



Washington State Board of Health

Communicable Disease Update
October 3, 2016

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Outline for today's presentation

- Outbreak prevention and response
- Overview of current communicable disease challenges
- Impact on Prevention Division & cross cutting services operations
- Foundational Public Health Services

Metro Foundational Public Health Services

Communicable
Disease
Control

Healthy
Communities:
Chronic Disease
and Injury
Prevention

Environmental
Public Health

Maternal Child
Family Health

Assurance Role:
Access to
Clinical Care

Vital Records

Jail Health

EMS

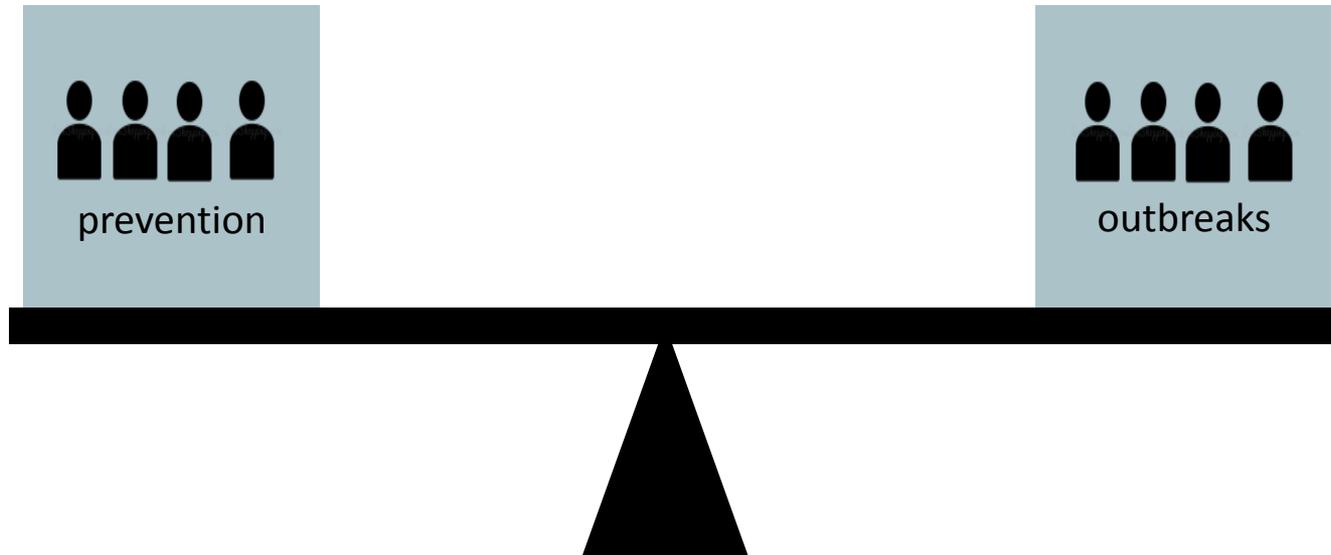
MEO

Across all programs:

- Assessment (surveillance and epidemiology)
- Emergency preparedness and response (all hazards)
- Communications
- Policy development and support
- Community partnership development
- Business competencies

