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- **Annual Tuberculosis Report for 2007 Now Available**
- **The Case of the Cajun Catering Calamity**

Annual Tuberculosis Report for 2007 Now Available

The Public Health Seattle-King County Tuberculosis Program has released their 2007 Annual Report. The full report can be found at: www.kingcounty.gov/health/tb (link in the lower right column). The following is the executive summary from that report.

Executive Summary:

As the number of reported cases of TB increases, King County faces on-going challenges. These challenges include a high proportion of people who have TB and live under the Poverty Threshold, patients from increasingly diverse backgrounds and the transient and migratory nature of many individuals at high risk for TB infection.

In 2007, King County reported 161 cases of active tuberculosis (TB) disease, representing an 11% increase from the 2006 count. King County had a TB rate of 8.6 cases per every 100,000 individuals; this rate remains higher than the national rate (4.4 per 100,000 in 2006).

The TB Program has been very successful in ensuring that TB cases complete treatment and in screening and evaluating contacts to these cases. To manage this disease with the tools currently available, the King County TB Control Program focuses on three fundamental principles:

(1) case management of patients with active TB disease in order to assure the cure of all TB cases, interrupt further transmission of TB, and prevent development of multi-drug resistant TB;

(2) timely and thorough contact investigations around infectious TB cases to identify, evaluate, and treat those who were exposed and/or recently infected; and

(3) collaborative efforts with a number of public health and community partners, particularly to enhance targeted TB testing and treatment of latent TB infection.

Due to the large pool of individuals with latent TB Infection – an estimated 100,000 people in King County, and one third of the world's population – and the lack of convenient preventive medications or an effective TB vaccine, it is unlikely that TB will be eliminated in the near future.

Age, Race, Ethnicity and Nativity
The median age of TB cases was 36 years. There were 13 pediatric cases (age 0-14 years), 11 of whom were identified and diagnosed through contact investigations (i.e., family members had active TB disease) and two were diagnosed soon after emigrating from their countries of birth. In 2007, 122 cases (76% of all King County TB cases) were born outside the United States (US). The five most common countries of origin were Vietnam (21 cases), Somalia (17), Ethiopia (14), India (11), and Marshall Islands (8). In addition, racial and ethnic minorities continue to have disproportionately high rates of tuberculosis. As an example, blacks have a rate of 46.2 cases per 100,000 individuals. Blacks born outside the US made up 38 (75%) of the 51 black cases in King County in 2007.

TB-human Immunodeficiency Virus (HIV) Co-infection
HIV is the most significant risk factor for TB. Offering HIV testing is an important part of TB management. In 2007, over 90% of TB cases in King County were offered HIV testing. Nine of these people were also infected with HIV, representing 6% of all TB cases.

Drug resistant TB
In 2007, 20 (16%) TB cases in King County were drug resistant to at least one TB medication. Multi-drug resistant (MDR) TB is exceedingly costly and difficult to treat. King County reported two cases of MDR-TB in 2007. Additionally, two cases of MDR-TB were diagnosed in other jurisdictions in 2007 and transferred to continue treatment in King County. In 2007, no cases of extensively drug-resistant (XDR) TB were reported in King County.

TB Treatment
The proportion of TB patients initially placed on a standard four-drug regimen remains above 90 percent. The proportion of patients who were treated with directly observed therapy has increased from 61% in 2001 to 96% in 2006, the latest year with complete treatment outcome data.

The Case of the Cajun Catering Calamity

On August 5, 2008, a King County business reported that several employees had become ill after consuming a catered meal at work. Approximately 70 percent of the employees developed diarrhea and abdominal cramping about 8 to 10 hours after eating. Other symptoms included nausea (33 percent) and vomiting (17 percent); most of the ill people recovered from their symptoms within 24 hours. The short incubation period, short duration and predominance of diarrhea suggested ingestion of food that had been contaminated with *Clostridium perfringens, Bacillus cereus, Streptococcus faecalis, or S. faecium* as the cause of the illnesses. Stool samples from three case-patients and several mixed samples of leftover food from the event were tested at the Washington State Public Health Laboratory and found to contain high levels of *C. perfringens*.

