EPI-LOG

Communicable Disease and Epidemiology News
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Public Health
Seattle & King County
HEALTHY PEOPLE. HEALTHY COMMUNITIES.
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Return Services Requested

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- **Recent Travel-Associated Infections Reported in King County**
- **Recognizing and Preventing Travel-Associated Infections**
- **Reasons to Report Travel-Associated Notifiable Conditions to Public Health**

RECENT TRAVEL-ASSOCIATED INFECTIONS REPORTED IN KING COUNTY

Each month, approximately 20 travel-associated notifiable conditions, are reported to Public Health. So far in 2005, we have received reports of salmonellosis after travel to Jamaica, mumps after travel to Pakistan, rubella after travel to Jordan, malaria after travel to Honduras, and more. Enteric infections make up the vast majority of travel-associated cases, followed by mosquito and tick borne infections, primarily malaria.

Notifiable Conditions Reported in King County Where Travel was the Suspected Risk Factor

Condition	2000	2001	2002	2003
Enteric Diseases	238	235	226	169
Campylobacter	60	98	82	54
Cholera	0	1	1	0
Cryptosporidiosis	1	7	9	5
Cyclosporiasis	0	3	2	1
Enterohemorrhagic E. Coli	12	0	1	1
Giardiasis	55	31	45	30
Hepatitis A	21	10	13	14
Listeriosis	0	0	0	1
Salmonellosis	59	51	39	39
Shigellosis	24	26	28	22
Typhoid Fever	3	4	2	1
Vibriosis	0	0	4	1
Yersiniosis	3	4	0	0
Vaccine Preventable Diseases	6	2	1	0
Mumps	3	0	0	0
Rubella	1	0	1	0
Measles	2	2	0	0
Zoonotic Diseases	1	1	0	1
Leptospirosis	0	0	0	1
Rabies Exposure	1	1	0	0
Mosquito or Tick Borne Diseases	21	10	20	14
Malaria	18	8	13	12
Lyme disease	2	2	3	2
Relapsing Fever	1	0	4	0
Total	**266**	**248**	**247**	**184**

Case 1

In February, 2005, a case was reported to Public Health of acute hepatitis A in an adult male who had not received hepatitis A vaccine before travel. One month prior to diagnosis, the patient and his two children had spent several days in Mexico. The children had each received one dose of hepatitis A vaccine prior to the trip. Because protective antibody levels develop in 97%-100% of children 1 month after the first dose, post-exposure prophylaxis for hepatitis A exposure with immune globulin was not necessary. Instead, the children received the second dose of the 2-dose hepatitis A vaccine series.

All susceptible persons traveling to, or working in countries that have high or intermediate HAV endemicity should be vaccinated or receive IG before departure**.** This includes:

- **High-risk areas:** Mexico, Central and South America, Greenland, Africa, the Middle East, and all of Asia
- **Intermediate risk areas:** Eastern Europe and the territory covering the former Soviet Union, including the Siberian peninsula.

Case 2

A college student was admitted to a King County hospital with symptoms of fever, stiff neck, and photophobia after spending 32 days studying in Northern Thailand. While in Thailand she went on one overnight camping trip, and two day hikes into rural areas, noting numerous mosquito bites. Analysis of cerebrospinal fluid was consistent with viral meningitis, but tests for herpes simplex virus and enterovirus were negative. Malaria was suspected, but blood smears were negative. Cerebrospinal fluid and serum samples that were sent to the CDC for arboviral testing demonstrated reactivity to IgM antigens for Japanese encephalitis.

The emergence of both Severe Adult Respiratory Syndrome (SARS) and avian influenza A (H5N1) in Asia highlight the importance of eliciting a detailed travel history during any acute care visit. The following questions may help when obtaining a travel history, and provide clues to diagnosis:

- The location, dates, and duration of travel (e.g. countries visited, rural versus urban)
- Timing of travel in relation to the onset of symptoms
- Activities while traveling (e.g., camping, water, and insect exposures, animal exposures including visiting farms or markets)
- Details related to types of accommodations (e.g. screened vs. unscreened, directly on ground, etc.)
- Exposure to ill persons while traveling and history of illness in contacts of the traveler
- Sources of food, water (e.g. bottled vs. tap), and ice
- Use of chemoprophylaxis, vaccination status, and any treatments administered

PREVENTING TRAVEL RELATED INFECTIONS: THE ROLE OF THE TRAVEL CLINIC AND TRAVEL MEDICINE CONSULTANT

For those patients who consult with a health care professional regarding their travel plans, a referral to a dedicated travel clinic is an option, particularly for persons traveling to developing countries or where the risk of exposure to serious diseases that are uncommon in North America is significant.

Unfortunately, many patients don't consult with a health care professional when planning travel. For this reason, ensuring that all patients are up-to-date on routine adult and childhood

vaccinations will help protect your patients against common vaccine-preventable disease whenever they travel. Adults should routinely be assessed for the need for measles, mumps, tetanus, diphtheria, hepatitis A, hepatitis B, and influenza vaccines, and children and adolescents should be up-to-date on all recommended vaccines. Children traveling to areas where certain vaccine-preventable diseases are endemic (e.g., measles), may need to receive vaccines at different ages and intervals than those in the routine childhood vaccination schedule. For specific questions about whether and how to vary the routine childhood vaccine schedule for children who are traveling, please contact the Public Health-Seattle & King County immunization section at 206-296-4774.