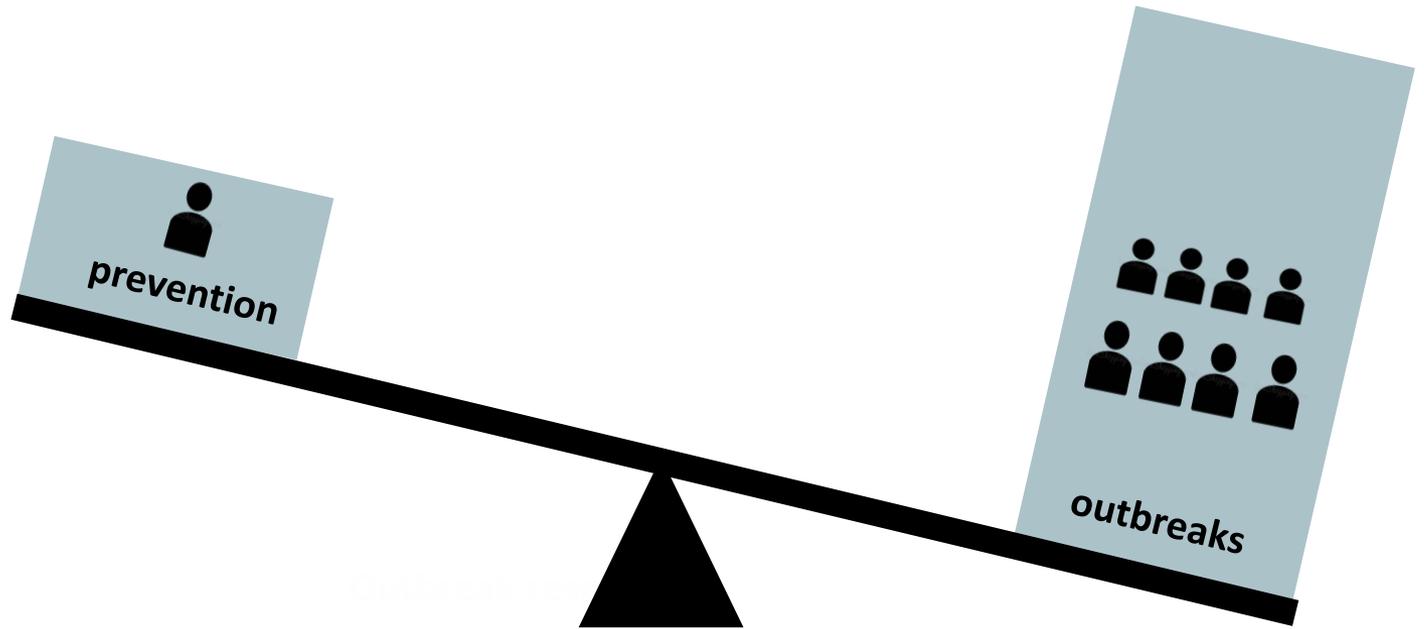
State's FPHS model
accounts for the
capacity shown in
yellow brackets.

Prevention and outbreak response



Ideally, Prevention Division focuses on prevention activities (e.g. promoting immunizations, infection control training). The more outbreaks there are, the fewer prevention activities can occur.

Current situation



Health | Local News

4th patient infected with Legionella bacteria in growing outbreak at UW Medical Center

Originally published September 16, 2016 at 12:54 pm | Updated September 16, 2016 at 7:50 pm



REPLAY: Q13 NEWS THIS MORNING Q13 FOX TV SCHEDULE SEARCH

Q13 FOX WE ARE 12 NEWS THIS MORNING SPORTS TRAFFIC WASHINGTON'S MOST WANTED PICK MY PET MORE - WEATHER 67°

Case of Legionella confirmed at Bellevue hospital; new case reported at UW

POSTED 3:54 PM, SEPTEMBER 26, 2016. BY Q13 NEWS STAFF. UPDATED AT 04:41PM, SEPTEMBER 26, 2016

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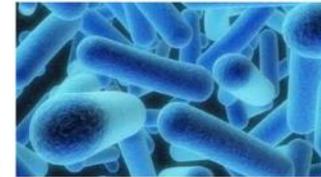
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Woman says dental office may have given her Hepatitis C

Updated: Sep 14, 2016 - 10:37 AM

VIDEO: Woman may have contracted HEPATITIS EXPOSURE

EVERETT NOON MOSTLY SUNNY 67° BOTHELL TO BELLEVUE: 11 MINS, AVERAGE #wakeupwithus



Victorian-era diseases making comeback

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INFECTIOUS DISEASE

At least 650 dialysis patients at Seattle hospital possibly exposed to hepatitis B

Published June 18, 2015

SEATTLE – A Seattle hospital has been exposed to hepatitis B, but the Virginia Mason health officials said.

