



Communicable Disease and Epidemiology News

Published continuously since 1961
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IN THE JUNE 1998 ISSUE:

VOL 38, NO. 6

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Chief Retires

On June 12th, Dr. Russ Alexander, Chief of Epidemiology, retired from the Health Department. Dr. Alexander came to the Seattle-King County Department of Public Health in January of 1990, at the same time joining the faculty at the University of Washington (UW) as Professor in the Department of Epidemiology. This was not his first foray into public health in Seattle, however. After finishing his residency in pediatrics at the University of Chicago and serving with the Centers for Disease Control and Prevention (CDC) Epidemic Intelligence Service, Dr. Alexander joined the faculty at the UW in 1961 and subsequently became the first Chairman of the Department of Epidemiology and International Health in the UW's newly created School of Public Health and Community Medicine in 1970. After leaving the UW at the end of 1979, he spent the next 10 years working in a wide array of capacities in the U.S. and overseas, from Professor at the University of Arizona, Emory School of Medicine and the National Taiwan University in Taipei to Chief at the Division of Sexually Transmitted Diseases at the CDC. His appointments as a member of numerous task forces fill two pages, ranging from the American Public Health Association to the National Institutes of Health. Dr. Alexander also served as Associate or Assistant Editor for several distinguished journals, including the American Journal of Epidemiology, International Journal of Epidemiology, Sexually Transmitted Diseases, and Culture, Medicine and Psychiatry. He also authored/co-authored nearly 200 articles himself.

Dr. Alexander has provided unparalleled leadership in the Epidemiology Unit, guiding us through major infectious disease outbreaks, including the 1993 *E. coli* O157 outbreak, the school-based meningitis outbreak, the

1993 *Shigella* epidemic and the ongoing battle with pertussis. He has also worked intensively with the AIDS Epidemiology Unit and the Immunization Program, and has been active in developing the local and state health departments' immunization practice.

We will miss Dr. Alexander's contributions of knowledge and experience as much as the gift of his 'human' touch in his interactions with the public and, most of all, with those who worked alongside him. However, we wish him well in his new role as retiree! We would like to welcome Dr. Jeff Duchin as the new Chief of Epidemiology and will introduce him in our next newsletter.

Vibrio Warning

The summer of 1997 brought *Vibrio parahaemolyticus* to Seattle-King County in full force, with over five times the number of cases reported in 1996; 23 of the 27 cases occurred between July and September. This was part of the largest outbreak in North America. Illness in 209 persons was associated with eating raw oysters harvested from California to British Columbia. Elevated water temperatures may have contributed to this outbreak. It is quite possible that *Vibrio* may return in large numbers this summer.

Vibrio is a bacteria which causes watery diarrhea and abdominal cramps 4 to 96 hours after exposure; nausea, vomiting, fever and headache may also occur. The duration of illness is 1 to 7 days. Vibriosis is usually a self-limited illness and supportive treatment alone is recommended. However, infection can cause serious illness in persons with underlying disease. When illness is severe or prolonged, antimicrobials may be useful; tetracycline is the drug of choice (the organism is usually resistant to the penicillins). Diagnosis is made by stool culture, although the stool should be collected early in the illness since the organism is rapidly cleared.

Testing for *Vibrio* must be specifically requested.

Vibriosis is associated with eating raw or undercooked shellfish. A period of time at room temperature also allows the bacteria to multiply. Cooking shellfish destroys the bacteria, although re-contamination may occur if the shellfish is rinsed in contaminated water. Please note that vibriosis is a reportable disease; reporting cases to your local Health Department aids in tracking the disease as well as the source of the shellfish. The Washington State Department of Health Shellfish Program monitors shellfish beds and recreational harvest areas, and works with the counties to maintain surveillance on shellfish-related illnesses.

Hepatitis A

Seattle-King County has experienced an increase in hepatitis A rates over the past two years, as has Washington State as a whole. From January through May of this year, 272 cases had been reported to the Seattle-King County Department of Public Health. At this time, the county has an incidence rate of 40 per 100,000 if projected to the end of 1998. Last year the county's case rate per 100,000 population was 27, and the state's was 18. Nationally, rates average 10-12 cases per 100,000. Rates tend to be higher in the states west and south of the Rocky Mountains. The exact reason for this is unknown.

Various epidemiologic comparisons of local and national hepatitis A data can be made. For 1996, the latest year in which comparable data exists, incidence rates in King County for persons greater than 15 years of age were approximately three times the rates for the U.S. population. King County tends to have a higher proportion of males reported as cases than the national ratio. In 1996, the male/female ratio in King County was 1.69 and in the U.S. it was 1.38. Last year, King County's

male /female ratio rose to 3.84 and rose again in 1998 to 6.14. Since 1990, 2.8% of King County cases were associated with consuming food from a restaurant, comparable to the national level.