For those patients who would benefit from the comprehensive services offered by a good travel clinic or consultant, a complete physical exam should be performed prior to referral to detect or monitor any long-term or acute health problems. The travel clinic will then assess the risks specific to the patient's individual travel plans. A travel assessment visit should be scheduled at least one month prior to travel begins in order to allow adequate time to receive vaccinations that require more than one dose.

What happens during a pre-travel consultation?

- **A review of the travel itinerary** - Some countries require that people arriving from locations where a particular disease is occurring, provide proof of vaccination. For example, some countries require that people arriving from areas where yellow fever is endemic provide proof of yellow fever vaccination. The itinerary will also be assessed for risks of arthropod–borne diseases, such as malaria, Japanese encephalitis, and Lyme disease, and risks of food or water-borne illnesses.
- **An assessment of risk factors for specific illnesses and injuries** - The travel clinic provider will review the type of accommodations that are planned (e.g., 4-star hotel vs. camping or living with local residents), and risks related to meals and drinking water (e.g., hotel dining room vs. street vendor). Travel activities are also considered. For example, do they involve high altitudes, swimming in areas with water-borne bacteria or parasites, or possible exposure to rabid domestic or wild animals?
- **A review of medical history and plans for medical and emergency care** - Travelers requiring medication for existing conditions or possible emergency care while traveling can learn from travel clinic staff how to access medical care in various locations.
- **Vaccine Requirements and Recommendations -** Travel consultants help travelers determine whether they need to update routine immunizations (e.g., Td, MMR), and which travel-specific vaccines or medications (e.g. malaria chemo-prophylaxis) they may need for their trip.

There are several travel clinics located throughout King County as well as expert travel consultants in private practice. Ask your usual source of healthcare for more information. Public Health Travel Clinics can be found at: www.metrokc.gov/health/immunization/travelclinics.htm, or by calling the communicable disease hotline at 206-296-4949. Extensive international travel related information can be found at: www.cdc.gov/travel.

REASONS TO REPORT SUSPECTED OR CONFIRMED TRAVEL-RELATED CONDITIONS TO PUBLIC HEALTH

- **Consultation on diagnosis, treatment and testing:** Public Health can help with diagnosis and management of travel-related infections, and facilitate referrals to expert consultants when necessary. In certain cases, Public Health can expedite testing at either the King County or Washington State Public Health Laboratory (e.g., measles). There is a Public Health medical epidemiologist on call "24/7".
- **Disease control measures**: Public Health can implement measures to prevent transmission to others in the public (e.g., exclusion of food workers with typhoid from work until they are typhoid-free), and conduct contact tracing and monitoring.
- **Infection control measures:** Public Health can provide infection control recommendations to prevent transmission in the household and healthcare settings
- **Health Education**: Public Health can provide counseling and written information to patients and their families.
- **Post-exposure prophylaxis:** Public Health can facilitate evaluation for and administration of post-exposure prophylaxis for diseases, including rabies, measles, hepatitis A, varicella, and hepatitis B.
- **Assurance of follow-up care for under- or un-insured patients or their contacts**: Public Health can provide referrals for care to patients who require significant medical follow-up (e.g., typhoid fever patients), and for contacts who may require post-exposure prophylaxis or treatment.

And the number one reason to report notifiable conditions to public health: **It's the law!**

Disease Reporting

AIDS/HIV	(206) 296-4645
STDs	(206) 731-3954
TB	(206) 731-4579
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

Public Health-Seattle & King County Online Resources

The *EPI-LOG*: www.metrokc.gov/health/providers

Communicable Disease listserv (PHSKC INFO-X) at: mailman.u.washington.edu/mailman/listinfo/phskc-info-x

Reported Cases of Selected Diseases, Seattle & King County 2005

	Cases Reported in February		Cases Reported Through February	
	2005	2004	2005	2004
Campylobacteriosis	17	14	33	31
Cryptosporidiosis	7	2	12	3
Chlamydial infections	459	402	861	790
Enterohemorrhagic *E. coli* (non-O157)	0	0	0	0
***E. coli* O157: H7**	3	0	3	0
Giardiasis	9	10	20	23
Gonorrhea	93	98	204	210
***Haemophilus influenzae* (cases <6 years of age)**	0	0	0	0
Hepatitis A	1	2	5	2
Hepatitis B (acute)	0	5	2	7
Hepatitis B (chronic)	38	52	80	86
Hepatitis C (acute)	1	0	3	0
Hepatitis C (chronic, confirmed/probable)	89	64	179	175
Hepatitis C (chronic, possible)	32	20	55	54
Herpes, genital (primary)	45	60	99	114
HIV and AIDS (includes only AIDS cases not previously reported as HIV)	40	48	79	65
Measles	0	0	0	0
Meningococcal Disease	3	1	6	5
Mumps	0	0	0	0
Pertussis	3	21	20	43
Rubella	0	0	1	0
Rubella, congenital	0	0	0	0
Salmonellosis	18	7	36	24
Shigellosis	1	3	8	19
Syphilis	35	6	41	11
Syphilis, congenital	0	0	0	0
Syphilis, late	5	11	11	15
Tuberculosis	5	12	13	20

The *Epi-Log* is available in alternate formats upon request.

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