Virginia Mason notified consistently screened Centers for Disease

U.S. News & WORLD REPORT News

HOME OPINION PHOTOS VIDEO BEST COUNTRIES THE REPORT

NEWS / NEWS

Seattle Hospital May Have Exposed 1,300 Patients to Hepatitis B and C, HIV

Investigators say the perpetrator is a drug addict

By Rachel Dicker | Associate Editor, Social Media

Q13 FOX WE ARE 12

NEWS THIS MORNING SPORTS TRAFFIC WASHINGTON'S MOST WANTED PICK MY PET ON-AIR EVENTS WEATHER 66°

Seattle Children's says former surgical patients at Bellevue Clinic may need hepatitis, HIV tests

POSTED 3:29 PM, AUGUST 26, 2015, BY Q13 FOX NEWS STAFF, ASSOCIATED PRESS AND JAMIE TOMPKINS

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This is an archived article and the information in the article may be outdated. Please look at the time stamp on the story to see when it was last updated.



CBS NEWS | January 22, 2015, 12:29 PM

Deadly superbug infected patients at Seattle hospital



Seattle health officials say a special type of endoscope, known as a duodenoscope, harbored an antibiotic-resistant bacteria that sickened dozens of patients at Virginia Mason Medical Center. / KIRO-TV

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Last Updated Jan 22, 2015 2:22 PM EST

At least 35 patients fell ill and 11 died after contracting a **superbug infection** at a hospital in Seattle, Washington, according to a new report. **The Seattle Times reports** that dozens of patients at Virginia Mason Medical Center were infected with a **drug-resistant bacteria** known as carbapenem-resistant Enterobacteriaceae (CRE) between 2012 and 2014, a result of contact with contaminated endoscopes.

The Seattle Times

Health | Local News

'Superbug' outbreak sparks changes at region's hospitals

Originally published March 8, 2015 at 7:52 pm | Updated March 9, 2015 at 11:04 am

A "superbug" outbreak at Virginia Mason, tied to bacteria in medical scopes, has pushed other Seattle hospitals, including Swedish Medical Center, to ramp up surveillance and safety procedures.

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By JoNel Aleccia

Seattle Times health reporter

An outbreak of drug-resistant "superbug" infections may have sent officials at Virginia Mason Medical Center

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Los Angeles Times

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Olympus to recall and redesign medical scope linked to superbug outbreaks

An Olympus duodenoscope is cleaned at Los Angeles County/USC Medical Center on Nov. 9, 2015. (Robert Gauthier / Los Angeles)

In Case You Missed It

California wildfires scorch parched hillsides and destroy one home in sweltering heat

Healthcare-Associated Infections & Outbreaks

Roles of Relevant Agencies

- DOH: Health Systems and Quality Assurance
 - Conduct State licensure and Medicare re-certification surveys and investigations as contracted agency for CMS
- Healthcare Accreditation Agencies
- Public Health – Seattle & King County (Local Health Officer)
 - WAC 246-100-036: ...shall, when necessary, conduct investigations and institute disease control and contamination control measures...
 - RCW 70.05.070: Control and prevent the spread of any dangerous, contagious or infectious diseases that may occur within his or her jurisdiction

One person diagnosed with TB at Seattle homeless shelter

POSTED 5:21 PM, SEPTEMBER 26, 2016, BY Q13 NEWS STAFF



SEATTLE – Health officials said one person at a Seattle homeless shelter has been diagnosed with tuberculosis.

Seattle & King County Public Health said the person is receiving treatment and is not at risk for infecting anybody else. Residents at the Downtown Center will be tested for



Health | Local News

2 at Mount Rainier High diagnosed with tuberculosis

Originally published April 4, 2015 at 12:45 pm | Updated April 4, 2015 at 12:49 pm

By Paige Cornwell

Seattle Times staff reporter

Share story

King County public health officials are recommending that all students and staff at Mount Rainier High School in Des Moines be tested for tuberculosis after two people at the school were diagnosed with the disease earlier this year.

One person was diagnosed with active TB in January and another in late March, according to Public Health — Seattle & King County. Both people are being treated for the infectious disease.

The two were exposed to TB in two unrelated instances outside the United States, said Dr. Masa Narita, tuberculosis-control officer for the health department.

