?
  - Are they narrowing antibiotics based on susceptibilities?

REPORTING

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Do you think reporting events positively change practice?

For example, does having to report the number of falls per month, lead to practice changes which decrease falls in your facility?

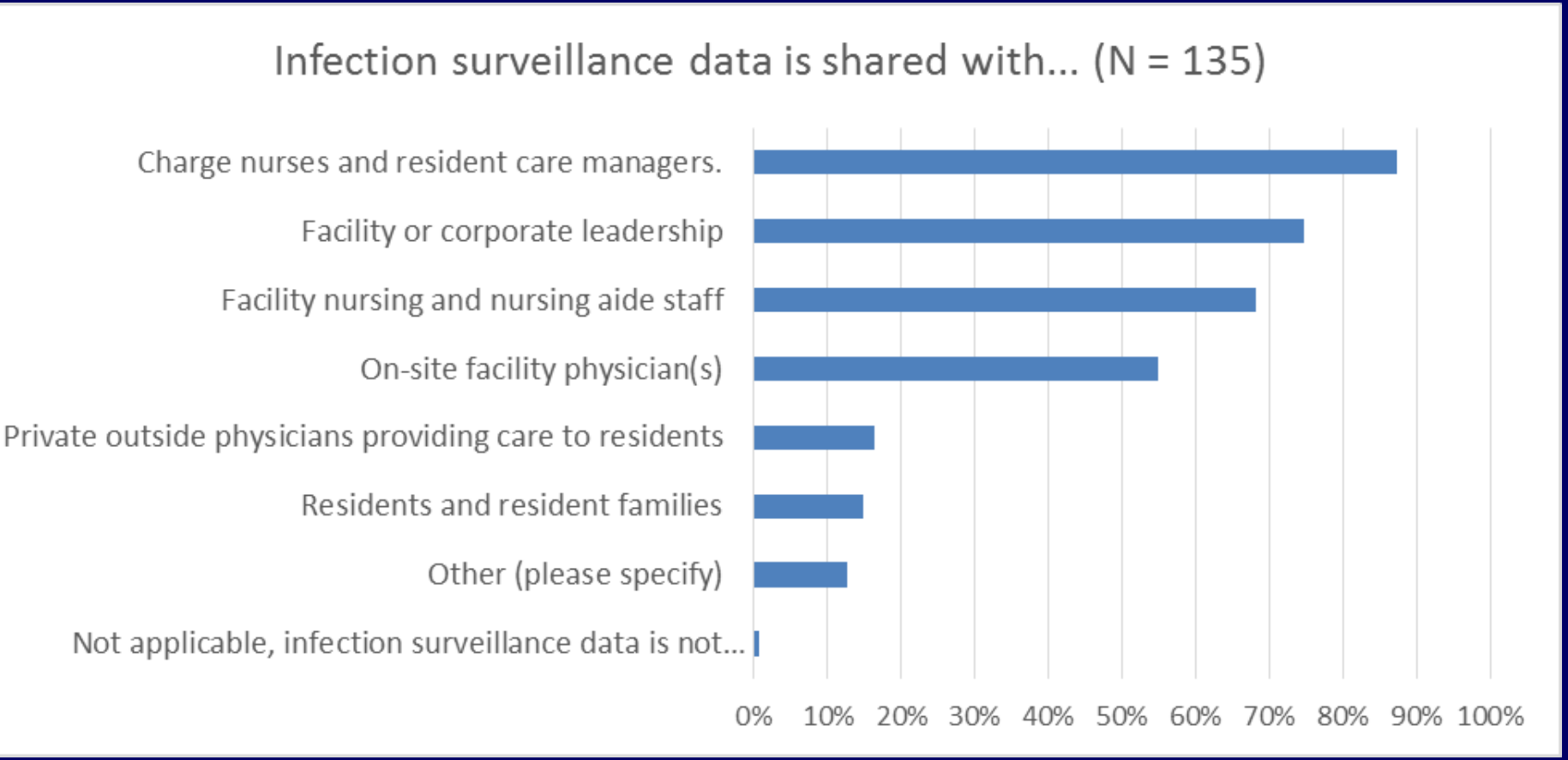
1. Yes, reporting has led to positive changes in our facility's practice

2. No, reporting does not lead to positive change our facility's practice

3. Maybe

4. Other

Fun Fact #2



Source: 2015 Oregon HAI Survey of SNFs

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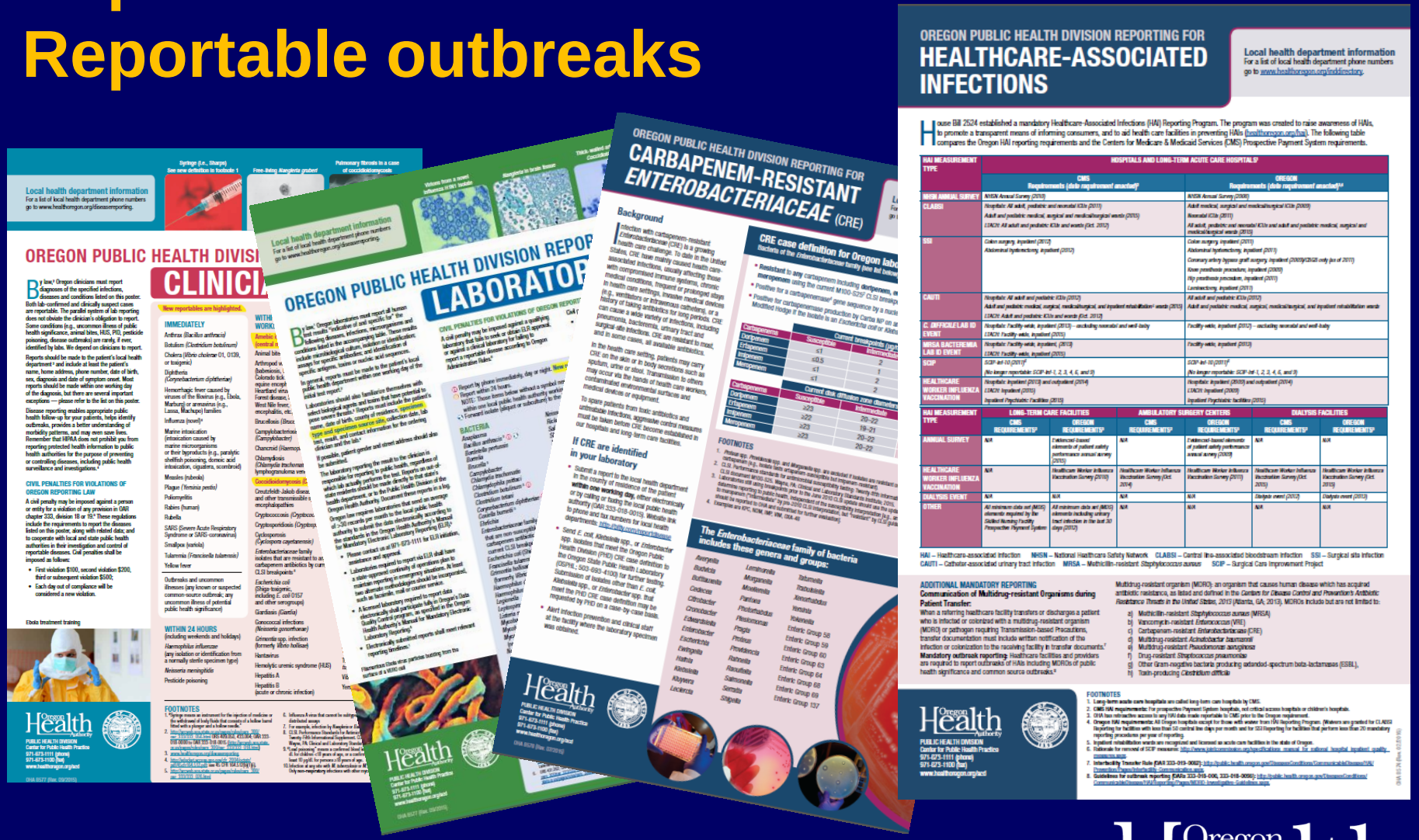
Reportable diseases
Reportable outbreaks



https://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/ReportingCommunicableDisease/Pages/index.aspx

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HAI reporting requirements for LTCFs

HAI MEASUREMENT TYPE	LONG-TERM CARE FACILITIES	
	CMS REQUIREMENTS[2]	OREGON REQUIREMENTS[3]
ANNUAL SURVEY	*N/A*	*Evidenced-based elements of patient safety performance annual survey (2015)*
HEALTHCARE WORKER INFLUENZA VACCINATION	*N/A*	*Healthcare Worker Influenza Vaccination Survey (2010)*
DIALYSIS EVENT	*N/A*	*N/A*
OTHER	*All minimum data set (MDS) elements required by the Skilled Nursing Facility Prospective Payment System*	*All minimum data set (MDS) elements including urinary tract infection in the last 30 days (2012)*

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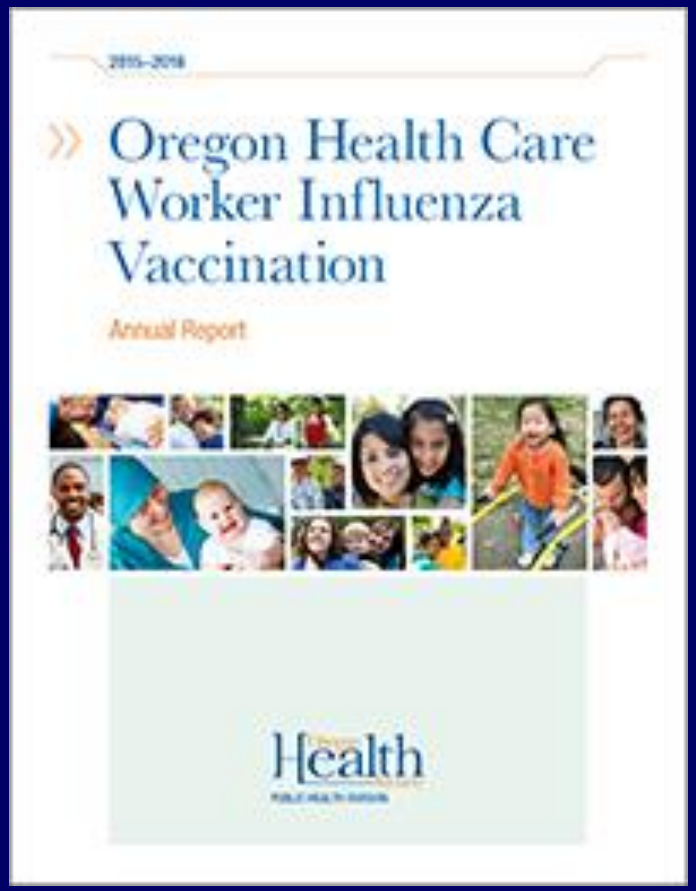
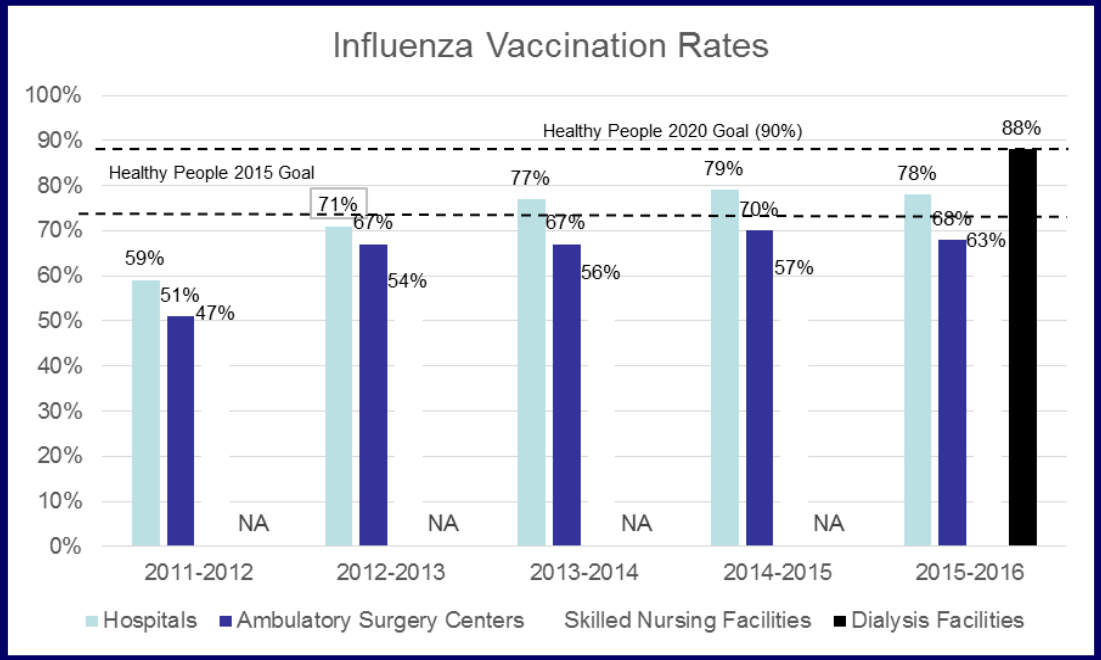
What we count matters





