



THE PREPAREDNESS REPORT

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DSHS REGIONAL STAFF SHOW OFF NEW RESPONSE VESTS

The DSHS Community Preparedness Program issued new response vests to Regional employees in March. All Region 2/3 office staff, including the field offices received these new vests for use in preparedness response activities.

Pictured Left: Fred Grimes shows off the back of the vests. Pictured Right: Sherri Colombo exudes excitement over the new clothing as she demonstrates how to wear the vest properly.



SHIGELLA OUTBREAK IN PARKER COUNTY

Kay Sanyal, MPH

On January 28, 2013 epidemiologists with Texas Department of State Health Services (DSHS) in Region 2/3 investigated an outbreak of *Shigella sonnei* in 41 people associated with an elementary school in Parker County. Shigellosis is a gastrointestinal illness (GI) that affects the intestinal area characterized by symptoms of diarrhea (possibly bloody), vomiting, nausea, headaches, and fever. The incubation period for shigellosis is 1-3 days and the duration of symptoms is 4-7 days. Shigella can spread easily through person to person contact, ingestion of contaminated food and drink, contact with contaminated inanimate objects, and contact via sexual activity (Heyman, 2008).

Epidemiologists initiated an investigation on a 10 year old male from Parker County with a positive stool culture for shigella. The child's onset was January 23rd with symptoms of bloody diarrhea, vomiting, abdominal cramps, and fever. The confirmed case had two brothers who were also symptomatic and attended the same elementary school. On January 30, 2013, another confirmed case of a 7 year old female with an onset of 1/8/2013, was reported by the school nurse. Upon contact with the nurse, the DSHS epidemiologist discovered that the nurse, her family, and other students were also symptomatic with GI illness. The elementary school has a student population of 561 and approximately 60 staff members. The lead epidemiologist requested a line listing of all symptomatic students and/or staff from the nurse for further investigation. The lead epidemiologist also informed the city sanitarian of the situation at the elementary school. The sanitarian completed an inspection of the school cafeteria and found nothing of significance. The food handling methods of kitchen staff were observed and the sanitarian found all proper procedures were being followed.