Health | Local News | Northwest | Puget Sound

140 cancer patients in Seattle area warned of TB risk from health worker

Originally published August 16, 2016 at 11:40 am | Updated August 16, 2016 at 3:43 pm



A representation of the bacteria that causes tuberculosis in humans. A local health-care worker has tested positive for the disease, prompting a warning to some 140. (Photo courtesy of the National Institute of Allergy and Infectious Diseases, NIAID) More

Screening for Latent Tuberculosis Infection in Adults US Preventive Services Task Force Recommendation Statement

US Preventive Services Task Force

- Latent TB infection (LTBI) is a condition in which a person carries the TB bacteria, but does not have active TB disease and cannot spread it to others.
- However, if these bacteria become active and multiply, LTBI can turn into TB disease.
- The new USPSTF recommendation aligns with CDC recommendations to provide targeted LTBI testing for:
 - People who were born in or frequently travel to countries with high TB prevalence
 - People who have lived in large group settings, such as homeless shelters and correctional facilities

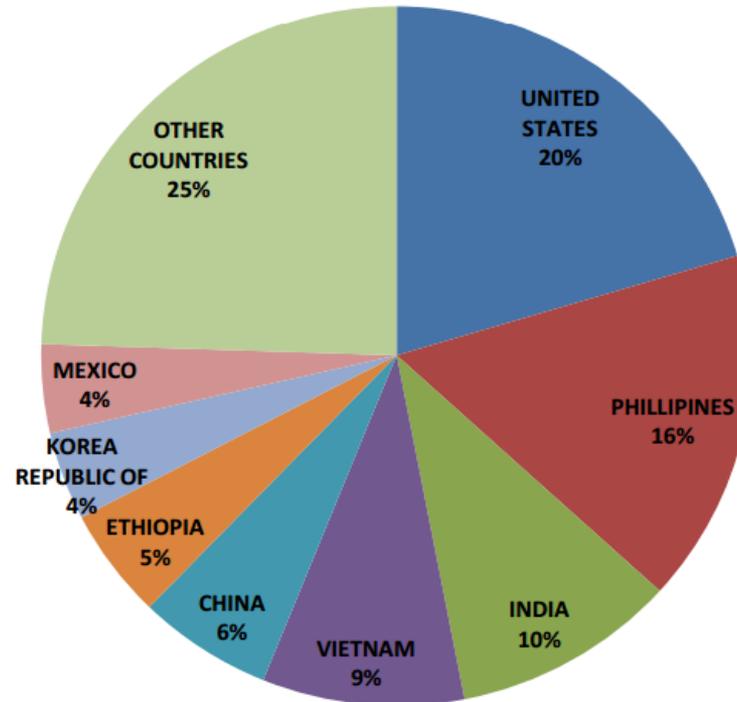
The US Preventive Services Task Force (USPSTF) makes recommendations about the effectiveness of specific preventive care services for patients without obvious related signs or symptoms.

It bases its recommendations on the evidence of both the benefits and harms of the service and an assessment of the balance. The USPSTF does not consider the costs of providing a service in this assessment.

The USPSTF recognizes that clinical decisions involve more considerations than evidence alone. Clinicians should understand the evidence but individualize decision making to the specific patient

and situation. Finally, the USPSTF notes that clinical decisions are not based on perfect, and latent infection (LTBI), which is asymptomatic and not infectious but can later reactivate and progress to active disease. The precise prevalence rate of LTBI in the United States is difficult to determine; however, based on 2011-2012 National Health and Nutrition Examination Survey data, estimated prevalence is 4.7% to 5.0%.¹ Tuberculosis is spread through respiratory transmission. Approximately 30% of persons exposed to *Mycobacterium tuberculosis* will develop LTBI and, if untreated, approximately 5% to 10% of these persons will progress to active tuberculosis disease or reactivation of tuberculosis.²⁻⁶ Rates of progression may be higher in persons with

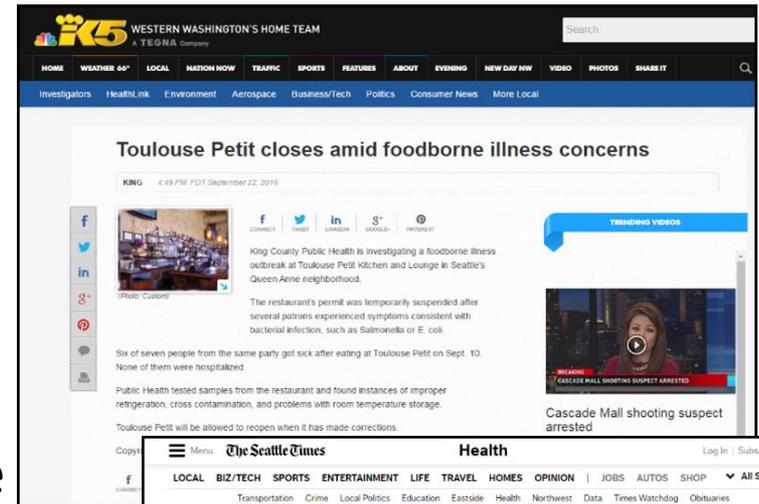
Proportion of TB cases by country of origin, 2015, King County, WA