Injection drug users are often recognized as a population in which outbreaks occur. Injection drug users represented 5.1% of King County cases in 1998. Injection drug users have represented as few as 1.4% of cases (1992) to as many as 11.4% of cases (1994). Nationally 3% of cases presented with this risk factor in 1990-2, the most recent years for which data is available.

The local epidemiology is unique in that a high proportion of the cases (45.7% through the end of April, 1998 and 35.4% in 1997) were males who reported having sex with men (MSM). Nationally, MSM comprised only 4% of cases (1990-2). Local estimated case rates for this at risk group were 313 per 100,000 in 1997. Since 1990, there have been 5 years (including what we project for 1998) in which case rates for this local population have exceeded 100 per 100,000, a CDC criteria for defining high risk populations.

Efforts are being made to educate the MSM population about the risk of hepatitis A, the behaviors contributing to this risk, and the recommendation for vaccination. A flyer has been developed with MSM as a target audience, and copies of this are available upon request. Proposals have been submitted to local government for supplemental funding to support educational and

vaccination strategies for this population. Groups recommended for vaccination include the following: MSM, users of injection and illicit drugs, persons with clotting factor disorders, persons with chronic liver disease (especially persons with hepatitis C), persons at occupational risk of exposure, travelers to areas where hepatitis A exposure is common, and military personnel.

The health department currently charges \$26 per dose for adults and low risk children who request hepatitis A vaccination. There is no sliding fee for this vaccination. Unfortunately this vaccine is not available to non-government health care providers at this price, and costs elsewhere are about twice as much.

Fifth Disease

Inquiries and reports of infection with erythema infectiosum, or Fifth Disease, have increased in Seattle-King-County since early May. Caused by human parvovirus B19, Fifth Disease typically presents with a 'slapped cheek' appearance and is frequently accompanied by a lace-like rash on the trunk and extremities; there is usually no fever. Children do not feel ill and do not need to be excluded from school or child care. The contagious period has passed by the time the rash occurs, making it difficult to control transmission. The incubation period is 4 to 20 days to development of the rash.

Fifth Disease is not a reportable disease, so we do not know the true incidence. Fifty percent of adults are thought to be immune.

When infection does occur in an adult, severe arthritis symptoms may occur, especially in females. A patient who presents with a sudden onset of joint pain and swelling should be questioned for history of a rash (or a rash in his/her child). However, arthritic symptoms can occur in the absence of the rash or the rash may be atypical. The arthritis will resolve in weeks to months.

Exposure to Fifth Disease during pregnancy can result in intrauterine infection with fetal anemia, hydrops fetalis, and fetal death, although these complications are rare. Pregnant women who have continued close contact with people with B19 infection (e.g. at home, school/child care, health care facilities) should be advised of the potential risk to the fetus. Pregnant women with sick children at home are advised to wash hands frequently and avoid sharing eating utensils. A serologic test to determine susceptibility or to confirm the diagnosis is commercially available .

To Report: (area code 206)
AIDS296-4645
Tuberculosis296-4747
STDs.....731-3954
Communicable Disease 296-4774
24-hr Report Line.....296-4782
Disease Alert:
CD Hotline296-4949
After hours682-7321
<http://www.metrokc.gov/health/>

REPORTED CASES OF SELECTED DISEASES SEATTLE-KING COUNTY 1998

	CASES REPORTED IN MAY		CASES REPORTED THROUGH MAY	
	1998	1997	1998	1997
VACCINE-PREVENTABLE DISEASES				
Mumps	0	1	0	4
Measles	0	0	0	0
Pertussis	8	9	77	99
Rubella	1	1	1	1
SEXUALLY TRANSMITTED DISEASES				
Syphilis	3	0	15	3
Gonorrhea	77	49	420	312
Chlamydial infections	280	244	1404	1294
Herpes, genital	66	61	306	271
Pelvic Inflammatory Disease	20	21	96	127
Syphilis, late	3	5	12	18
ENTERIC DISEASES				
Giardiasis	22	20	82	86
Salmonellosis	18	25	55	83
Shigellosis	8	10	36	40
Campylobacteriosis	21	29	83	105
E.coli O157:H7	4	2	5	9
HEPATITIS				
Hepatitis A	41	44	266	190
Hepatitis B	2	2	26	16
Hepatitis C/non-A, non-B	0	1	1	2
AIDS	15	18	122	143
TUBERCULOSIS	12	6	43	45
MENINGITIS/INVASIVE DISEASE				
Haemophilus influenzae	1	0	1	1
Meningococcal disease	2	1	10	10