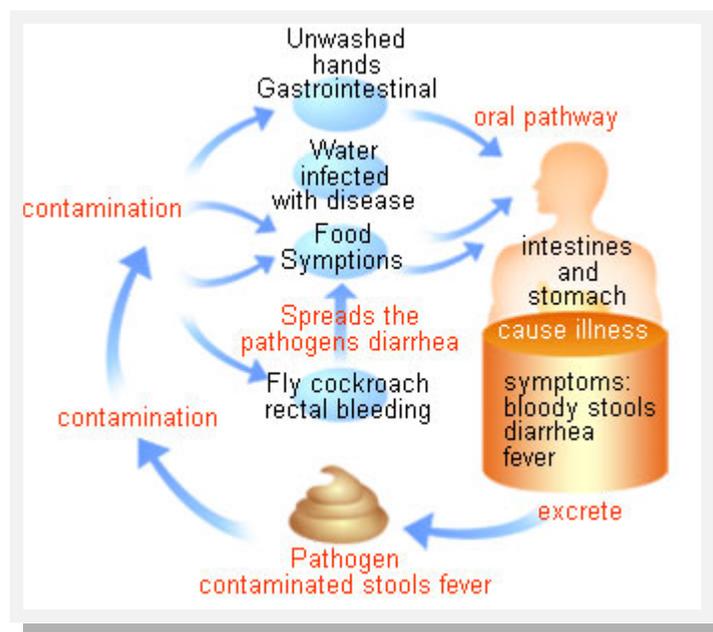


IMAGE COURTESY OF: <http://knowledgecloset.com/2010/05/19/what-is-shigella/>

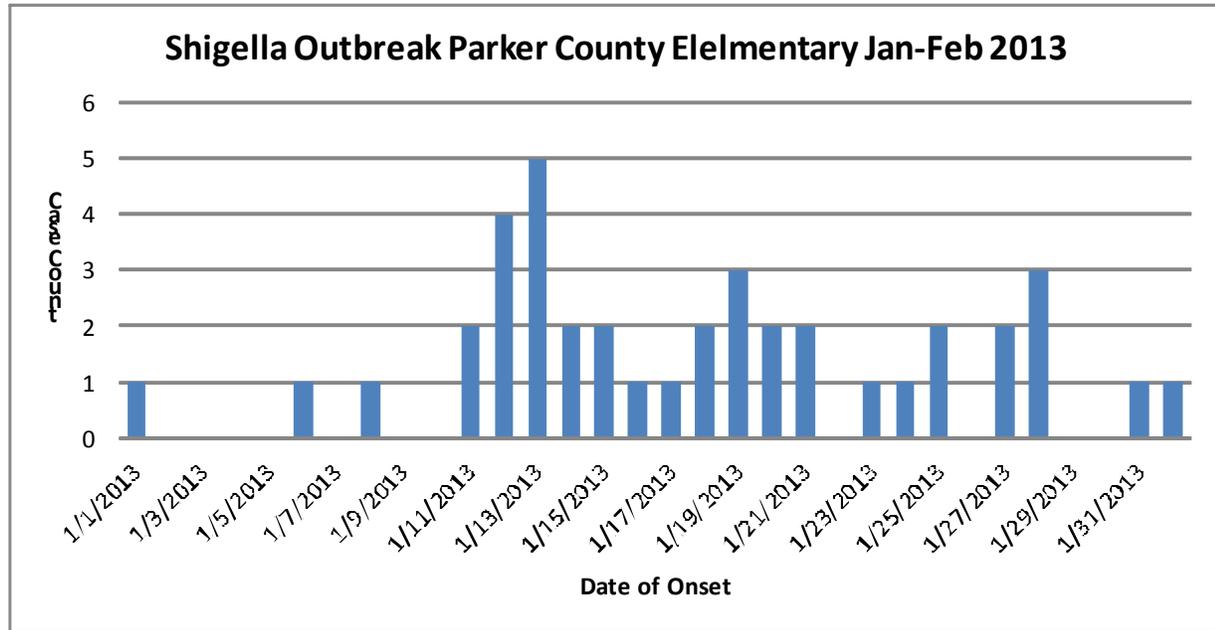
Investigators from Region 2/3 contacted the parents of all symptomatic children using a standard questionnaire for enteric diseases. Epidemiologists identified 3 confirmed cases of *Shigella sonnei* in students attending the elementary school and 38 probable cases among students, staff, and households. Of the 38 probable cases identified in this outbreak, 24 cases were students, 1 was staff, and 13 were secondary cases. The ages ranged from 1 to 54 years (median = 15). The attack rate for students at the school was 4.8%. Epidemiological investigation conducted by Region 2/3 did not identify the source of the infection.

SHIGELLA OUTBREAK IN PARKER COUNTY

Kay Sanyal, MPH

The epidemic curve shown in Figure 1 demonstrates person-to-person transmission of Shigella. The curve shows the onset of illness against number of cases.

Figure 1



Recommended control measures include classroom instruction on proper hand washing technique for the entire student body. Educational materials on hand washing and Shigella were provided to parents of students as well as the school staff. Classrooms, common areas, and restrooms were all thoroughly cleaned by janitorial staff. Investigators informed the school nurse of the recommended 48 hour exclusion criteria (without aid of anti-diarrheal medication) for symptomatic children and staff sick with GI illness.

Sources:

Heymann, L. David. 2008. Control of Communicable Disease Manual. American Public Health Association. Washington D.C., pgs. 556-560