- 78 (80%) of 98 King County cases in 2015 were born outside the US.
 - These individuals were born in 27 countries.
 - More than half of cases born outside the US came from five countries: China, India, Ethiopia, Philippines, and Vietnam.
 - The rate of TB among persons born outside the US (17.5 per 100,000) is 15 times the rate of TB in US born individuals (1.2 per 100,000).

Other Concurrent Work (Through 27 September)

- 117 enteric disease cases reported
 - Five foodborne illness outbreak investigations
 - 56 foodborne illness complaints
- 23 persons recommended to receive rabies preventive treatment after animal bites/exposures
- 88 requests for Zika testing
- Influenza cluster investigations
- 12 pertussis cases





You heard it here first: Changing our food borne illness public notification process

Hilary N. Karasz / November 13, 2015

Since June, we've written in this space about a spate of food borne illness outbreaks that have kept all hands on deck here at Public Health – Seattle & King County and at times across the state – the [salmonella outbreak](#) connected to pork from Kapowsin's slaughterhouse, the *E. coli* O157 outbreak linked to [food trucks and farmers markets](#), and the [current multi-state outbreak of E. coli O26](#), associated with Chipotle restaurants.



Our epidemiologists (disease detectives), food safety experts, public health nurses, investigators and other staff work to identify and stop disease outbreaks before they become widespread. Nonetheless, large outbreaks inevitably occur and gobble up even more resources and time to investigate and respond to. But the outbreaks you've read and heard about in the media are just a few of the infectious disease issues that we have been grappling with this summer.

In fact, in a typical week, we receive reports of other enteric (intestinal) illnesses including campylobacteriosis, salmonellosis, shigellosis, and norovirus. At the time of this posting, we're investigating reports of mumps, pertussis, tularemia, varicella, and suspected rabies exposures. We're continuing to monitor returning travelers from countries impacted by Ebola and have had several returning healthcare workers evaluated for Ebola infection (none have had it). And we're in the early phases of our annual

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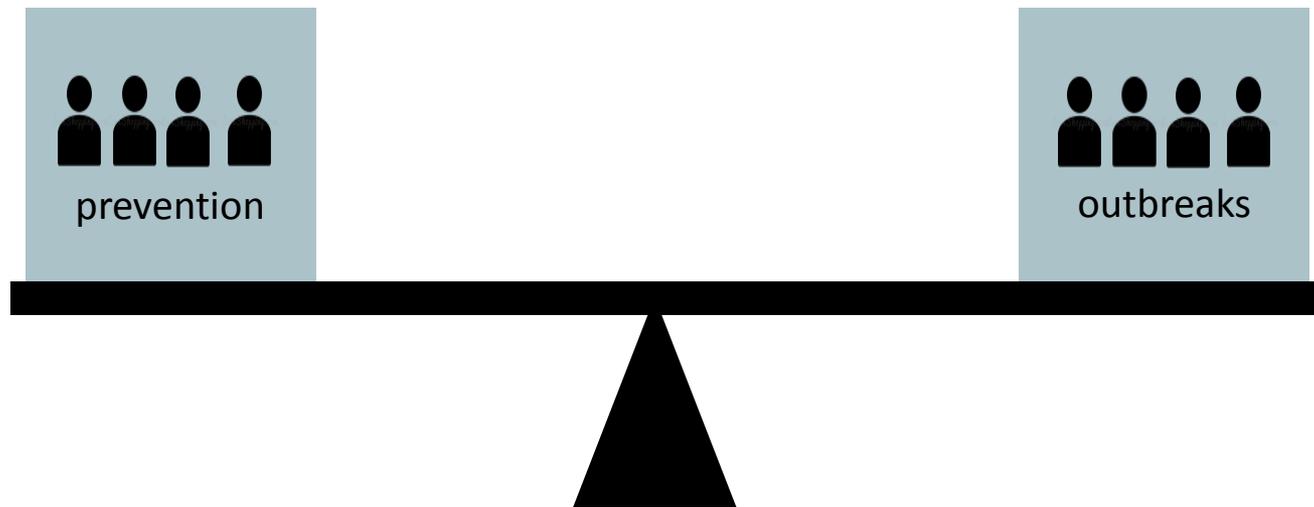
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Prevention vs. outbreak response