HCW Vaccination Rates

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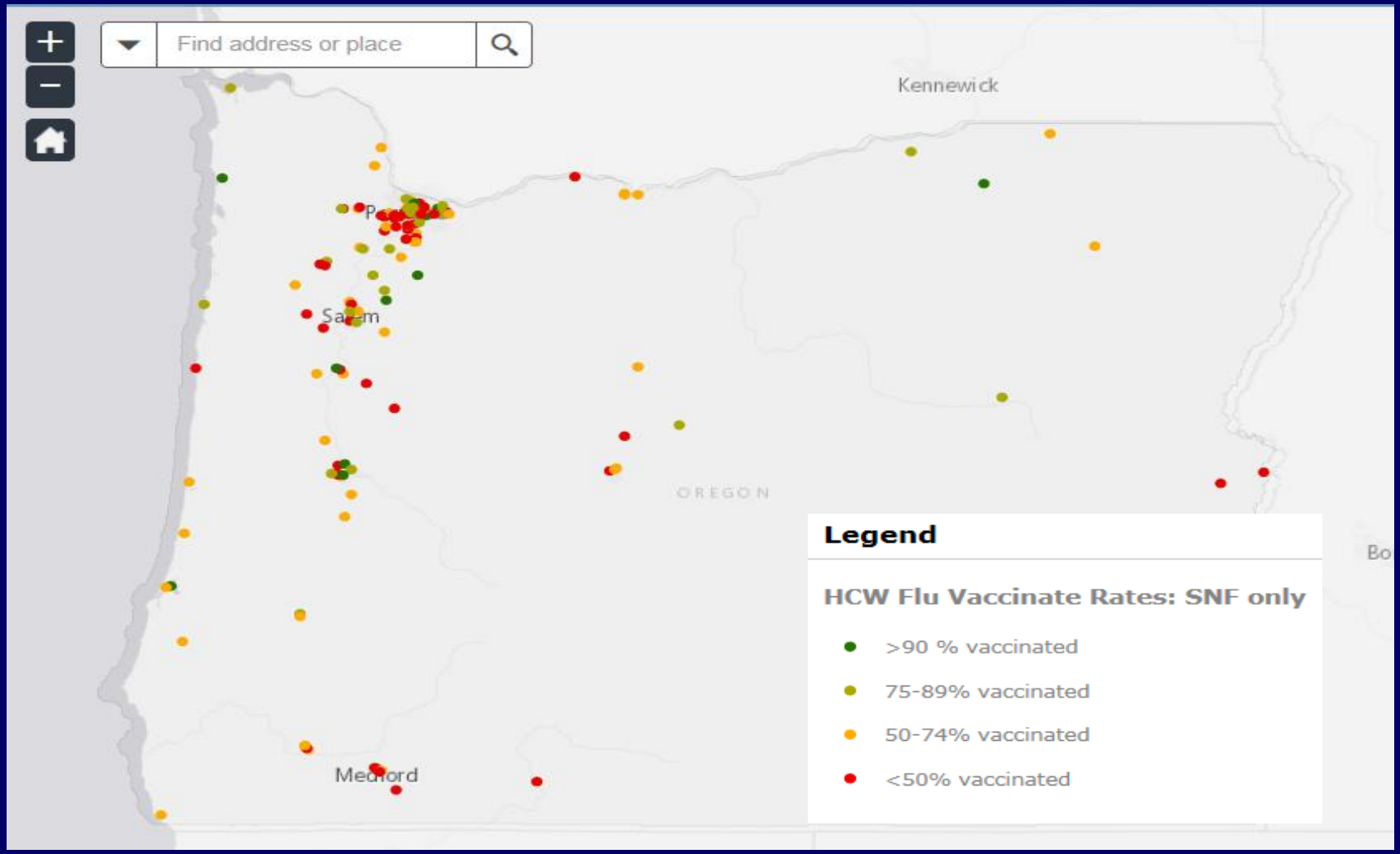
Updated interactive maps: 2014-15



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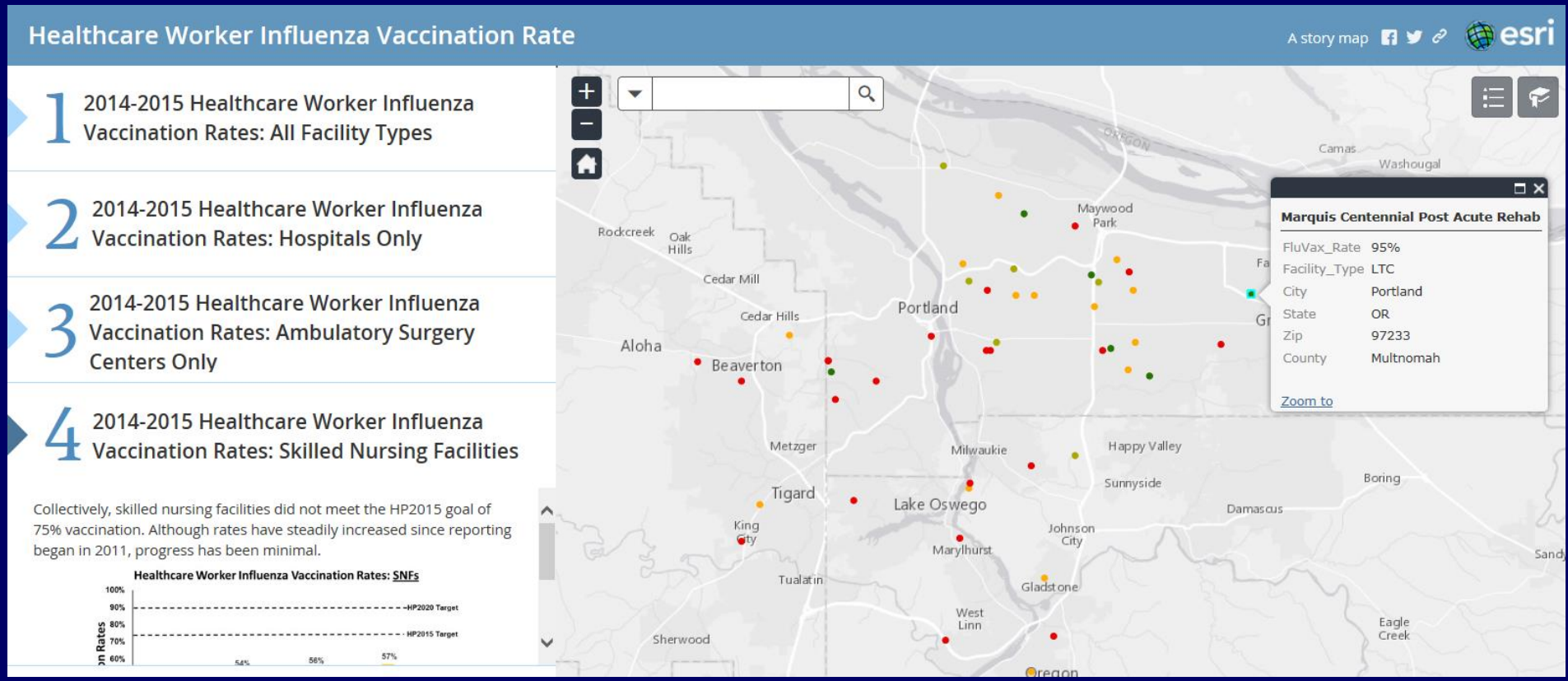
Healthcare worker influenza vaccination by facility



https://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/HAI/Pages/Reports-and-Data.aspx

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Examples of reporting in action

- Hepatitis associated with medical care
  - Reviewed outpatient practice, and notified >1,200 Oregonians
  - Reviewed dialysis center practice
- Group A streptococcal disease
  - Report of resident cases in facility led to survey that found carriage in 30% residents and 20% of staff
- Influenza/respiratory disease
  - Local health department helps identify contacts for prophylaxis, decreasing morbidity and death
  - Local health departments assisted 59 facilities during 2015
- Norovirus/gastrointestinal disease
  - Assisted 81 facilities during 2015

National Health Safety Network (NHSN)

- CDC's NHSN is largest HAI reporting system in the US
- For healthcare facilities
  - Share data with HCWs, leadership, other partners
  - Meet Centers for Medicaid and Medicare Services (CMS) reporting requirements
  - Benchmark against national standards
- For patients
  - Public access to quality metrics via CMS Compare: https://www.medicare.gov/nursinghomecompare/search.html
- For state and national agencies
  - Identify emerging areas of concern
  - Measure progress towards goals

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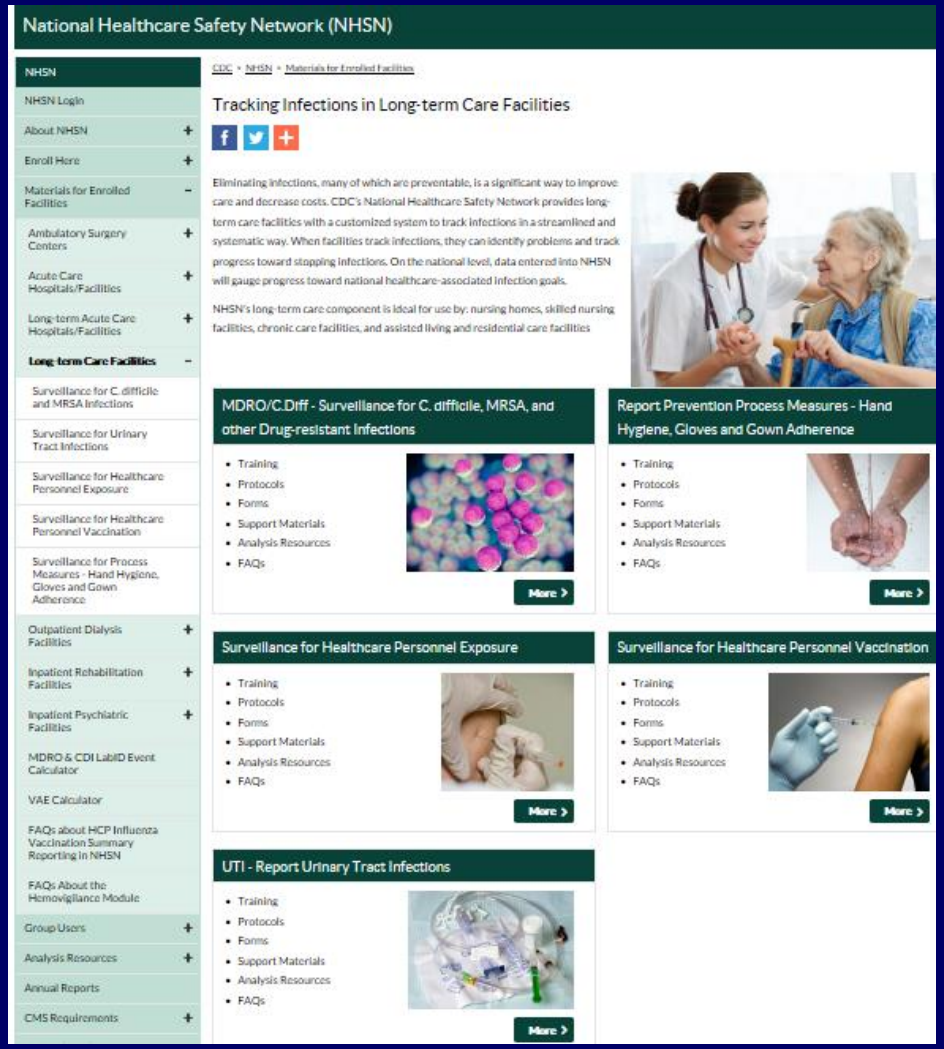
NHSN for long-term care facilities



- Modules for
  - UTI
  - MDRO/*C. difficile*
  - HCW vaccination
  - Process measures
    - Hand hygiene
    - Contact precautions
  - HCW bloodborne pathogen exposure
- CMS requirements ahead?