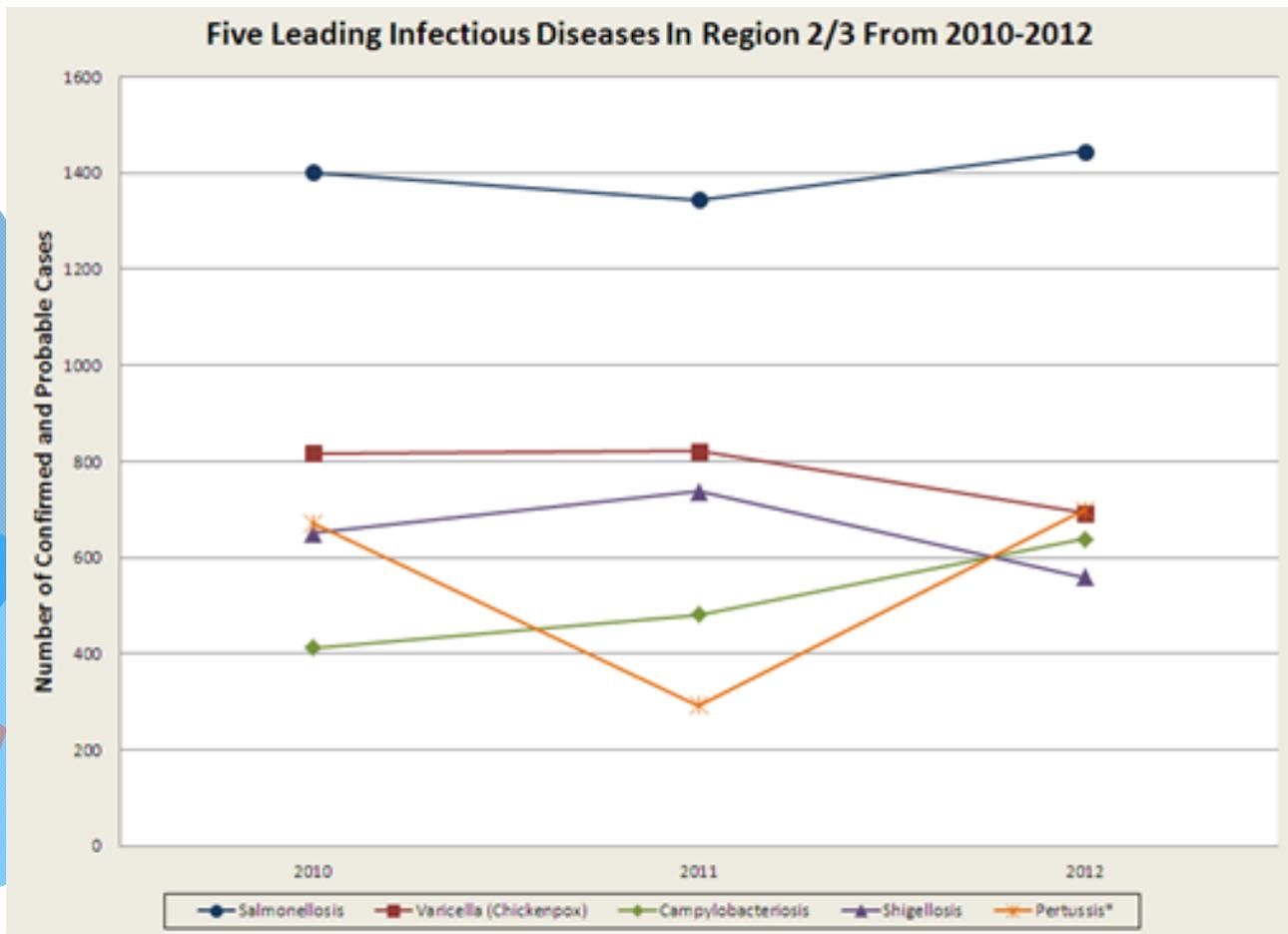
Top 5 Diseases in Region 2/3 from 2010-2012

Kristen Tolbert

The following data is reflective of confirmed and probable cases (excluding zoonotic diseases) for all of Region 2/3's counties (including local health department's jurisdictions) taken from the National Electronic Disease Surveillance System (NEDSS).

TOP 5 DISEASES CIRCULATING IN REGION 2/3 FROM 2010-2012			
CONDITION	2010	2011	2012
Salmonellosis	1401	1345	1445
Varicella (Chickenpox)	817	821	692
Shigellosis	651	738	559
Pertussis*	672	292	698
Campylobacteriosis	412	481	639

**In 2010 DSHS implemented new guidelines to discontinue follow up on negative pertussis lab PCRs. This change is reflected in the 2011 data.*



Health care-Associated Infections

Marcelle Breaux, RN

Patients may develop health care-associated infections (HAI) caused by a variety of bacteria, fungi, and viruses during the course of receiving treatment for another condition. HAIs can be acquired following treatment in hospitals, outpatient surgery centers, dialysis centers, long-term care facilities, or anywhere health care is delivered (TDSHS, 2013). Several risk factors can increase the chances of contracting an HAI such as the use of medical devices, surgery, environmental contamination, the overuse of antibiotics, or the failure of health care personnel to follow infection prevention precautions (CDC, 2010).

HAIs are the most common complication of hospital care and are a significant cause of morbidity and mortality. Though largely preventable, they are among the top ten leading causes of death in the United States. According to the CDC, approximately 1 in every 20 hospitalized patients will develop an HAI, resulting in 1.7 million HAIs and nearly 100,000 deaths per year (CDC, 2010). In addition to the disease threat HAIs place on patients, they impose financial burdens on those affected and the national health care system (Scott, 2009).

Many initiatives have been created to prevent HAIs. One such initiative is targeted HAI surveillance. This type of surveillance is being implemented at both the national and state level, including Texas. The reporting of hospital HAI rates can be utilized to monitor hospital quality of care and provide transparency to patients. The data can serve as a benchmark for facilities to monitor progress of HAI prevention and identify areas of concern.