Ideally, Prevention Division focuses on prevention activities (e.g. promoting immunizations, infection control training). The more outbreaks there are, the fewer prevention activities can occur.

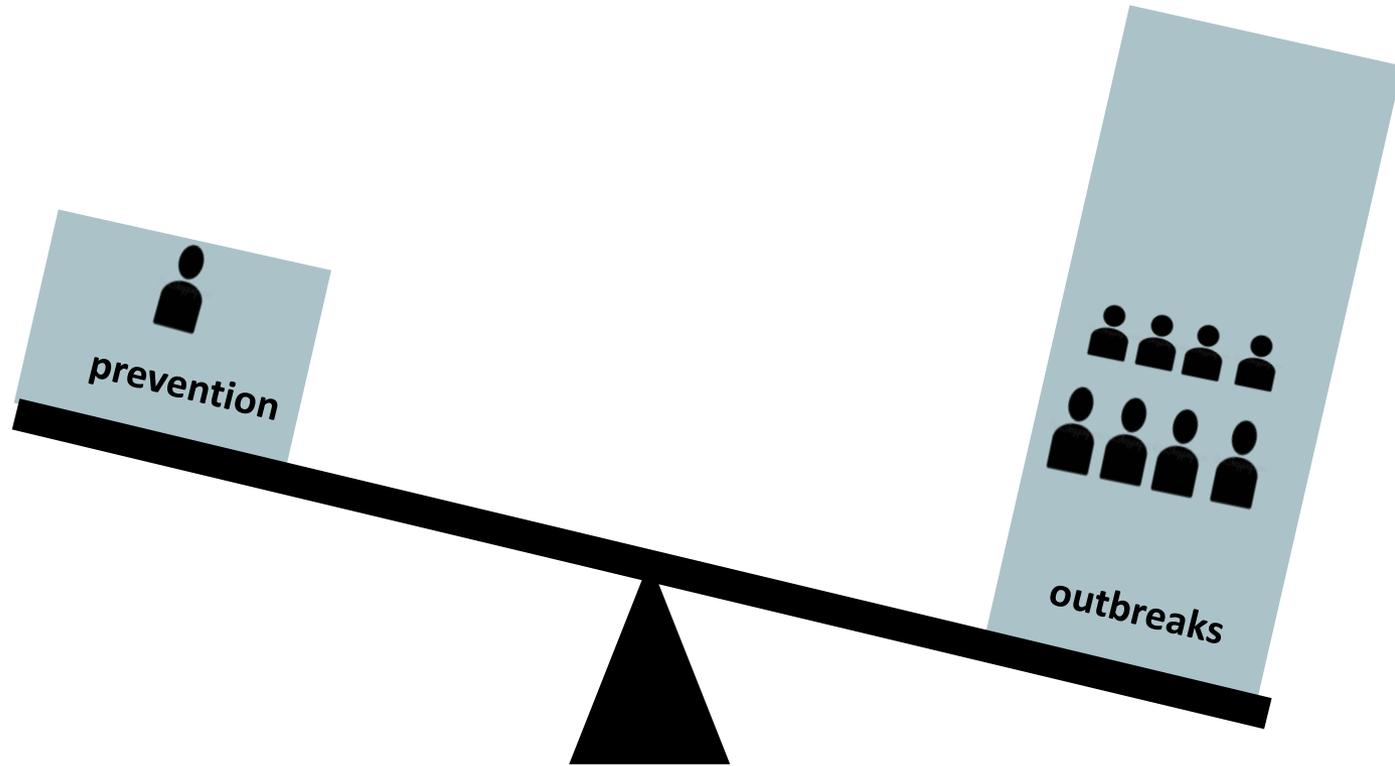
Inadequate or no prevention activities

Examples of preventable infectious diseases in which we have inadequate investments:

