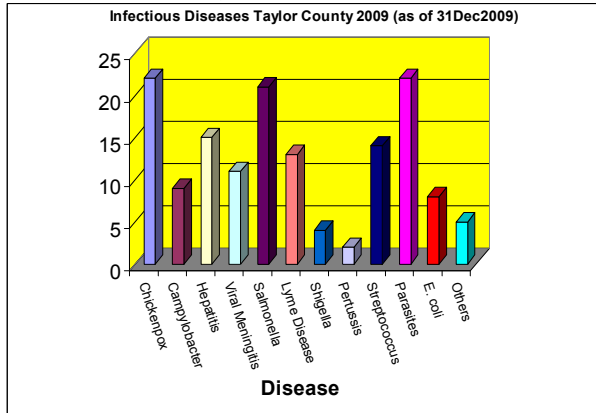


Infectious Diseases

The diseases we report include all of the notifiable conditions. The complete listing of notifiable conditions is located on our city website:

http://www.abilenetx.com/Health/documents/NotifiableConditionsexpJan2011_000.pdf

The graph below depicts data collected from infectious disease reports showing which diseases were reported and how many times during the year.



Disease Surveillance & Reporting

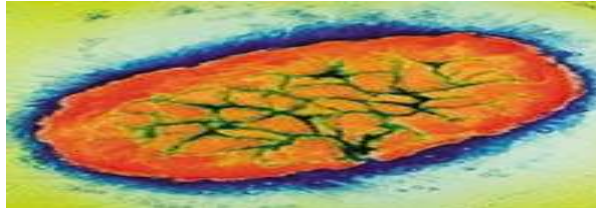
Public health surveillance involves systematic collection, analysis, and dissemination of data regarding adverse health conditions. Surveillance involves investigating individual cases as well as epidemics. Only residents of Taylor County are counted in our surveillance.

In public health surveillance data are used to monitor disease trends; detect, respond to, and study new disease threats, outbreaks, or epidemics; identify risk factors; and plan, implement, and assess intervention and prevention services.

Most case reports must include the patient's name, date of birth, sex, race/ethnicity, city of residence, date of onset, physician's name, and method of diagnosis. Surveillance data are obtained from laboratory reports and case investigation forms. Social and demographic information is collected to determine patterns of disease in the population, identify case contacts, and target control measures. Reports should be given to the local public health department.

Surveillance is subject to limitations which affect many data collections systems. Underreporting is an ubiquitous problem, but its extent differs among diseases.

Pertussis



Pertussis, or whooping cough, is a highly transmissible disease that lasts for many weeks. It is caused by the gram-negative coccobacillus *Bordetella pertussis*, as depicted above.

The disease is highly contagious and is spread by inhaling airborne droplets. After exposure to an index case, 90% of susceptible household contacts will acquire the disease.

Pertussis has an incubation period of 5-10 days before symptoms begin to appear. However, as many as 21 days have been noted before the onset of symptoms. Symptoms typically include spastic bouts of severe coughing, whooping, slight fever, diarrhea, and sometimes choking and vomiting.

Whooping cough can be diagnosed by clinical symptoms. In cases where no or mild symptoms occur, a nasal swab can be used for laboratory diagnosis. The lab will conduct a PCR test on the swab for positive identification of the disease-causing bacterium.

A vaccine, DTaP, was developed to reduce susceptibility and prevent the spread of disease and deaths caused by this bacterium. Young children that have not been fully vaccinated are most at risk. As we age our immunity may wear off and a booster, Tdap, can be given to adolescents and adults.

For individuals that have contracted the disease, early detection is vital in eliminating the symptoms quickly. Erythromycin and amoxicillin are the drugs of choice. Fluids can be given intravenously to prevent dehydration and sedatives allow the patient to sleep better. If diagnosis occurs late in the disease's progression antibiotics will not ease symptoms but will reduce the spread of the disease to others. Cough suppressants should not be used.

Typically 5,000 - 7,000 cases are reported in the U.S. each year and the numbers are consistently rising. In 2007 10,454 cases were reported. Unfortunately the United States experiences epidemics every 3 to 5 years. The most recent occurred in 2005 with 25,616 reported cases.

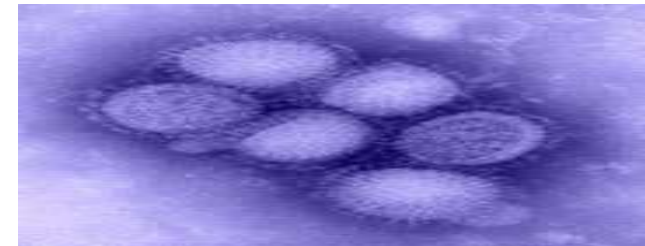
http://www.cdc.gov/ncidod/dbmd/diseaseinfo/pertussis_t.htm

www.pertussis.com

Abilene-Taylor County Public Health District Epidemiology Report



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INFLUENZA !!