C. perfringens is a Gram-positive spore-forming rod that is ubiquitous in the environment. The bacteria multiply readily in high-protein foods such as stews, gravies, and chilies when these foods are held at between 40° and 145° F (known as "the danger zone" for bacterial growth in food) for an extended time. If the food is consumed without being appropriately re-heated to at least 165° F, the ingested bacteria release a toxin in the digestive tract causing diarrhea and abdominal cramping 8 to 22 hours later. The illness typically lasts less than 24 hours.

Public Health Seattle-King County Environmental Health staff discovered that the meal caterer was unlicensed and working out of a private residence. The caterers reported that all food were prepared just prior to delivery, except for the Cajun Beans and Sausage, which had been cooked overnight over extremely low heat, then kept warm until delivery. No food temperatures were taken. The caterer was ordered by Environmental Health staff to cease operations immediately.

The Centers for Disease Control and Prevention (CDC) estimate that about 10,000 cases of illness due to consumption of food contaminated with *C. perfringens* occurs annually in the U.S. making it one of the most common foodborne diseases; the CDC receives reports of 10 to 20 outbreaks due to *C. perfringens* each year.

Only foodborne outbreaks that are reported to Public Health are likely to be traced to *C. perfringens* because public health agencies can facilitate testing of both food and stool. Findings from this outbreak investigation enabled Public Health to identify and close an unlicensed caterer, potentially protecting scores of additional customers from becoming ill. Of note, the company that ordered the catered meals had no reason to believe the caterer was unlicensed; the caterer had official-looking stationery and business cards, had advertised on the internet, and even obtained a Washington State business license.

Please report all clusters of suspect foodborne illness to Public Health immediately by calling 206-296-4774.

Disease Reporting

AIDS/HIV .... (206) 296-4645
STDs .... (206) 744-3954
TB .... (206) 744-4579
All Other Notifiable Communicable Diseases (24 hours a day) .... (206) 296-4774
Automated reporting line for conditions not immediately notifiable .... (206) 296-4782

Hotlines

Communicable Disease .... (206) 296-4949
HIV/STD .... (206) 205-STDS

Please Note Our New Website Addresses:

Public Health main page: www.kingcounty.gov/health
Communicable Disease Epidemiology & Immunization Section main page: www.kingcounty.gov/health/cd

Reported Cases of Selected Diseases, Seattle & King County 2008

	Cases Reported in October		Cases Reported Through October	
	2008	2007	2008	2007
Campylobacteriosis	20	21	265	209
Cryptosporidiosis	3	2	34	38
Chlamydial infections	497	565	5,005	4,774
Enterohemorrhagic *E. coli* (non-O157)	0	0	3	6
***E. coli* O157: H7**	12	4	42	36
Giardiasis	11	15	97	126
Gonorrhea	93	105	1,114	1,227
***Haemophilus influenzae* (cases <6 years of age)**	0	0	2	2
Hepatitis A	1	6	16	16
Hepatitis B (acute)	0	0	28	21
Hepatitis B (chronic)	81	56	759	682
Hepatitis C (acute)	0	0	10	5
Hepatitis C (chronic, confirmed/probable)	133	137	1,244	1,160
Hepatitis C (chronic, possible)	30	22	300	247
Herpes, genital (primary)	37	57	441	531
HIV and AIDS (new diagnoses only)	20	32	293	360
Measles	0	0	0	1
Meningococcal Disease	0	0	5	5
Mumps	0	0	1	7
Pertussis	6	8	64	69
Rubella	0	0	0	0
Rubella, congenital	0	0	0	0
Salmonellosis	59	20	225	214
Shigellosis	2	3	39	47
Syphilis	14	16	174	130
Syphilis, congenital	0	0	0	0
Syphilis, late	9	6	71	61
Tuberculosis	7	14	88	126

The *EPI-LOG* is available in alternate formats upon request.