In 2007, mandatory HAI reporting laws were created in Texas with the passing of the Texas Health and Safety Code, Chapter 98 and of the Texas Administrative Code, Title 25, Chapter 200. The facilities required to report include general hospitals licensed under Chapter 241 and ambulatory surgical centers licensed under Chapter 243 of the Texas Health and Safety Code.

Beginning in October of 2011, the HAIs to be reported were phased in and include central line-associated bloodstream infections (CLABSIs) in intensive care units (ICU) and specific surgical site infections (SSIs). The reporting of catheter-associated urinary tract infections (CAUTI) will be required beginning in July 2013 (TDSHS, 2013).

HAIs in Texas are reported using the CDC's National Healthcare Safety Network (NHSN). NHSN provides secure HAI tracking and allows facilities to comply with requirements from both the state and the Centers for Medicare and Medicaid. Reporting facilities must follow the guidelines and definitions provided by NHSN in order to accurately report their data (CDC, 2013).

After data are entered into NHSN, the Department of State Health Services (DSHS) downloads the HAI data and imports it into the Texas Health care Safety Network (TxHSN). TxHSN is an online database that allows Texas to track the reporting status of health care facilities and enables DSHS to create facility-specific HAI reports. The HAI Data Display Reports that are generated by TxHSN are biannually published on a public website that can be accessed at www.haitexas.org using the "Data" link. From here, consumers can search for facility-specific HAI reports to determine the HAI incidence of specific institutions.

DSHS provides HAI reporting information at www.haitexas.org and questions can be emailed to haitexas@dshs.texas.gov. Questions about NHSN can be found online at <http://www.cdc.gov/nhsn/>.

References

Centers for Disease Control and Prevention. (December, 2010). Health-care associated infections. Retrieved from <http://www.cdc.gov/HAI/burden.html>

Centers for Disease Control and Prevention. (February, 2013). National healthcare safety network. Retrieved from <http://www.cdc.gov/nhsn/about.html>

Scott, D. (2009). The direct medical costs of health-care associated infections in U.S. hospitals and the benefits of prevention. Retrieved from http://www.cdc.gov/HAI/pdfs/hai/Scott_CostPaper.pdf

Texas Department of State Health Services. (March, 2013). Health-care associated infections. Retrieved from: http://www.dshs.state.tx.us/idcu/health/infection_control/HAI/



TECHNICAL ASSISTANCE REVIEW (TAR) RECAP

Matt Honza

In February, the Region 2/3 Cities Readiness Initiative (CRI) counties and local health departments completed their Technical Assistance Reviews (TAR). As a whole, the scores were extremely high with an average score of 98. The high scores are a true reflection of the hard work by our partners to make sure our counties are prepared to respond to various events. Even though our scores were exceptional, we found some areas that need improvement. With the help of John Pettitt, our Strategic National Stockpile (SNS) security liaison, we found our POD (points of dispensing) site security plans were missing components that need to be added to make our plans more thorough. He suggested the jurisdictions coordinate with their law enforcement officers to establish traffic control patterns and have those patterns added to the maps in the security plans. Mr. Pettitt also mentioned the need for the inclusion of short, concise narratives to the security plans describing the area security and traffic control plan, parking plan, crowd control plan and the site evacuation plan. His goal was to have someone unfamiliar with the plans to review them on the spot and execute the plan to effectively and efficiently run the POD. The feedback was invaluable, as this was the first year the SNS security liaison was included in the general TAR meetings. We look forward to maintaining high level performance and continuous improvement across the Region.

UPCOMING TRAININGS & EVENTS

- SAF-T-PAK TRAINING4/18/13
DSHS REGION 2/3 ARLINGTON OFFICE
- CASPER WORKSHOP5/1/13
DSHS REGION 2/3 ARLINGTON OFFICE
- PUBLIC HEALTH RISK-BASED FUNDING WORKSHOP.....5/22/13
BOB DUNCAN CENTER, ARLINGTON
Registration link: <http://www.surveymonkey.com/s/9M7VXHB>
- CRI/SNS TABLETOP EXERCISE.....5/29/13
OSHA TRAINING CENTER, MESQUITE
- REGIONAL OPERATIONS CENTER EXERCISE.....6/13/13
DSHS REGION 2/3 ARLINGTON OFFICE

WANT TO READ MORE OF OUR REPORTS?