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NHSN: Training & analysis options

National Healthcare Safety Network (NHSN) Training

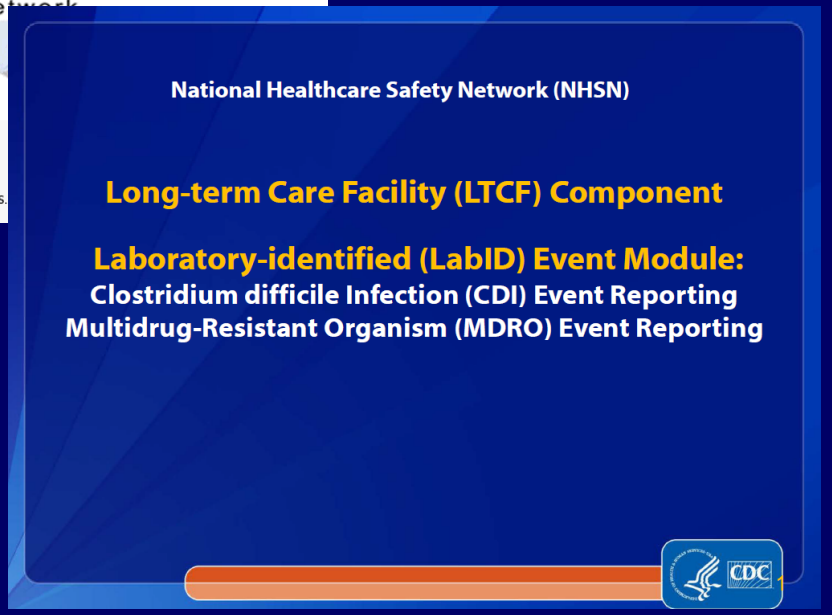
Our mission is to offer learning opportunities in a variety of formats that enhance the knowledge and skills of NHSN facility- and group-level participants and their partners in order that they may effectively use the data obtained from the surveillance system to improve patient and healthcare personnel safety.

Objectives

- Convey NHSN data collection methods, submission requirements, and analysis options to participants so that they may acquire, submit, and disseminate high quality, actionable data.
- Prepare participants to use the NHSN reporting application accurately and efficiently.
- Enhance participants' and their partners' understanding of data quality and the value of adverse event monitoring.
- Encourage collaboration among participants and partners to improve the patient and healthcare personnel safety across the spectrum of care.

COURSE CATALOG
Course descriptions for NHSN components, modules and events.

PATIENT SAFETY COMPONENT TRAINING
Self-paced training for specific module and events.



http://www.cdc.gov/nhsn/training/

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Examples of NHSN data in action

- Targeted Assessment for Prevention (TAP) strategy
  - Estimate absolute number of infections need to prevent
- Healthcare worker influenza vaccination rates
  - Used by facilities to benchmark progress
- Data validation highlights areas to improve surveillance methods
  - CLABSI, 2012
  - *C.difficile* LabID events, 2013
- Case identification for surgical site infection cluster linked to vendor

Executive summary: Health care-associated infections in Oregon hospitals — 2014

Health care-associated infections (HAIs) can have devastating consequences for patients. The summary below shows how 2014 data from 61 Oregon hospitals compares to: 1) recent HAI data for the U.S. as a whole; and 2) national HAI reduction targets set for 2013 by the U.S. Department of Health and Human Services (HHS).*

CLABSIs†
CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS — 35 INFECTIONS

A CLABSI occurs when germs enter the blood along a tube (central line) placed in a large vein.

Oregon hospitals
- ✔ *Performed statistically better than the U.S.*
- ✔ *Exceeded national reduction target set by HHS*

MRSA BLOODSTREAM INFECTIONS (MRSA BSIs)
HOSPITAL-ONSET MRSA BSI — 61 LABORATORY-IDENTIFIED EVENTS

An MRSA BSI is a difficult to treat infection caused by germs that enter the body through wounds or medical devices.

Oregon hospitals
- ✔ *Performed statistically better than the U.S.*
- ✔ *Exceeded national reduction target set by HHS*

C. Difficile infections
HOSPITAL-ONSET *C. DIFFICILE* — 732 LABORATORY-IDENTIFIED EVENTS

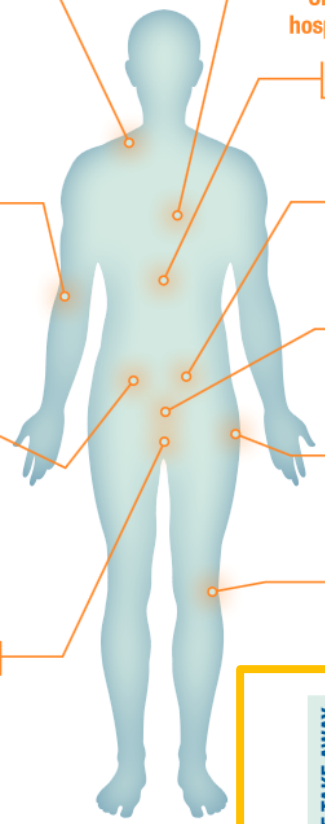
C. difficile spreads to patients from unclean hands and surfaces in hospitals, leading to colon infection and diarrhea.

Oregon hospitals
- ✔ *Performed statistically better than the U.S.*
- ✘ *Did not meet national reduction target set by HHS*

CAUTIs
CATHETER-ASSOCIATED URINARY TRACT INFECTIONS — 182 INFECTIONS

CAUTIs occur when germs travel up a urinary catheter that was not put in correctly, not kept clean, or left in too long.

Oregon hospitals
- = *Performed statistically equal to the U.S.*
- ✘ *Did not meet national reduction target set by HHS*



SSIs
SURGICAL SITE INFECTIONS

An SSI occurs when germs enter a surgical wound during or after surgery. The data below are for deep incisional and organ space SSIs only.

Coronary artery bypass graft (heart surgery) — 10 SSI
Oregon hospitals
- = *Performed statistically equal to the U.S.*
- ✔ *Exceeded national reduction target set by HHS*

Laminectomy (back surgery) — 30 SSI
Oregon hospitals
- ⊘ *No recent national comparison available*
- ✔ *Exceeded national reduction target set by HHS*

Colon surgery — 101 SSI
Oregon hospitals
- = *Performed statistically equal to the U.S.*
- ✘ *Did not meet national reduction target set by HHS*

Abdominal hysterectomy surgery — 25 SSI
Oregon hospitals
- = *Performed statistically equal to the U.S.*
- ✘ *Did not meet national reduction target set by HHS*

Hip replacement surgery — 56 SSI
Oregon hospitals
- = *Performed statistically equal to the U.S.*
- ✘ *Did not meet national reduction target set by HHS*

Knee replacement surgery — 41 SSI
Oregon hospitals
- = *Performed statistically equal to the U.S.*
- ✔ *Exceeded national reduction target set by HHS*

THE TAKE AWAY

In 2014, Oregon hospitals exceeded national targets for reducing bloodstream infections and infections following heart, back and knee surgeries. More work is needed to prevent *C. difficile* infections, catheter-associated urinary tract infections and infections following colon, hysterectomy and hip surgeries.

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What can I do to improve reporting?

- Post the reportable disease posters
- Educate staff that outbreaks of disease in facilities are reportable to your local public health department
- Implement National Health Safety Network reporting
  - Health Insight and HAI program working to enroll skilled nursing facilities
    - *C. diff* LabID event
    - CAUTI
    - Hand hygiene
    - Personal protective equipment use
  - http://www.cdc.gov/nhsn/ltc/

Health Insight contact: Leah Brandis, LBrandis@healthinsight.org

SUPPORT PREVENTION

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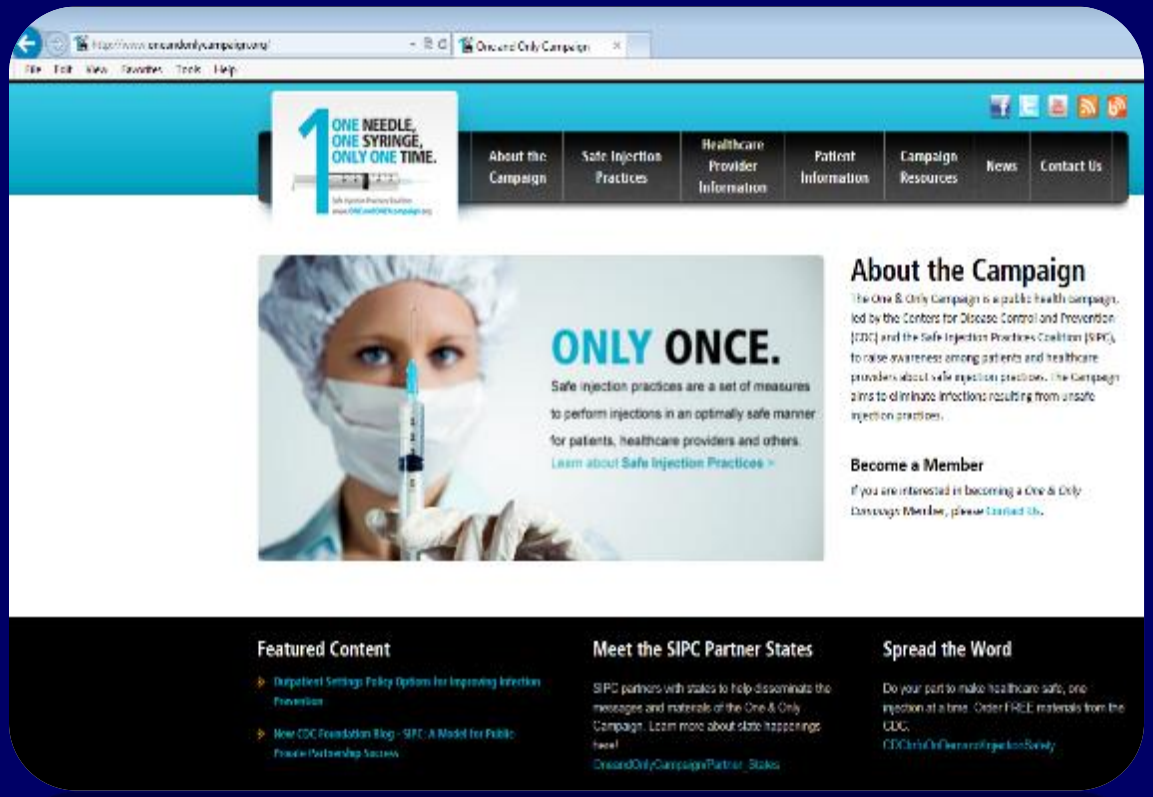
Safe injection practices

- Over 50 US outbreaks (1998-2014) due to unsafe injections
- >700 patients infected
- >150,000 patients notified of potential exposure
- Inappropriate use and maintenance of fingerstick devices and glucometers one of several causes



http://www.oneandonlycampaign.org/

Insulin pen reuse incidents

Reuse of insulin pens for multiple patients, reportedly after changing needles

- 2008: 185 patients notified, NY hospital
- 2009: 2,114 patients notified, TX hospital
- 2011: 2,401 patients notified, WI outpatient and hospital
- 2013: multiple incidents, NY and NC, including 2 VA Medical Centers and a private hospital

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Fingerstick or lancing devices

- Used to prick skin and obtain blood drop
- Reusable Devices: devices resemble a pen and have the means to remove and replace lancet after each use
  - Never use on more than one person
  - If used, should be by individuals who self-monitor
- Single-use auto-disabling fingerstick devices
  - Devices that are disposable and prevent reuse through an auto-disabling feature
  - Should be used in settings where assisted monitoring of blood glucose is performed

A simple rule for safe care:
Fingerstick devices should **never** be used for more than one person.

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Blood glucose monitors

- Blood glucose meters measure glucose levels
- Whenever possible, blood glucose meters should be assigned to an individual person and not be shared
- If meters must be shared, the device should be cleaned and disinfected after every use, per manufacturer's instructions
- If the manufacturer does not specify how the device should be cleaned and disinfected then it should not be shared.

