

THE PUBLIC'S HEALTH

Newsletter for Medical Professionals in Los Angeles County

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Severe Acute Respiratory Syndrome (SARS): *Awareness and Reporting are Essential*

It is essential that all health professionals in Los Angeles County be capable of identifying and reporting any suspect case of SARS.

In conjunction with the Centers for Disease Control (CDC), the Los Angeles Department of Health Services is responding to an emerging disease known as severe acute respiratory syndrome (SARS). SARS is believed to be responsible for substantial illness in several Asian countries, Germany, and Canada. The definitive cause of SARS is unknown. In light of the notable morbidity and mortality associated with SARS, it is essential that all health professionals in Los Angeles County be capable of identifying and reporting any suspected case.

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Enhanced Awareness and Rapid Reporting of Vaccinia-related Illness is Essential

Healthcare providers are advised to be especially vigilant for possible vaccinia-related infection as smallpox vaccinations continue among the military and first responders.

Smallpox vaccine does not contain the smallpox virus so it cannot cause smallpox infection. However, the vaccinia virus in the smallpox vaccine may be transmitted and cause infection in both vaccinees and their close contacts. It is therefore essential that all healthcare providers be familiar with smallpox vaccination contraindications and potential adverse reactions to the vaccinia virus.

Extensive resources regarding smallpox and smallpox vaccination are available on the Los Angeles County Public Health Bioterrorism Preparedness and Response website www.labt.org or the CDC website at www.bt.cdc.gov/agent/smallpox.

Any suspected secondary transmission of the vaccinia virus as well as any known or suspected adverse reactions to the vaccine should be reported to Acute Communicable Disease Control immediately. ☐

**For questions or to report vaccinia-related illness or any serious disease call:
213-240-7941 (during working hours) • 213-974-1234 (after hours)**

**Sign up to receive critical
county-related public health
information via e-mail.
See page 2.**

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ANTIBIOTIC RESISTANCE INFORMATION CORNER

The Role of Clonality in the Global Spread of Fluoroquinolone-Resistant Bacteria

Keith P Klugman

Clinical Infectious Diseases 2003;36:783-5.

Available at: www.journals.uchicago.edu/CID/journal/issues/v36n6/30067/30067.html

This article reviews data demonstrating the spread of fluoroquinolone (FQ) resistant *Staphylococcus aureus*, gonococci, and pneumococci clones in the US and abroad. Two clones make up 44% of resistant pneumococci from 7 population centers in the US and FQ resistance has been documented in these clones. Children are often colonized with pneumococci, while adults rarely are, and there has been a shift in the serotype distribution of invasive pneumococci in adults to the pediatric subtypes. Therefore, the use of FQ in children may lead to the development or dissemination of FQ resistant pneumococci in both children and adults.

Clinicians should be cautious in their use of antibiotics. It is estimated that half of all antibiotic prescriptions for children are for viral diseases – mostly acute respiratory infections (ARI) caused by viruses. While the number of prescriptions for ARI in children have decreased recently, inappropriate antibiotic use can have significant consequences, as illustrated in this article.

Severe Acute Respiratory Syndrome (SARS): (from page 1)

To avoid confusion with other respiratory illnesses which are in circulation, the following conditions must be met in order to be considered as SARS.

SARS Case Definition (4-9-03):

- Fever ($\geq 38^{\circ}$ C or 100.5° F);
 - AND one or more signs of symptoms of respiratory illness (e.g., cough, shortness of breath, difficulty breathing, abnormal chest x-ray);
 - AND either of the following:
 - History of travel[†] to Hong Kong; the People's Republic of China (but NOT Taiwan); Hanoi, Vietnam; or Singapore within ten days of symptom onset;
- OR
- Close contact with persons with respiratory illness having the above travel history. Close contact includes having cared for, having lived with, or having had direct contact with respiratory secretions and bodily fluids of a person with suspected SARS.

[†]Travel includes transit in an airport in an area with documented or suspected community transmission of SARS.

This definition is intentionally quite non-specific and will undoubtedly capture many other untreated respiratory illnesses. The definition will be updated as new laboratory tests become available.

Additional information about SARS is available at: www.lapublichealth.org/acd/sars.htm 

SARS UPDATE (4-9-03)

As of press time (4-9-03), the Los Angeles County Department of Health Services, Public Health, has identified eight cases that meet the current suspect case definition for severe acute respiratory syndrome (SARS). All but one of the suspect cases met the case definition due to travel to at least one of four high incidence SARS areas in Southeast Asia. While four of the suspect cases were hospitalized, all have since been discharged, and all show no signs of complications or further illness.

Nationwide, the CDC reports 149 SARS suspect cases from 30 states. The leading risk factor is travel to a SARS-related area. There have been only three U.S. cases among healthcare workers, no documented community acquired cases, and no deaths in the U.S.. In addition, there is no known association of SARS with receipt of blood or blood products.

Dispelling rumors:

Despite the current low occurrence of SARS locally, numerous false rumors are circulating. Of note, there have been no closures of any facilities (e.g., restaurants, markets, etc.) due to suspected SARS among employees. In addition, there have been no SARS-related deaths either locally or nationwide. It is important to address rumors quickly in order to quell unsubstantiated fear in our community.