- Adult immunizations
- Latent TB
- Sex partners of people with certain STDs
- Comprehensive pertussis outreach
- Limited Perinatal Hep B prevention
- Hepatitis C (when grant expires)



Managing these outbreaks



Impacts of surge events on cross-cutting services

Preparedness:

- You should expect your Public Health Preparedness unit to deploy health-related emergency response activities and resources in an efficient, effective coordinated manner.
- No local dollars or general funds currently support the Public Health Preparedness program or positions.
- Outbreaks like these cause delays in work aimed at preparing us for a major catastrophe.

Impacts of surge events on cross-cutting services

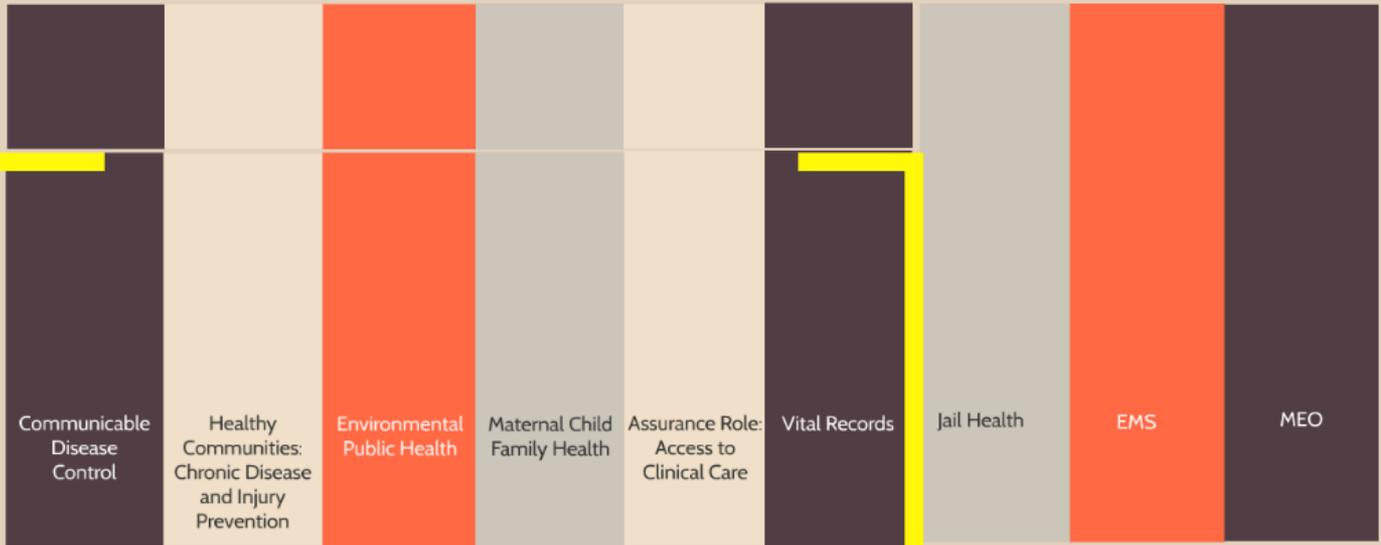
Public Information/Communications:

- You should expect the unit to:
 - Respond to media, develop health messages
 - Conduct crisis and risk communications
 - Plan and create communications strategies
 - Assure employees are well informed
 - Use digital media (including web sites, social media, texting)
 - Engage communities and different audiences
- Communications is overwhelmed, creating delays in working with programs and communities on important efforts such as BSK and COO

Short term needs

- We expect Public Health to spend up to \$200,000 (mainly in OT, extra staff, and other associated costs of managing this outbreak
 - This will be needed to be added to the PH debt
- Hospital Associated Infections – additional expertise needed
 - 1 FTE staff requested

Metro Foundational Public Health Services



State's FPHS model accounts for the capacity shown in yellow brackets.

Questions?