A simple rule for safe care:
If shared, blood glucose meters should be cleaned and disinfected after every use.

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Insulin administration

- Insulin Pens: Intended for use by a single person
  - Pens have an insulin reservoir, or an insulin cartridge for an individual to self-administer several doses
  - Needle must be changed before each injection
- Insulin Vials: Multidose vials of insulin should be dedicated to a single person whenever possible.
  - If the vial must be used for more than one person it should be stored and prepared in a dedicated medication preparation area outside of the patient care environment
  - Always enter vial with new needle and syringe and dispose immediately after use in approved sharps container.

A simple rule for safe care:

Injection equipment (e.g., insulin pens, needles and syringes) should never be used for more than one person

60 second check

- 1 insulin pen =
  1 resident
- Label, check name
- Not damaged
- Expiration
- Recheck name
- Storage

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Process-specific resources

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DON'T DO IT

Sharing Insulin Pens and Other Injection Equipment Harms Patients

In 2009, in response to reports of improper use of insulin pens in hospitals, the Food and Drug Administration issued an alert reminding healthcare providers that insulin pens are meant for use on a single person only and are not to be shared. Unfortunately, there have been continuing reports of patients placed at risk of bloodborne and bacterial pathogen transmission through sharing of insulin pens.

A SIMPLE RULE

Injection equipment (e.g., insulin pens, needles and syringes) should **never** be used for more than one person.

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

About the Safe Injection Practices Coalition

The Safe Injection Practices Coalition (SIPC) is a partnership of healthcare-related organizations led by the Centers for Disease Control and Prevention. The SIPC developed the *One & Only Campaign*—a public health effort to eliminate unsafe medical injections by raising awareness of safe injection practices.

For a list of SIPC partners, for more information about the campaign, and to view additional resources including videos and other materials, please visit:

OneandOnlyCampaign.org

For the latest news and updates, follow us on Twitter @injectionsafety and Facebook/OneandOnlyCampaign.

This material was developed by CDC. The *One & Only Campaign* is made possible by a partnership between the CDC Foundation and Lilly USA.

BE AWARE
DON'T SHARE

ONE INSULIN PEN, ONLY ONE PERSON

What Every Healthcare Provider Needs To Know

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Materials available for order free of charge

One & Only Campaign Materials For Order Via CDC-INFO

Safe Injection Practices DVD
Item 22-0087

Rx for Safe Injections Poster
Item 22-0696

It's Elementary Poster
Item 22-0697

Provider Brochure
Item 22-0702

Patient Brochure
Item 22-0701

Injection Safety Infographic
Item 22-1504

Single-Dose & Multi-Dose Vial Infographic
Item 22-1599

Injection Safety Pocket Card
Item 22-0713

Logo Poster for General Public
Item 22-0699

You Can Order 3 Ways

SCAN
Scan with your smartphone to access the ordering page

CALL
1-800-CDC-INFO

CLICK
wwwn.cdc.gov/pubs/CDCInfoOnDemand.aspx

Select Injection Safety–One & Only Campaign to order materials

Be Aware Don't Share Insulin Poster
Item 22-1503

Be Aware Don't Share Insulin Brochure
Item 22-1501

Injection Safety Dangerous Misperceptions Flyer
Item 22-1178

Injection Safety Healthcare Provider Checklist
Item 22-1176

The *One & Only Campaign* is made possible by a CDC Foundation partnership with Eli Lilly and Company

Injection Safety Fact Sheet
Item 22-1502

Injection Safety Healthcare Provider Toolkit
Item 22-1177

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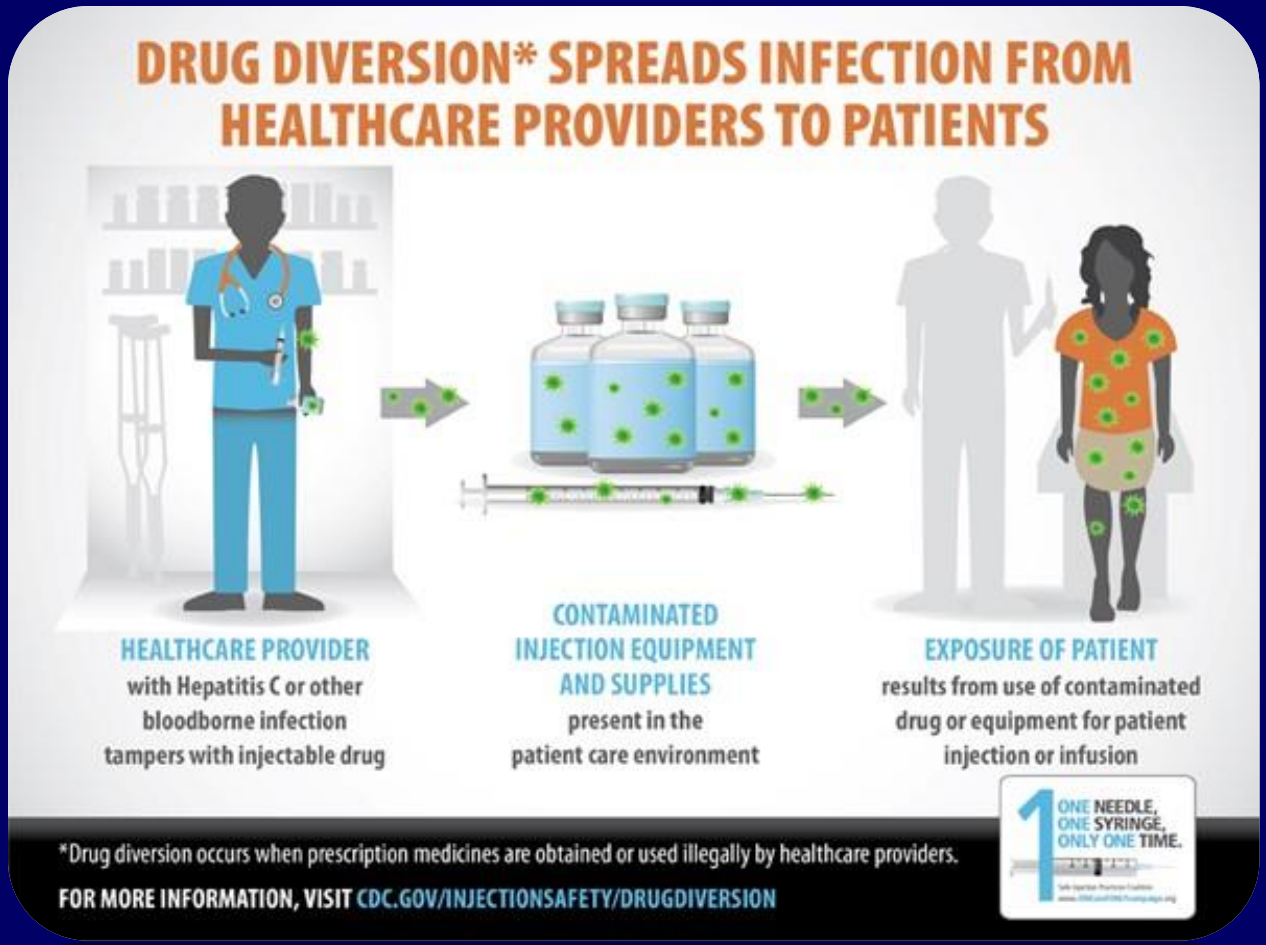
Drug diversion: Not just a hospital problem



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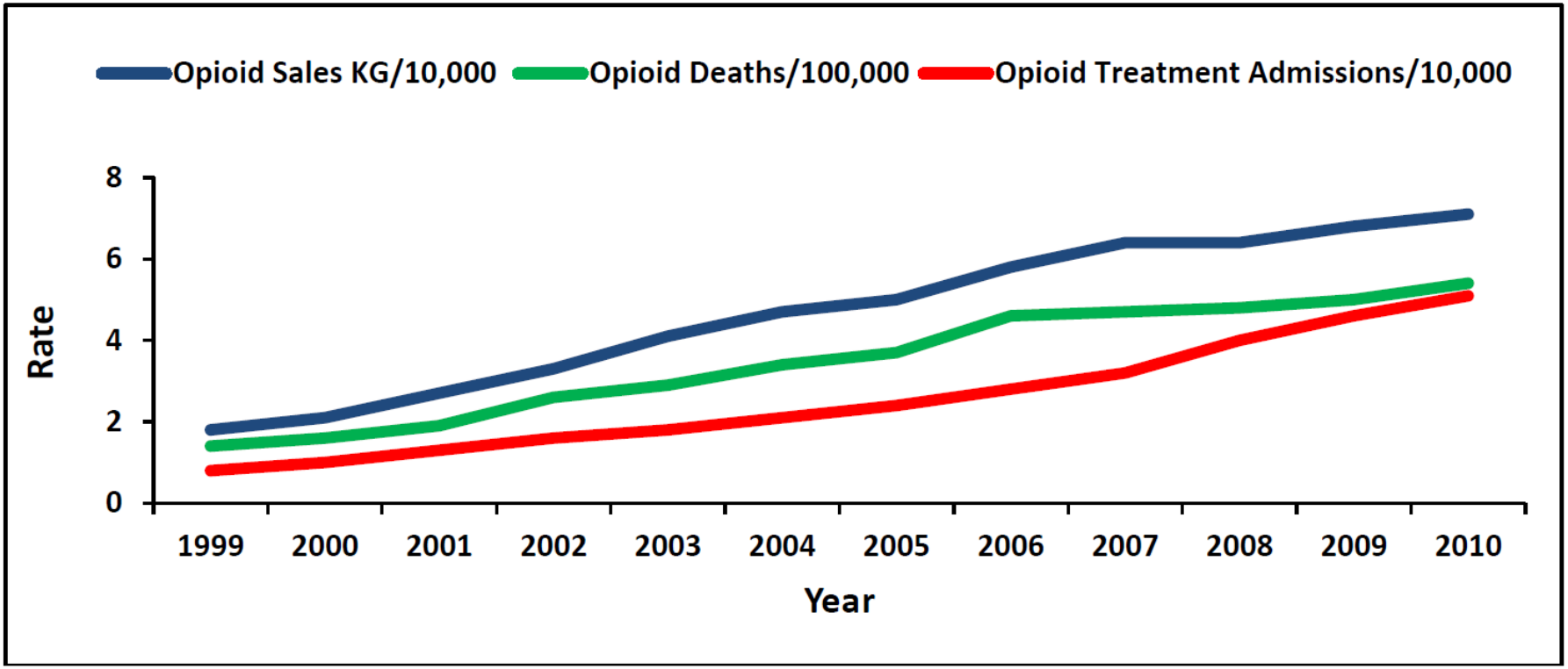
Why? Increasing opioid use

Figure 2. Rates of opioid overdose deaths, opioid sales, and opioid substance abuse treatment admissions, United States, 1999-2010



http://www.cdc.gov/drugoverdose/pdf/hhs_prescription_drug_abuse_report_09.2013.pdf

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Context: Substance abuse in HCW tracks with population at large

- 10-12% of physicians will develop substance use disorder during careers[1,2]
- 5 year British Medical Journal (BMJ) study found that physicians with substance use disorders are
  - 87% male
  - **36% abused opioids**
  - 50% abused alcohol
  - **14% history of IDU**
- Less data on non-physician HCW substance abuse, but diversion documented in these HCWs

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1. Hughes, JAMA, 1992
2. McLellan, BMJ, 2008

Mechanisms of diversion

- False documentation (e.g., medication not administered to the patient or “wasted” and instead used by the HCW)
- Scavenging of wasted medication (e.g., removal of residual medication from trash or used syringes)
- Theft by tampering (e.g., removal of medication from a container or syringe and replaced with similarly appearing solution that may be administered to patients)

Risks to patients

- Patient safety is compromised whenever drug diversion by HCWs occur
- Harms can include
  - Failure to receive prescribed medication (including pain management)
  - Exposure to substandard care from an impaired HCW
  - Exposure to potentially life-threatening infections

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Berge KH et al. Mayo Clin Proc. 2012;87(7):
Schaefer MK, Perz JF. Mayo Clinic Proc.2014; 89 (6)

Resource: CDC injection safety website

http://www.cdc.gov/injectionsafety/drugdiversion/

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Training video resources

http://www.oneandonlycampaign.org/content/audio-video

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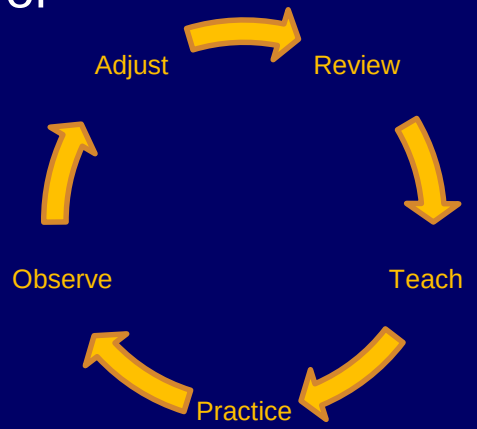
What steps can I take today to improve injection safety?