Abilene-Taylor County Public Health District
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Abilene, Texas 79604-2818

Check our websites for public health, epidemiology,
and preparedness information:

www.abilenepublichealth.org
www.abilenetx.com/Health/epidemiology.htm

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Statewide Number for Reporting Infectious
Diseases:
800-705-8868

Influenza surveillance is vital for educating our communities, preparing them for future health emergency situations, and for early detection of the virus's presence in the area. Flu cases are confirmed by rapid test, culture, PCR, or antigen detection.

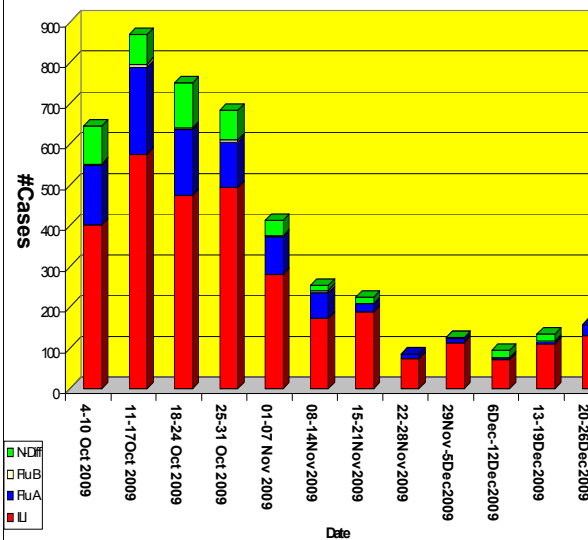
Our influenza sentinels represent a cross section of our medical community. Sentinels submit their statistics weekly from October through May. Please contact us if you wish to become a flu sentinel.

We record and report Influenza-Like Illness (ILI), Flu A, Flu B, and Non-Differentiated (ND) Flu in the area. ILI is defined as fever >100°F with cough and/or sore throat. ND is the designation given when a patient rapid tests positive for the flu but type A or B cannot be determined.

The graph represents the second wave of the H1N1 flu which started in late September. The first wave was in the Spring of 2009. A third wave is possible at any time.

ILI	Flu A	Flu B	ND
3084	867	28	453

Total (Seasonal/H1N1) Flu Activity By Week (31 Dec 2009)



UPCOMING EVENTS

January

- National Blood Donor Month

February

- National Children's Dental Health Month

March

- National Colorectal Cancer Awareness Month

"**Making the Case for Case Investigation and Response**" is a one day course taught by DSHS Arlington for those responsible for reporting disease, surveillance, and investigation. It also covers disease control, bioterrorism and case studies. If you are interested in such a course, let us know.

FLU SYMPTOMS

- fever*
- cough
- sore throat
- runny/stuffy nose
- body aches
- headache
- chills
- fatigue
- diarrhea
- vomiting

*It's important to note that not everyone with flu will have fever.

www.cdc.gov/flu/

SMART - MRC

The mission of the Medical Reserve Corps (MRC) is to improve the health and safety of communities across the country by organizing and utilizing volunteers.

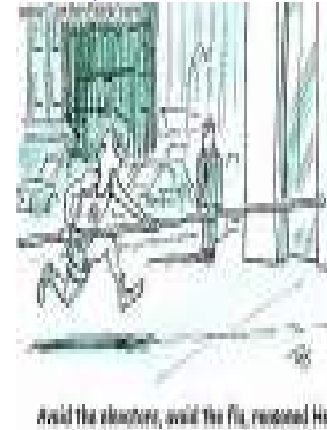
The Support and Medical Alert Response Team (SMART is the local MRC and participates in community awareness activities such as mass prophylaxis, vaccination clinics, and emergency scenarios as needed.

SMART - MRC volunteers include medical and public health professionals such as physicians, nurses, pharmacists, dentists, veterinarians, and epidemiologists. Community members, non-health professionals, can fill key support positions as well.

If you are interested in volunteering for your local SMART - MRC unit please contact us for an application.

Charlotte Lambert
325.676.6356

<http://smartmrc.com/>



avoid the sneezers, avoid the flu, respond here

CBRNE

CBRNE is the acronym for Chemical, Biological, Radiological, Nuclear, and Explosive events related to accidents or weapons of mass destruction.

Possible early indicators of a CBRNE event for healthcare professionals include unusually high numbers of people in an area experiencing:

- blisters/rashes
- nausea
- disorientation
- difficulty breathing
- convulsions
- localized sweating
- conjunctivitis (reddening of the eyes)
- erythema (reddening of the skin)
- any irregular symptoms
- deaths

You should notify the proper authorities if you suspect a CBRNE incident has taken place.

Resources:

Centers for Disease Control and Prevention
<http://www.cdc.gov/niosh/docs/2004-173/>

The Disaster Preparedness and Response Association
<http://www.disasters.org/dera/library/Heyer%20WMD.pdf>

News

President Obama signed a proclamation declaring the 2009 H1N1 influenza pandemic a National Emergency on October 24, 2009. Certain statutory Federal requirements for medical treatment facilities will be waived to ease providers' ability to respond to the pandemic. This is intended to give HHS the ability to put aside legal requirements that could otherwise limit the capacity of our nation's health care system to respond to the surge of patients with the 2009 H1N1 influenza virus.

<http://www.flu.gov/professional/federal/h1n1emergency10242009.html>