Proposed New Reportable Disease Regulation in Kentucky

**Conference for
Healthcare Transparency & Patient Safety**
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Topics

- Current regulations and reporting of outbreaks
- Major changes to regulations
  - Definitions
  - Simultaneous reporting of data to both National Healthcare Safety Network (NHSN) and Kentucky Department for Public Health (DPH)
  - Electronic laboratory reporting of multidrug resistant organisms beginning in October 2016
- Advantages of reporting

Population Health Surveillance for Communicable Diseases

- From the French: "to watch over"
- Surveillance helps to call attention to unusual events or numbers of events.
- Gaining awareness of a potential public health problem from the outset allows more time for a thoughtful, considered response and more strategic use of limited resources.
- Surveillance also helps us understand the depth and breadth of a health event: the "who," "what," "where," "when," and possibly "why" and "how."

Ultimate Goal

Control and reduce diseases of public health importance and impact

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Reportable Disease Laws

- Kentucky Revised Statute 214.010
  - "Every physician and advanced practice registered nurse shall report all diseases designated by administrative regulation of the Cabinet for Health and Family Services as reportable"
- 902 Kentucky Administrative Regulation 2:020
  - Delineates who should report, the diseases and outbreaks to be reported, and how they are to be reported

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Remember!

HIPAA Privacy Rules **do not change** the state requirement for reporting diseases to the state or local health department. However, an additional notation should be made in the patient's record that the information was shared with the health department.

What's Reportable to Public Health in KY Now?

- Certain specific illnesses, or
- Unexpected patterns of cases or deaths
- Examples:
  - Large numbers ill with similar syndrome
  - Failure of common disease to respond to usual therapy
  - Unusual geographic or seasonal distribution
  - Atypical aerosol, food or water transmission
- Healthcare Associated Infections are only reportable as "outbreaks"
- Reports can be made to *either* the state or local health department

Who is responsible for infectious disease surveillance?

- State Level:
  - State Epidemiologist
  - Medical Epidemiologists
  - Infectious Disease Epidemiologists
  - Nurse Consultants
  - Other DPH staff
- Local Level:
  - Regional Epidemiologists
  - Public Health Nurses
  - Environmental Health Specialists (occasionally)

Traditional Passive Surveillance

Relies on timely **recognition** *and* **reporting** of certain types of disease or clusters of illness.

- Presumes thorough knowledge and correct diagnosis of illness by clinician
- Presumes that all reportable diseases or unusual disease groupings will be reported to the health department
- Presumes reporting will occur promptly

What does Public Health do with the reports?

- Assists in determining whether outbreak is occurring, case investigation, and prevention/control of other cases
- In the case of healthcare facilities, can assist in providing guidance for control and with more detailed testing
- Can help determine if facility outbreaks are interrelated across county and state lines

2012 Investigations

- 8,466 total investigations
  - Lab report
  - Morbidity report from hospital
  - Faxed EPID 200 Form
- Campylobacteriosis= 552
- Salmonellosis = 757
- STEC = 120
- HAV, acute = 83
- HBV, acute = 275 (509 chronic)
- HCV, acute = 344 (2,573 chronic or resolved)
- Influenza isolates = 516
- Pertussis = 741