1. Write or review protocols based on best practice for
   a. Blood glucose monitoring
   b. Insulin pen use
   c. Narcotics administration



2. Teach protocols; practice technical steps

3. Observe, provide feedback; adjust practice; repeat

4. Review for new hires; periodic refreshers
   a. “Train the trainer” concept perpetuates bad practice
   b. Competency big focus of regulators

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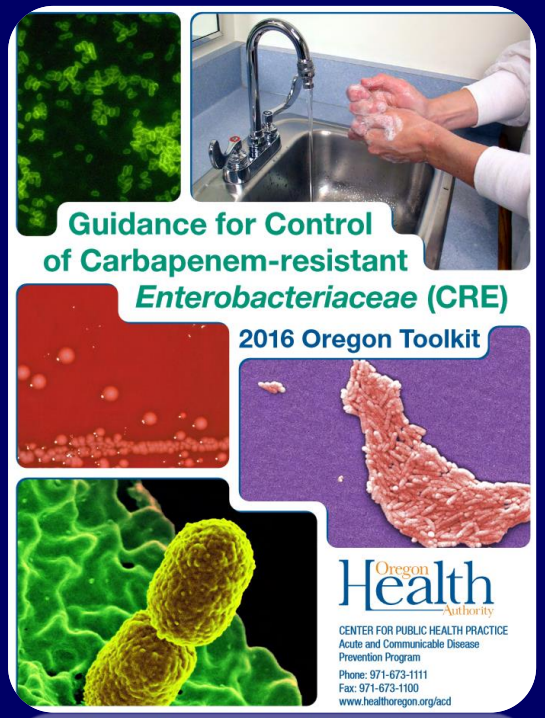
DROP-CRE Network

- Drug-Resistant Organism Prevention and Coordinated Regional Epidemiology Network
- Multi-drug resistant Gram-negative bacteria
- Detection = Lab reporting
- Protection = Specialized testing at
  Oregon State Public Health Lab
  - Carbapenemase testing in-house
- Prevention
  - Education of patients and providers
  - Interfacility transfer communication
  - Toolkit



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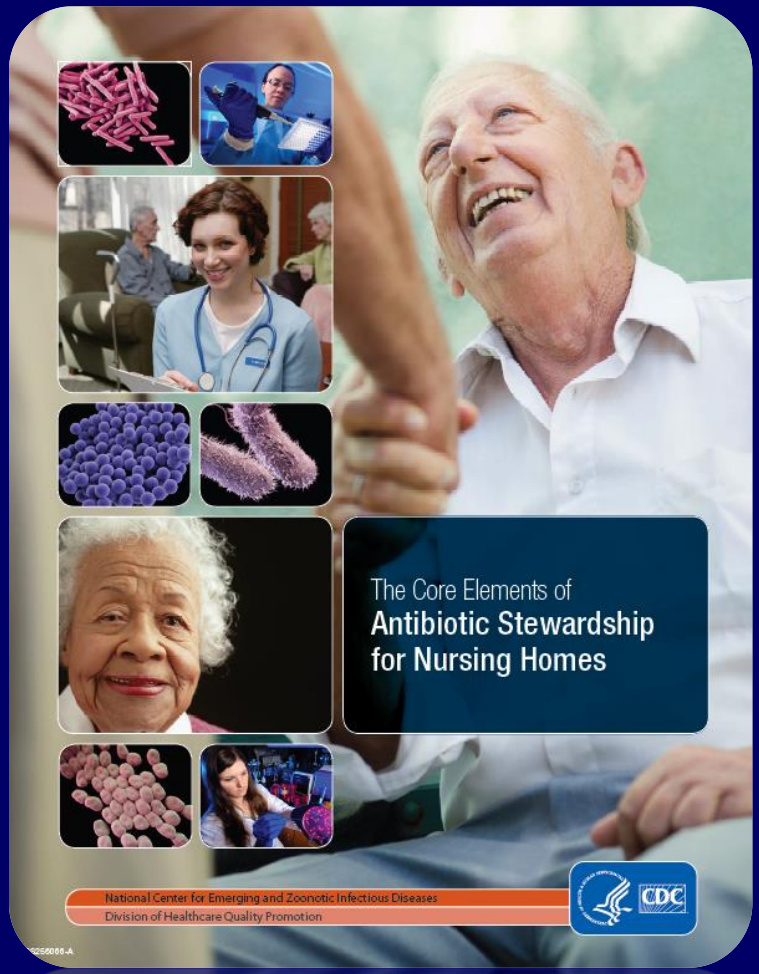
Antimicrobial stewardship



Leadership commitment
Demonstrate support and commitment to safe and appropriate antibiotic use in your facility

Accountability
Identify physician, nursing and pharmacy leads responsible for promoting and overseeing antibiotic stewardship activities in your facility

Drug expertise
Establish access to consultant pharmacists or other individuals with experience or training in antibiotic stewardship for your facility

Action
Implement **at least one** policy or practice to improve antibiotic use

Tracking
Monitor **at least one process** measure of antibiotic use and **at least one outcome** from antibiotic use in your facility

Reporting
Provide regular feedback on antibiotic use and resistance to prescribing clinicians, nursing staff and other relevant staff

Education
Provide resources to clinicians, nursing staff, residents and families about antibiotic resistance and opportunities for improving antibiotic use

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CDI collaborative

- Detection = surveillance = testing
- Protection = contact precautions
- Environment = sporocidal
- Antibiotic stewardship
  - Indication, drug, dose, duration
  - Colonization vs. infection
  - Prevention: UTI prevention, catheter care
- Interfacility transfer communication
  - Communicate, communicate, communicate

Inter-facility Infection Control Transfer Form

SENDING FACILITY TO COMPLETE FORM and COMMUNICATE TO ACCEPTING FACILITY

Please attach copies of latest culture reports with susceptibilities, if available

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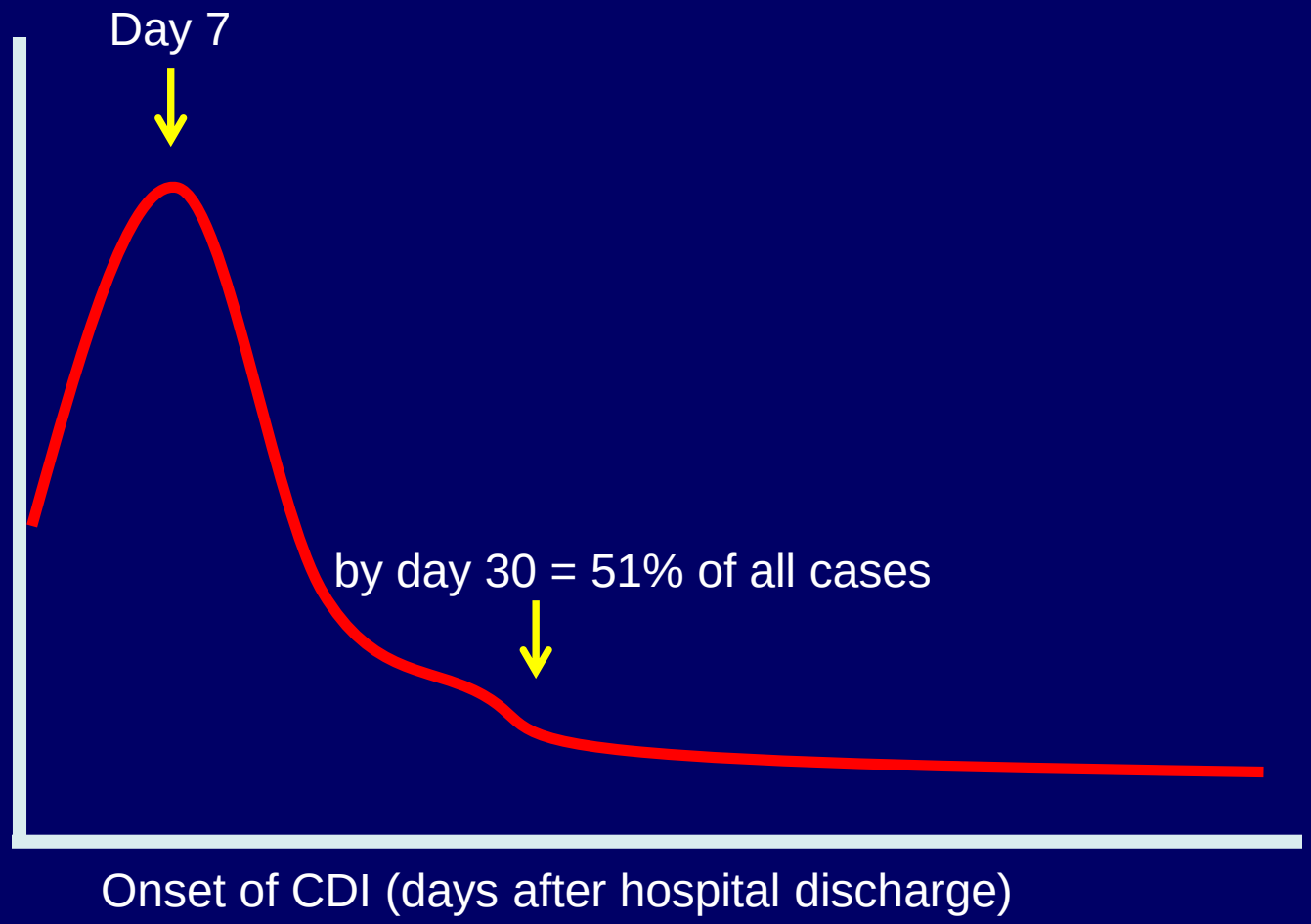
Onset of CDI after hospital discharge to LTCF



Rebecca Smith, NYC EIP CDI Surveillance Update, CDC, 2011

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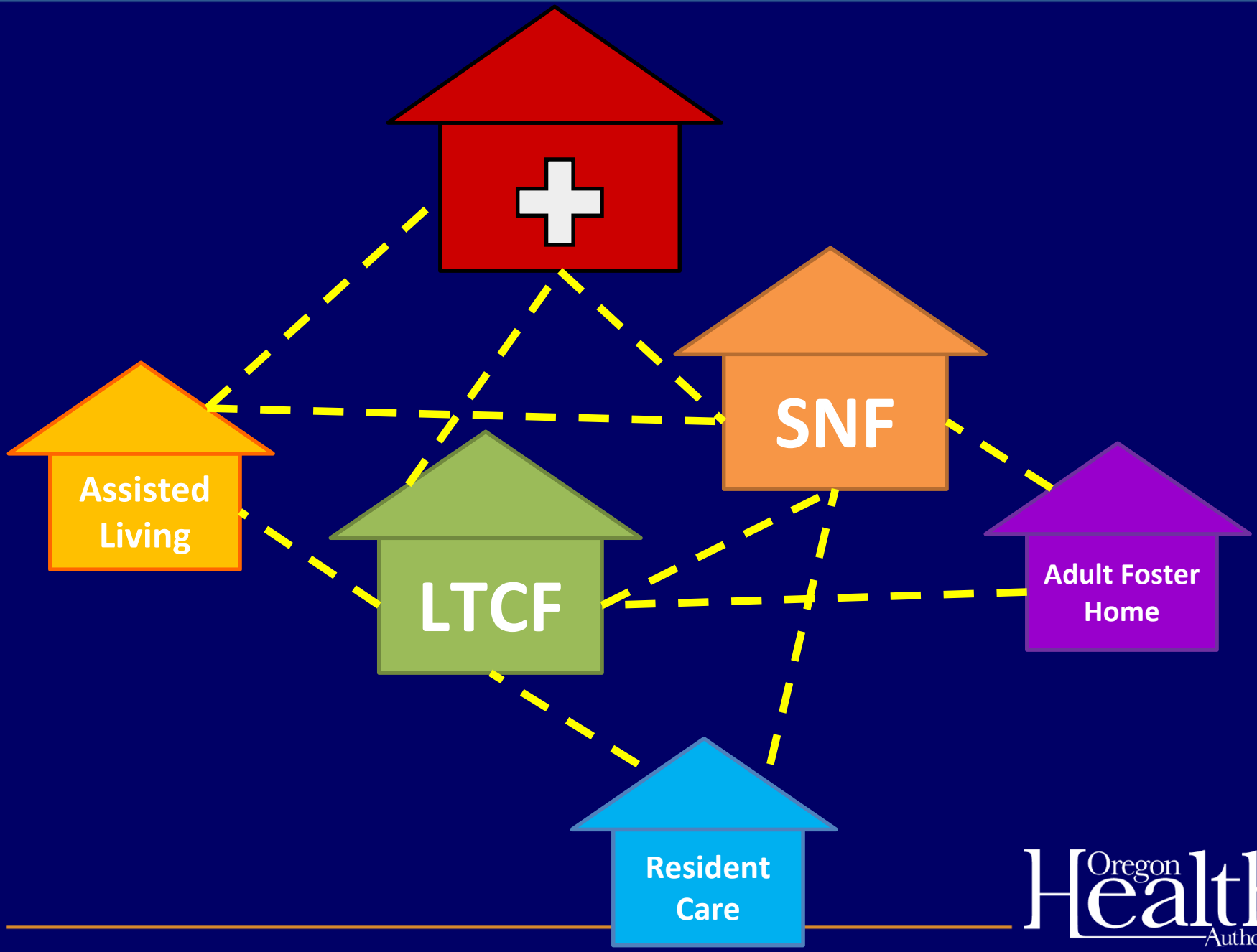