All DSHS REGION 2/3 Newsletter Editions, Epi Data Reports, & VPD Reports can be found here: <http://www.dshs.state.tx.us/Region2-3/programs/commprep/epirptarchive.shtm>

UPCOMING REGIONAL ACTIVITIES

May 22, 2013

DSHS Health Service Region 2/3 will be hosting a Public Health Risk-Based Funding Workshop. The goals of the workshop will be to increase community preparedness partnerships and to identify county/Regional mitigation strategies. Participants will discuss the top 10 Regional hazards identified by the TxPHRAT, mitigation strategies to begin to address the identified resource needs, and strengthen capabilities to respond to these hazards.

Target Audience: Emergency management, hospital systems, local health departments, local municipalities and community organizations. For additional information please contact: Michael Felan at: Michael.felan@dshs.state.tx.us

May 29, 2013

DSHS Health Service Region 2/3 will be hosting a Strategic National Stockpile Regional Tabletop exercise that will focus on an infectious disease outbreak and will engage participants to discuss the following objectives:

- Implementation of control measures during a public health emergency
- Sharing of epidemiological data between disciplines
- Activation of MOCs / EOCs and triggers for resource requests
- Integration of public information plans during a public health emergency
- Distribution and security strategies for medical countermeasures

Target Audience: Emergency management, hospital systems, local health departments, local municipalities and community organizations. For additional information please contact: Brenda Hart at: Brenda.hart@dshs.state.tx.us

June 13, 2013

DSHS Health Service Region 2/3 will conduct a Regional Operations Center (ROC) tabletop exercise with Regional staff assigned to lead positions in the ROC. Objectives for this exercise include: engaging participants to discuss working with external partners to analyze data, assess emergency conditions and determine the activation levels based on the complexity of the incident, development of an Incident Action Plan (IAP) and responsibilities of public health response staff, implementation of the IAP, determination of the need for additional training, and discussion of flexibility and scalability of the current organizational structure.

Target Audience: Regional staff assigned to specific responsibilities within the ROC. For additional information please contact: Brenda Hart at Brenda.hart@dshs.state.tx.us



RISK: Use and Application of the Texas Public Health Risk Assessment Tool

Michael Felan

Public health threats are always present. Whether caused by natural, unintentional, or intentional means, these threats can rapidly overwhelm routine public health, behavioral/mental health and medical care systems. The H1N1 influenza pandemic underscored the importance of communities being prepared for public health threats. Although large responses may get the headlines we must always be vigilant as we address day to day issues such as food-borne outbreaks, seasonal flu, pertussis, TB, measles, weather events, etc.

Prepared, capable, and resilient public health systems and communities are the cornerstone of an effective response during any public health emergency. The Centers for Disease Control (CDC) defined a set of public health preparedness capabilities to assist communities with their strategic planning. The very first capability asks jurisdictions to identify the potential hazards, vulnerabilities, and risks to the community that may impact or interrupt the public health, medical, and mental/behavioral health systems. Texas developed the Texas Public Health Risk Assessment Tool (TxPHRAT) is a collaborative development involving local, Regional, and state partners and was developed to provide a way to assess public health risk at the county level. The tool includes:

- The human and systemic impacts to public health, healthcare, and mental health;
- Measures the positive effect of mitigation measures; and,
- Is informed by science and as objective in its measurements as possible.

The use and application of this tool has helped identify the top hazards for counties. The top 5 hazards identified for Region 2/3 include:

1. Pandemic Influenza;
2. Wildfire;
3. Mass Population Surge;
4. Biological Disease Outbreak and
5. Hazardous Materials Incident (Fixed Facility)

The top 5 Public Health capability gaps for Health Service Region 2/3 are:

1. Public Health Capability #1. Community Preparedness;
2. Public Health Capability #10. Medical Surge;
3. Public Health Capability #15. Volunteer Management;
4. Public Health Capability #9. Medical Materiel Management & Distribution; and
5. Public Health Capability #12. Public Health Laboratory Testing

Next Steps:

Region 2/3 staff will continue to meet with local community partners to review the County Profiles and Intervention Strategies and Activities.

Region 2/3 will be hosting a conference on May 22nd highlighting the county profiles, mitigation planning, intervention strategies and activities as well as looking at next steps.

An after action review (AAR) is being conducted with 12 counties with and without local health departments in Region 2/3 to identify areas of process improvement. The AAR will benefit the Team that is currently preparing the next version of the TxPHRAT.

For additional information please go to: <http://www.dshs.state.tx.us/commprep/phep/program.aspx> or contact Michael Felan at Michael.felan@dshs.state.tx.us



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