2013 Investigations

- 9,689 total investigations
  - Lab report
  - Morbidity report from hospital
  - Faxed EPID 200 Form
- Campylobacteriosis= 683
- Salmonellosis = 562
- STEC = 177
- HAV, acute = 84
- HBV, acute = 289 (589 chronic)
- HCV, acute = 321 (3,222 chronic or resolved)
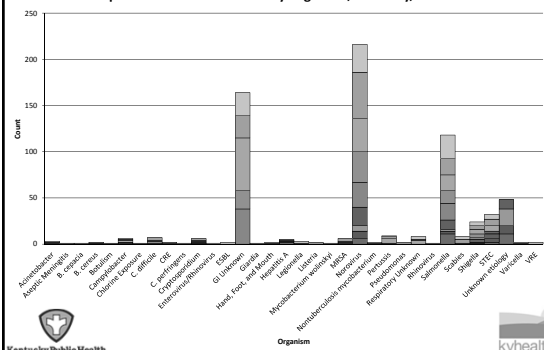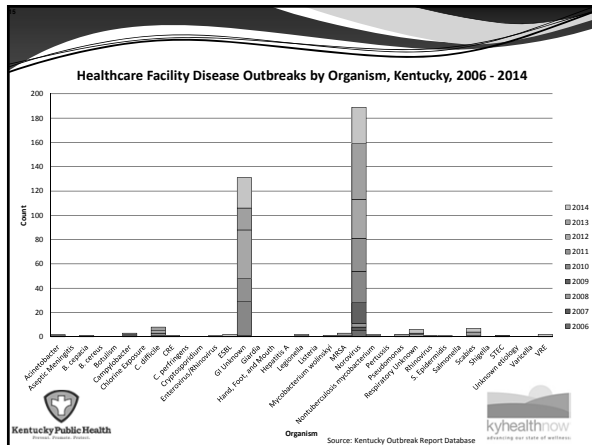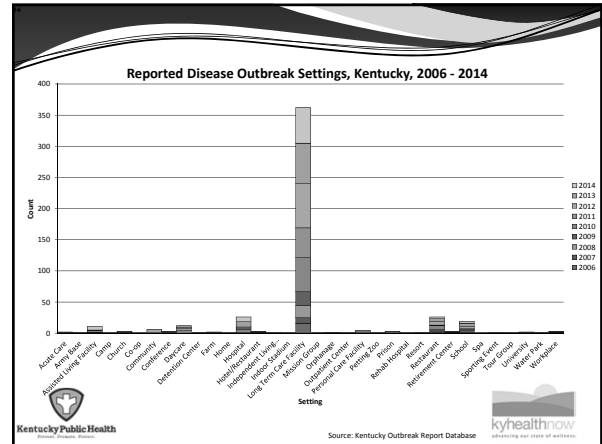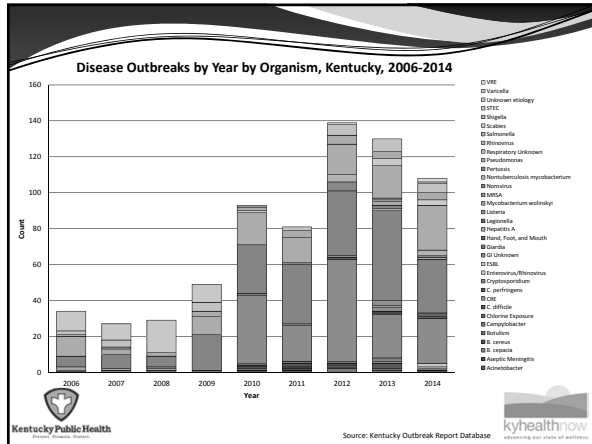- Influenza isolates = 1,195
- Pertussis = 499

Source: Kentucky NEDSS Data

Reported Disease Outbreaks by Organism, Kentucky, 2006 - 2014

Source: Kentucky Outbreak Report Database

Slide 1

Disease Outbreaks by Year by Organism, Kentucky, 2006-2014

Legend: VRE, Varicella, Unknown etiology, STEC, Shigella, Scabies, Salmonella, Rhinovirus, Respiratory Unknown, Pseudomonas, Pertussis, Nontuberculosis mycobacterium, Norovirus, MRSA, Mycobacterium wolinskyi, Listeria, Legionella, Hepatitis A, Hand, Foot, and Mouth, Giardia, GI Unknown, ESBL, Enterovirus/Rhinovirus, Cryptosporidium, C. perfringens, CRE, C. difficile, Chlorine Exposure, Campylobacter, Botulism, B. cereus, B. cepacia, Aseptic Meningitis, Acinetobacter