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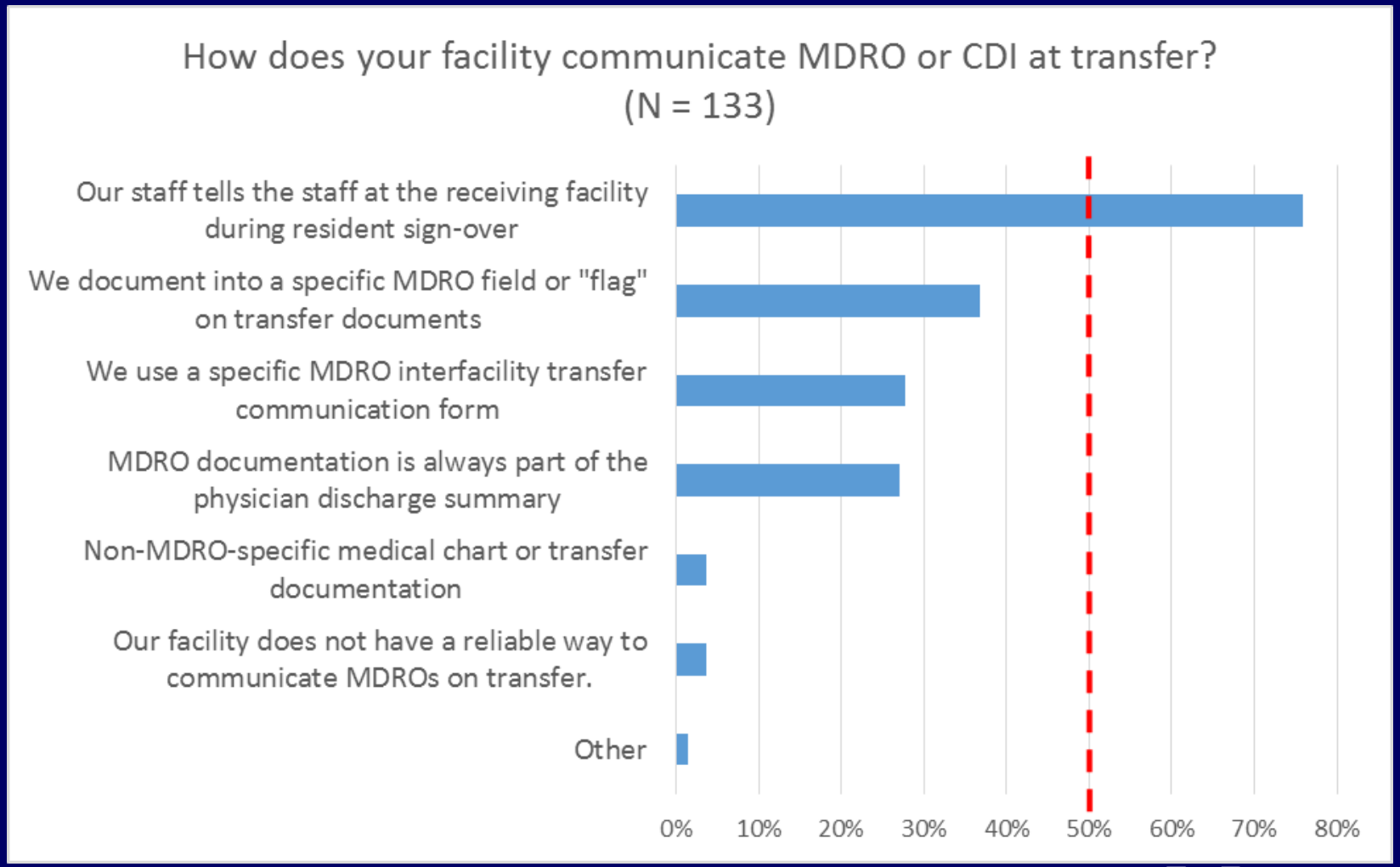
Fun fact #3



Source: 2015 Oregon HAI Survey of SNFs

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Interfacility transfer communication

- Rule since January 1, 2014
- Healthcare facilities, including
  - Hospitals
  - Birthing centers
  - Dialysis
  - Ambulatory surgery centers
  - Nursing homes, CBC
- Report the receiving facility
  - Readily available, any disease using infection control, MDRO
- Receiving facility reports back
  - If present on admission

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Facility Logo

Inter-facility Infection Control Transfer Form

SENDING FACILITY TO COMPLETE FORM and COMMUNICATE TO ACCEPTING FACILITY

Please attach copies of latest culture reports with susceptibilities, if available

Patient/Resident Last Name	First Name	Date of Birth
Print or place Patient Label		

Sending Facility Name	Sending Facility Unit	Sending Facility Phone #

Is the patient/resident currently on antibiotics? □ **NO** □ **YES** **DX:** _____

Does the patient/resident have pending cultures? □ **NO** □ **YES**

Is the patient/resident currently on precautions? □ **NO** □ **YES**

Type of Precautions (check all that apply) □ **Contact** □ **Droplet** □ **Airborne** □ **Other:**_____

Does patient currently have an infection, colonization OR a history of a multidrug-resistant organism (MDRO)?	**Colonization or history** *Check if YES*	**Active infection on treatment** *Check if YES*
MRSA (methicillin-resistant *Staphylococcus aureus)*	☐	☐
VRE (Vancomycin-resistant *Enterococcus*)	☐	☐
C. diff *(Clostridium difficile, CDI)*	☐	☐
Acinetobacter **spp.,** multidrug-resistant	☐	☐
Gram-negative organism resistant to multiple antibiotics* (e.g., *E. coli, Klebsiella, Proteus* spp.)	☐	☐
CRE (carbapenem-resistant *Enterobacteriaceae*)	☐	☐
Other:**	☐	☐

*Culture report with multiple antibiotics marked resistant (R); send copy of report with susceptibilities.

**Other: lice, scabies, shingles, norovirus, influenza, tuberculosis, etc.

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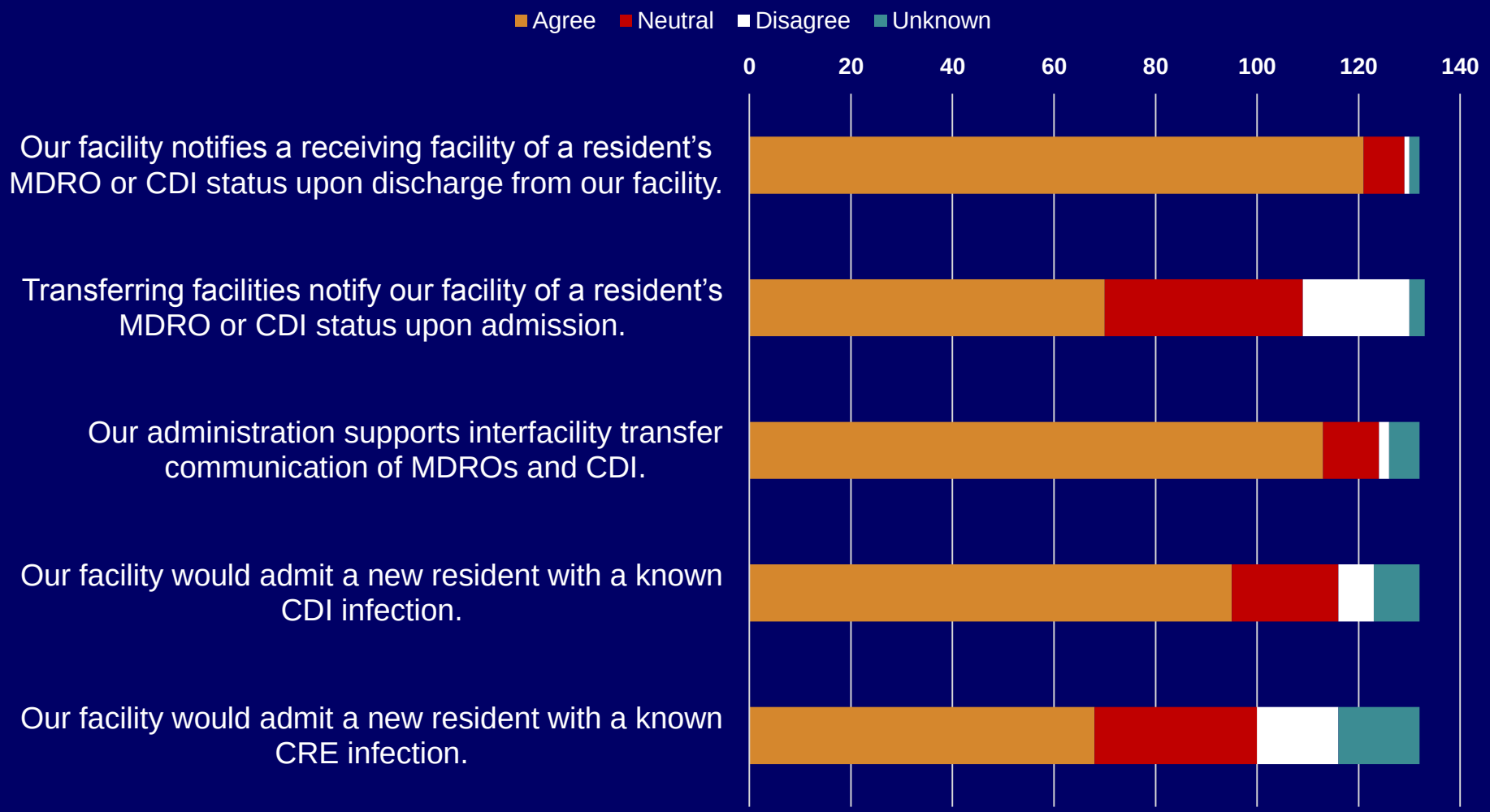
Interfacility transfer communication performance, as reported by SNFs — Oregon, 2015 (N = 133)