Source: Kentucky Outbreak Report Database

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Slide 2

Reported Disease Outbreak Settings, Kentucky, 2006 - 2014

Settings: Acute Care, Army Base, Assisted Living Facility, Camp, Church, Co-op, Community, Conference, Daycare, Detention Center, Farm, Home, Hospital, Hotel/Restaurant, Independent Living, Indoor Stadium, Long-term Care facility, Motion Group, Orphanage, Outpatient Center, Personal Care Facility, Petting Zoo, Prison, Rehab Hospital, Resort, Restaurant, Retirement Center, School, Sporting Event, Spa, Tour Group, University, Water Park, Workplace

Legend: 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007, 2006

Source: Kentucky Outbreak Report Database

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Slide 3

Healthcare Facility Disease Outbreaks by Organism, Kentucky, 2006 - 2014

Organisms: Acinetobacter, Aseptic Meningitis, B. cepacia, B. cereus, Botulism, Campylobacter, Chlorine Exposure, C. difficile, CRE, C. perfringens, Cryptosporidium, Enterovirus/Rhinovirus, ESBL, GI Unknown, Giardia, Hand, Foot, and Mouth, Hepatitis A, Legionella, Listeria, Mycobacterium wolinskyi, MRSA, Norovirus, Nontuberculosis mycobacterium, Pertussis, Pseudomonas, Respiratory Unknown, Rhinovirus, S. Epidermidis, Salmonella, Scabies, Shigella, STEC, Unknown etiology, Varicella, VRE

Legend: 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007, 2006

Source: Kentucky Outbreak Report Database

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Slide 4

Reported Disease Outbreaks, Kentucky, 2006-2014

Organism	2006	2007	2008	2009	2010	2011	2012	2013	2014
Acinetobacter	0	0	0	0	1	1	0	0	
Aseptic Meningitis	0	0	0	0	0	1	0	0	
B. cepacia	0	0	0	0	0	0	0	1	
B. cereus	1	0	0	0	0	1	0	0	
Botulism	0	0	0	0	1	0	0	0	
Campylobacter	0	0	1	1	0	0	2	1	
Chlorine Exposure	0	0	0	0	1	0	0	0	
C. difficile	0	0	0	0	0	2	1	3	
CRE	0	0	0	0	0	0	1	1	
C. perfringens	0	0	0	0	0	0	0	0	
Cryptosporidium	0	1	0	0	1	1	1	2	
Enterovirus/Rhinovirus	0	0	0	0	0	0	0	0	
ESBL	0	0	0	0	0	0	0	0	
GI Unknown	0	0	0	0	38	20	57	24	25
Giardia	0	0	0	0	0	0	0	1	
Hand, Foot, and Mouth	0	0	0	0	0	0	0	1	
Hepatitis A	2	1	1	0	1	0	0	0	
Legionella	0	0	0	0	0	0	1	0	
Listeria	0	0	0	0	0	0	0	2	
Mycobacterium wolinskyi	0	0	0	0	0	0	0	1	
MRSA	0	0	1	0	0	0	1	3	
Norovirus	6	8	6	20	27	33	36	50	36
Nontuberculosis mycobacterium	0	0	0	0	0	0	0	1	
Pertussis	0	0	0	0	0	1	5	2	
Pseudomonas	0	0	0	0	0	0	0	2	
Respiratory Unknown	0	0	0	0	0	0	4	1	
Rhinovirus	0	0	0	0	0	0	0	1	
Salmonella	11	3	2	10	18	14	17	18	25
Scabies	0	0	0	0	1	0	0	4	
Shigella	1	1	0	3	2	4	5	4	
STEC	2	4	0	5	1	2	6	7	
Unknown etiology	11	9	18	10	0	0	0	0	
Varicella	0	0	0	0	0	0	1	0	
VRE	0	0	0	0	0	0	0	0	
Total	34	27	29	49	93	81	139	130	100

Source: Kentucky Outbreak Report Database

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Slide 5

New Definitions

- Healthcare-Associated Infection (HAI) Outbreak:
  - two or more HAIs that are epidemiologically linked or connected by person, place or time

  OR

  - a single case of an HAI not commonly diagnosed (for example, legionellosis acquired in a healthcare facility)

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Slide 6

New Definitions

- Healthcare-Associated Infection (HAI):
  - An infection acquired by a person while receiving treatment for a separate condition in a healthcare setting
- Under the new regulation, certain HAIs would be reportable when the law goes into effect through NHSN
  - Cases of multidrug resistant organisms would be reported electronically beginning in October 2016.