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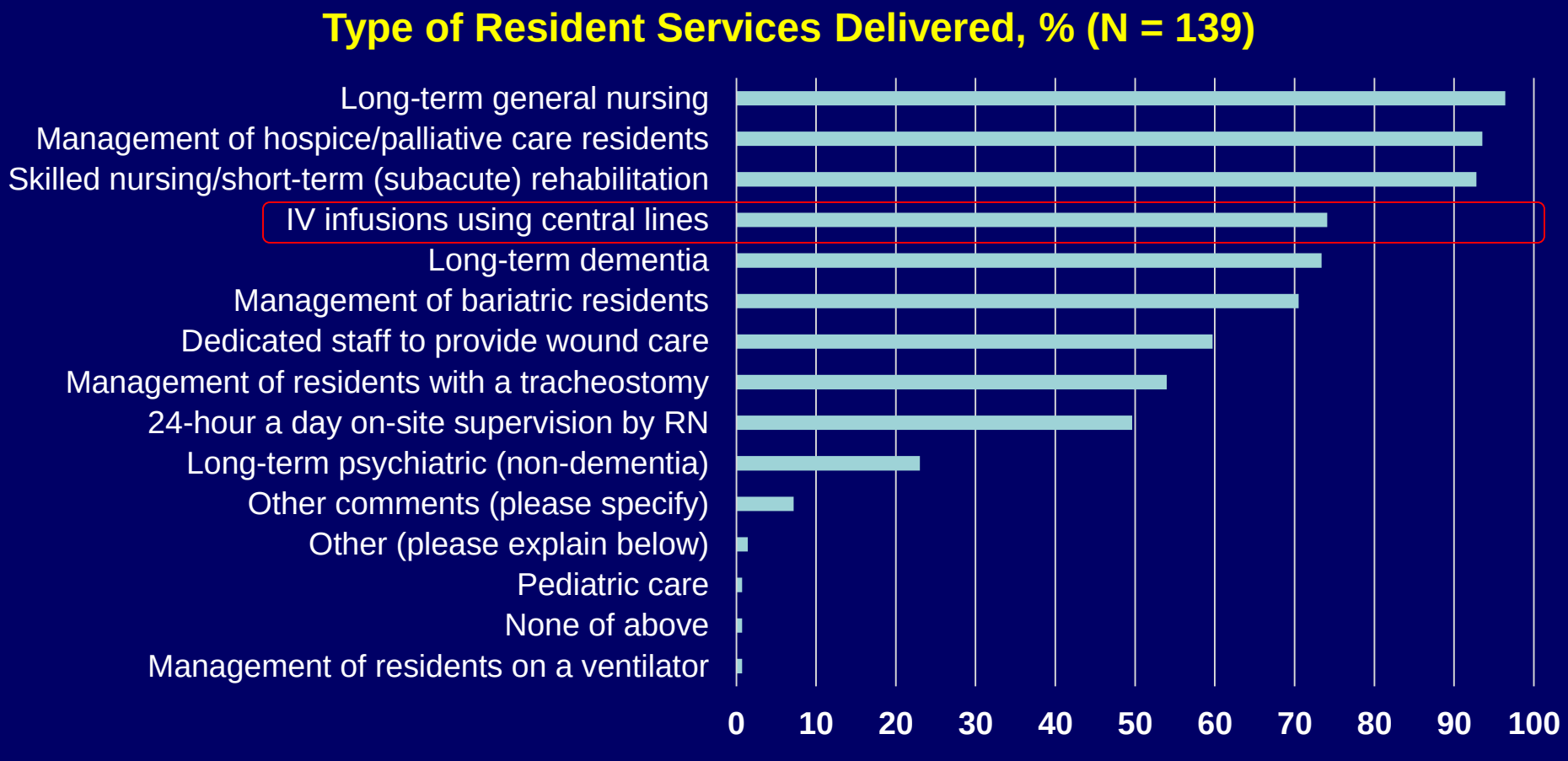
Fun fact #4: Increasing acuity of care



Source: 2015 Oregon HAI Survey of SNFs

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What types of infection risks are present in your facility?

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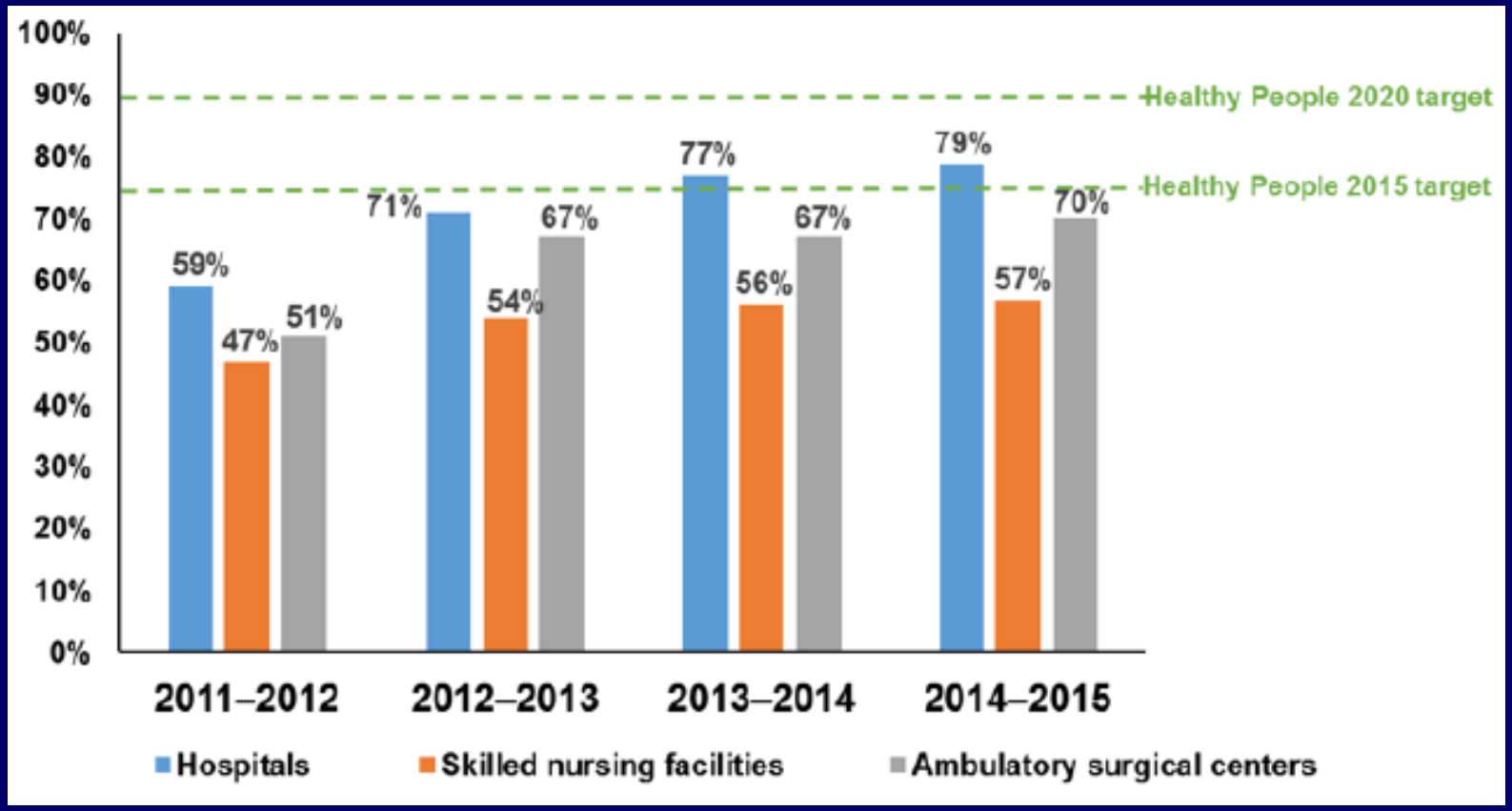
Fun fact #5

HCW Influenza Vaccination Rates, Oregon SNFs, 2011–2014



Source: 2015 Oregon HAI Survey of SNFs

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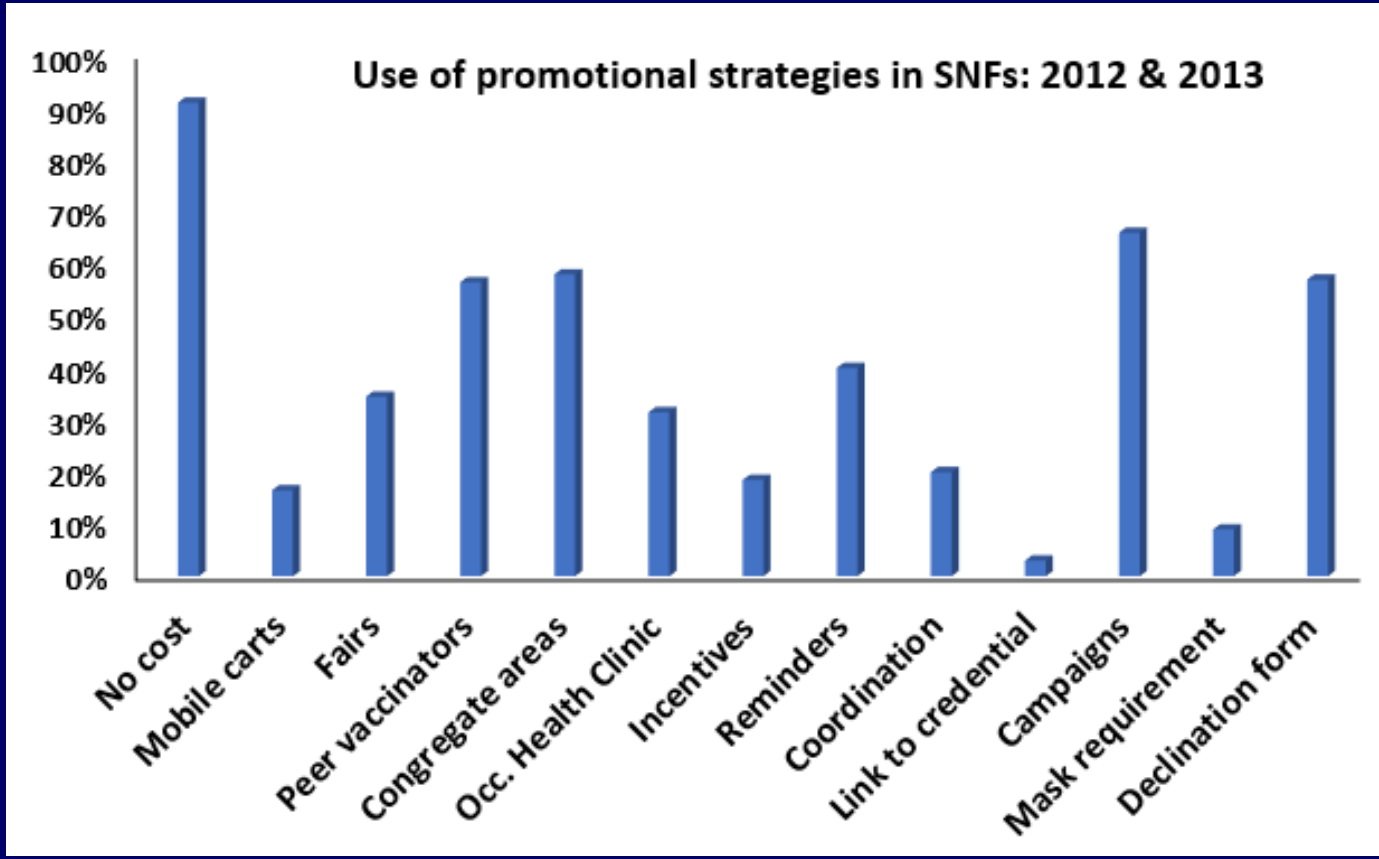
Strategies to promote vaccination

Healthcare worker influenza vaccination



Source: 2013 Oregon HCW Influenza Vaccination Report

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What can I do to improve prevention?

1. Perform an infection control risk assessment
   a. Minimum Expectations, Tools
      a. http://www.cdc.gov/hai/prevent/infection-control-assessment-tools.html
   b. Pick a policy (e.g., blood glucose monitoring, urine catheter use)

2. Review policies
   a. Do they support infection prevention best practice?
   b. Interfacility transfer, safe injection, antibiotic stewardship

3. Review education
   a. Are new hires and current hires getting taught best practice?

4. Review practice
   a. Observe and give feedback

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RESPONSE

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How do I know I have a problem?

- EDUCATE: Encourage staff to communicate what they are seeing

- ASK: Daily huddles with care staff
  - Residents with diarrhea without other cause?
  - Residents with vomiting?
  - Residents with influenza-like illness? (sore throat, fever, cough)
  - Other spontaneous infections? (e.g., cluster of cellulitis)

- LOOK: Nursing evaluation when change in status
  - Assess patient
  - Confirm meets infection criteria
  - Collect appropriate pre-treatment testing, if indicated

What if I notice a cluster?