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Healthcare-Associated Infection Data
2 types of hospital data describing infections

- Clinical – administrative coded data
  - Reflects individual patient experience, conditions that physicians are treating and are based on physician's diagnosis, e.g., pneumonia, urinary tract infection, etc. Used for Medicare, Medicaid, insurance payments and some quality measures.
- Surveillance – population based data
  - Based on set definitions, may or may not always agree with clinical definitions. Infection rates maybe over-called or under-called. Not intended to identify individual infections, allows facilities to look at trends over populations and time.

National Healthcare Safety Network (NHSN)

CDC's National Healthcare Safety Network (NHSN) is the nation's most widely used healthcare-associated infection tracking system. NHSN provides facilities, states, regions, and the nation with data needed to identify problem areas, measure progress of prevention efforts, and ultimately eliminate healthcare-associated infections.

http://www.cdc.gov/nhsn/about.html

NHSN (Continued)

NHSN provides medical facilities, states, regions, and the nation with data collection and reporting capabilities needed to:
- Identify infection prevention problems by facility, state, or specific quality improvement project
- Benchmark progress of infection prevention efforts
- Comply with state and federal public reporting mandates, and
- Ultimately, drive national progress toward elimination of HAIs.

http://www.cdc.gov/nhsn/about.html

Important NHSN Links

- http://www.cdc.gov/nhsn/cms/
- http://www.cdc.gov/nhsn/PDFs/CMS/CMS-Reporting-Requirements-Deadlines.pdf
- http://www.cdc.gov/HAI/stateplans/state-hai-plans/ky.html

Simultaneous Reporting to Both CMS and DPH

- HAIs are mandated to be reported routinely for hospitals that participate in the Centers for Medicare and Medicaid Services (CMS) Hospital IQR Program.
- Similar requirements exist for long term care facilities, outpatient dialysis centers, rehabilitation centers and others.
- Under new regulation, data submitted to CMS through NHSN would be required to be submitted at same time to Department for Public Health (DPH.)

State Mandate for HAI Reporting

- NHSN Surveillance data
- Allows KDPH to see how facilities are doing based on national benchmarks and in comparison with each other
- Facilities that report in the highest or lowest tertiles may be highlighted for data validation or consultation
- Individual patient level data is protected
- Hospital level data may be reported once finalized
- Also available on https://data.medicare.gov/data/hospital-compare

Electronic Multidrug Resistant Organism (MDRO) Reporting

- Officially begins October 16, 2016
- Can be used be facilities to demonstrate "meaningful use," in order for facilities to receive meaningful use payments
- Involves electronic reporting of positive laboratory results of certain MDROs as defined in the regulation, via the Kentucky Health Information Exchange

Kentucky Health Information Exchange (KHIE)

- Enables safe, secure electronic exchange of patient health information among participating providers and organizations throughout the state
- Participation fulfills meaningful use objectives of the Medicare and Medicaid Electronic Health Record Incentive Program

http://khie.ky.gov

Advantages of MDRO Reporting

- Allows KDPH to have an understanding of "strains" or emerging important pathogens that may be present in our state
- Opportunity for quicker recognition and intervention in the event of a cluster or outbreak of an organism
- Allows KDPH to offer assistance with evaluating Infection Prevention activities, laboratory assistance with PFGE analysis, outbreak investigation expertise and on-site consultation
- Aids in understanding resistance patterns that may affect antimicrobial treatment limitations that could be more widespread than previously known
- Provides potential for development of regional/statewide antibiograms

Summary of Proposed Regulation

- Defines HAIs and HAI outbreaks
- Would mandate simultaneous reporting of HAI data to both CMS and DPH after regulation goes into effect
- Would mandate electronic reporting of positive laboratory tests for certain MDROs via the Kentucky Health Information Exchange beginning on October 16, 2016