- Reach out to your local health department
  - www.healthoregon.org/diseasereporting
- Gather information: Line List
  - Name, DOB, room (all ill, whether or not lab confirmed)
  - Dates of onset of illness
  - Key symptoms (fever, vomiting, diarrhea, rash, pneumonia, cellulitis)
  - Outcomes
  - Vaccination status
- Tools available here:
  - https://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/Outbreaks/Pages/index.aspx

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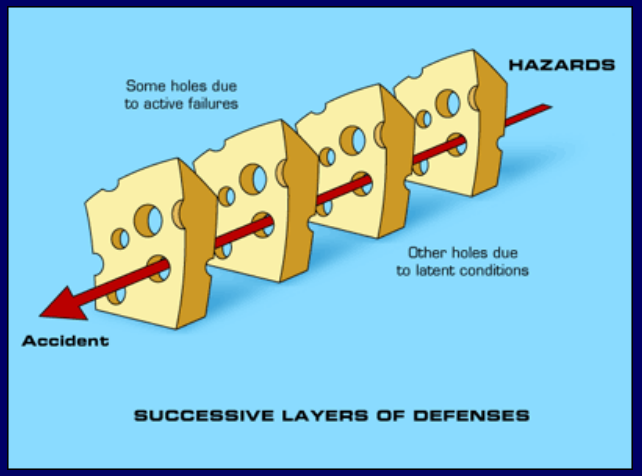
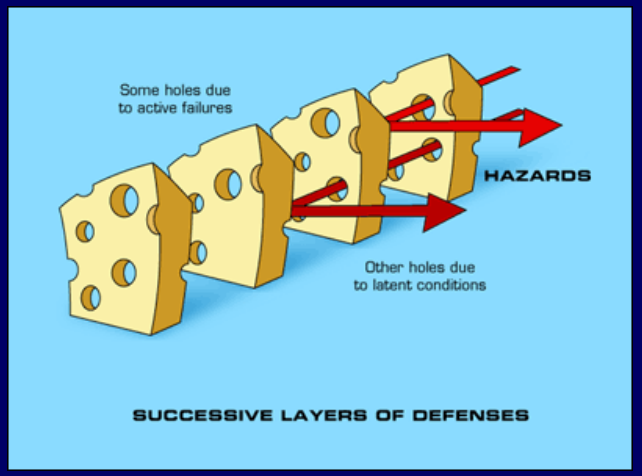
What happens if I report a cluster?

- Local public health coordinates with Director of Nursing to:
  - Gather info (line list)
  - Identify pathogen (samples tested at public health laboratory)
  - Form a plan to halt outbreak (isolation, cleaning, prophylaxis, etc.)
  - Determine source
- Local public health may contact other facilities
  - E.g., hospital which performed surgeries, outpatient dialysis center
- Residents are usually not contacted
  - Some diseases need a resident's specific risk factors
- Local public health may ask to review resident's charts
  - Depends on the pathogen
- Follow-up to ensure plan completed, outstanding issues, prevention

What's the benefit of reporting a cluster?

- Prevent other residents from becoming ill
- Prevent staff from becoming ill
- Identify the issue and improve the system
  - Blame-free
  - Root cause analysis
  - Swiss cheese framework
- Compliance with legislative mandate





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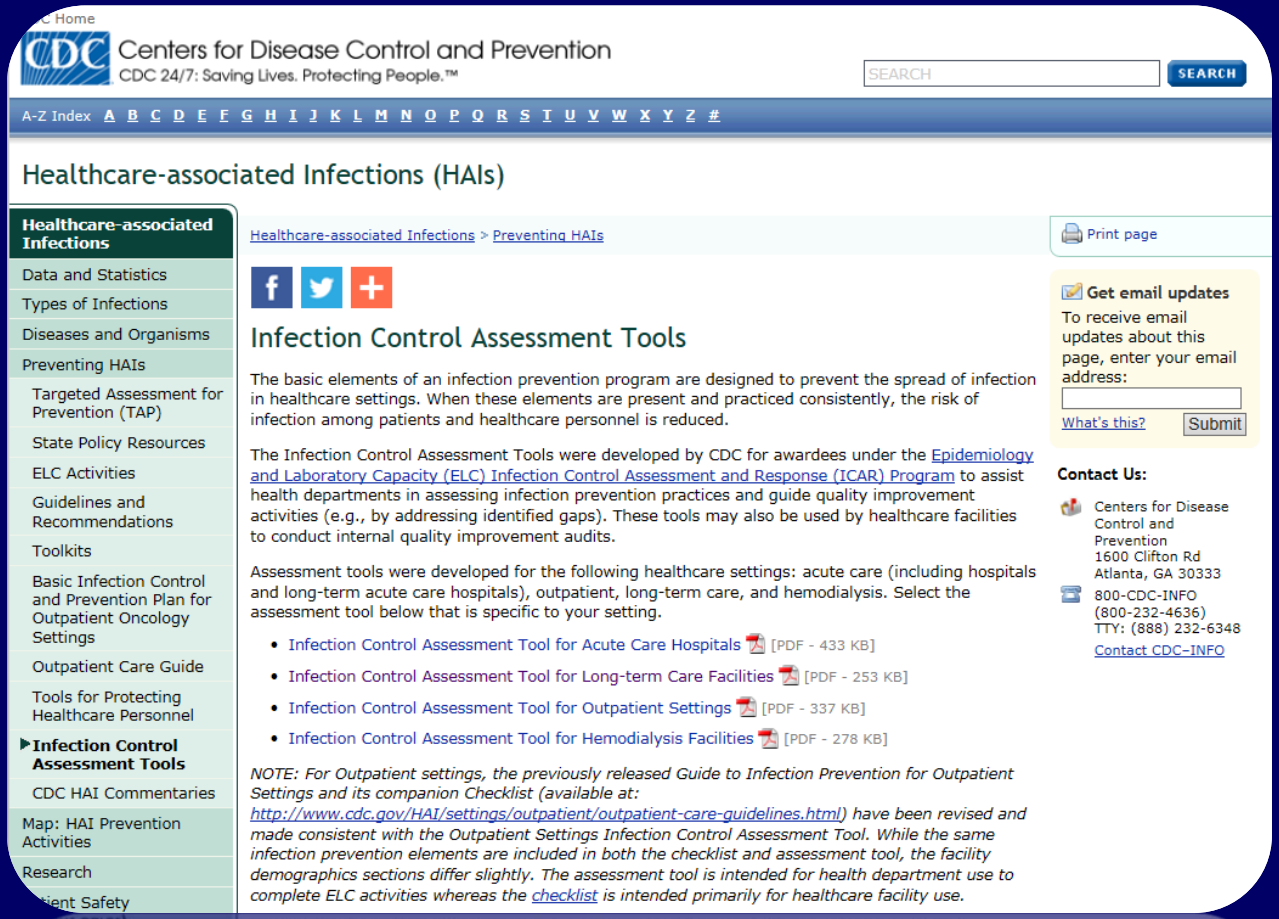
Oregon Patient Safety Commission onsite consultations 2016–2017



http://www.cdc.gov/hai/prevent/infection-control-assessment-tools.html

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Infection control self-assessment tools

VIII. Injection Safety and Point of Care Testing		
Elements to be assessed	**Assessment**	**Notes/Areas for Improvement**
A. The facility has a policy on injection safety which includes protocols for performing finger sticks and point of care testing (e.g., assisted blood glucose monitoring, or AMBG).	○ Yes ○ No	
B. Personnel who perform point of care testing (e.g., AMBG) receive training and competency validation on injection safety procedures at time of employment. *Note: If point of care tests are performed by contract personnel, facility should verify that training is provided by contracting company*	○ Yes ○ No	
C. Personnel who perform point of care testing (e.g., AMBG) receive training and competency validation on injection safety procedures within the past 12 months. *Note: If point of care tests are performed by contract personnel, facility should verify that training is provided by contracting company*	○ Yes ○ No	

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http://www.cdc.gov/hai/prevent/infection-control-assessment-tools.html

What can I do to improve response?

- Get to know the infection preventionists at your referring hospitals
  - They want to know you!
  - Great resources and pulse of what's going on in region
  - Interfacility communication of infectious diseases

- Get to know your public health partners
  - www.healthoregon.org/diseasereporting

- Get to know your policies and procedures for dealing with infectious diseases

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EDUCATION

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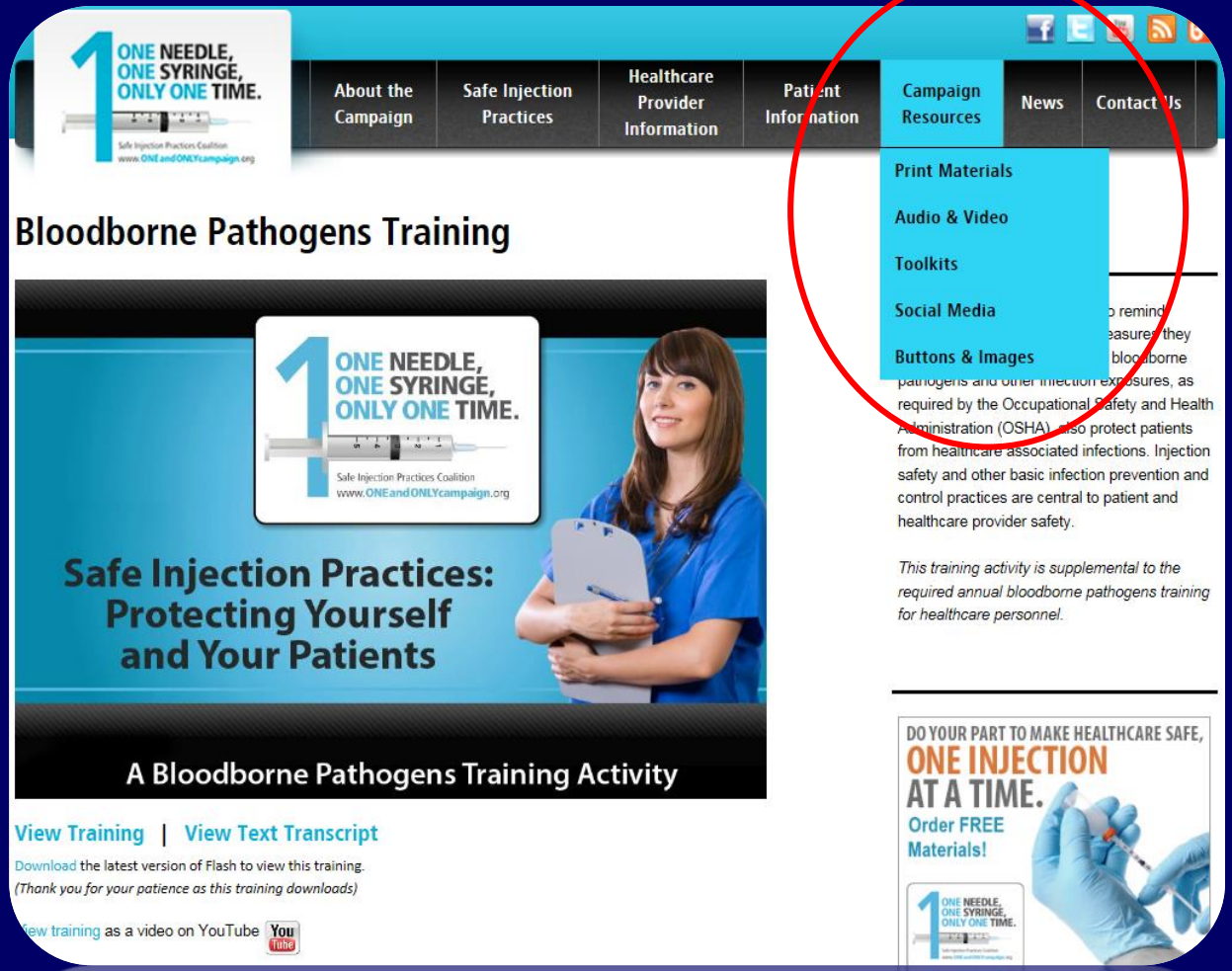
Educational opportunities



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Thank you for your collaboration to improve care for Oregonians!

Acute & Communicable Disease Prevention Team
HAI Program
(971) 673-1111 (24/7)
Ohd.acdp@state.or.us

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Questions?
Follow up?

Healthcare Associated Infections (HAI) Program
Roza Tammer, MPH, CIC, HAI Reporting Epidemiologist
roza.p.tammer@dhsoha.state.or.us

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