SARS INFORMATION HOTLINE

In order to address basic questions about SARS, the Los Angeles County Department of Health Services has established a toll-free hotline to provide information to the public in 7 languages: English, Mandarin, Cantonese, Vietnamese, Thai, Korean, and Spanish. This service provides the latest in CDC guidelines and can explain to your patients what is SARS, its symptoms, how it is spread, and what is recommended for travelers.

SARS Hotline: 1-800-989-5255

Adolescent Hepatitis B Immunizations

Missed Opportunities for Kids 15-18 Years Old

An estimated 1.25 million people in the U.S. are infected with chronic hepatitis B virus (HBV), and approximately 4,000-5,000 individuals die every year from liver cancer and associated liver disease morbidity.^{1,2} Hepatitis B is most commonly transmitted vertically (from infected mother to child), but it is also infectious horizontally (household contact from blood of an infected person, e.g., sharing toothbrushes, razors).⁴ Those who are unknowingly infected with chronic HBV, represent a potential reservoir for continued disease transmission. This is particularly true for certain higher risk groups^{3,4} including:

- Adolescents 15-19 years of age (who have a greater incidence of unprotected sex);
- Heterosexual persons with multiple partners or suspected of a sexually transmitted disease (STD);
- Men who have sex with men (MSM);
- Alaskan natives, Asian and Pacific Islanders (API), children of immigrants from hepatitis B endemic countries such as Asia, Southeast Asia, Middle East, Central America, Africa;¹⁻⁴
- Household members of HBV carriers;
- Injection Drug Users (IDU);
- Health care workers.

Hepatitis B is vaccine-preventable, and the potential benefits of immunization have played a major role in the declining trends of acute HBV infections in California. In fact, the decline in acute disease is most pronounced among the age group 0-18 years; the number of reported acute HBV infections in this age group decreased from 224 cases in 1990 to just 9 cases in 2002.⁵ Undoubtedly, certain strategies, such as standardizing hepatitis B immunizations as part of the infant/childhood vaccination schedule, and state-mandated hepatitis B immunization requirements for middle school entry have lessened the disease burden of acute hepatitis B. However, medical providers are

strongly encouraged to continue following the recommended guidelines to reach the goal of eliminating HBV transmission:³⁻⁴

- Serologically screen all pregnant females for hepatitis B to identify acute or chronic hepatitis B virus infection and report all positive cases to the health department;
- Administer Hepatitis B Immune Globulin (HBIG) vaccine to infants born to hepatitis B surface antigen (HBsAg) positive mothers;
- Administer the first hepatitis B dose to all infants at birth;
- Identify and serologically screen household contacts of hepatitis B infected persons;
- Vaccinate all children 0-24 months at the recommended intervals;
- Serologically screen and vaccinate adolescents and adults at high risk for hepatitis B.

Achievements and Future Challenges:

The progress made in decreasing acute HBV infections is a major public health achievement. The hepatitis B vaccine is an effective method for preventing the development of hepatocellular carcinoma, an unfortunate consequence of chronic HBV infection.⁶ Nevertheless, a significant challenge still remains for adolescents between the ages of 15-18 years. Many of these adolescents missed out on hepatitis B immunizations as infants and were again exempt from California's state-mandated hepatitis B immunizations for school entry. Despite hepatitis B immunization coverage estimates of over 60% among middle school kids, 15-18 year olds remain unprotected and thus vulnerable to acute and/or chronic infection.⁴

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Adolescent Hepatitis B Immunizations: (from page 4)

What doctors and health providers can do to prevent the transmission of HBV:

Doctors and health care workers can be instrumental in preventing acute and/or chronic hepatitis B transmission in 15-18 year olds. The following strategies are strongly recommended to providers when examining adolescents in this age group:

- Routinely review and maintain the immunization record of adolescent patients between the ages of 14-18 years;
- If hepatitis B immunizations have not been started, begin the three-dose series. The usual schedule for adolescents is two doses (0.5ml) separated by no less than 4 weeks, and a third dose 4-6 months after the second dose. If the accelerated schedule is needed to ensure that the series is completed soon, the minimum interval between the first two doses is 4 weeks, and the minimum interval between the second and third doses is 8 weeks. However, the first and third doses **must** be separated by 4 months.
- 11-15 year olds may receive the two 10 mcg doses of RecombivaxHB, separated by 4-6 months.⁶
- Recall/remind patients periodically to return to the clinic to finish the recommended doses in order to satisfy the immunization series.
- If a patient started but did not complete the hepatitis B three-dose series, **DO NOT START THE SERIES AGAIN**. Instead, resume vaccination until the required three doses are completed.
- Enroll as a **Vaccines for Children Provider (VFC)**, a federally-funded, state-operated vaccine supply program that helps offset the costs of the vaccine to the patient and medical provider.

Careful immunization history of adolescents 15-18 years old can prevent future cases of hepatitis B and other life threatening liver diseases. Don't miss this opportunity to save lives. Be sure to vaccinate your adolescent patients who are 15-18 years old.

Save lives by vaccinating your 15-18 year old patients against hepatitis B.

For more information about immunizations against hepatitis B, contact Wendy Berger at the Immunization Program, (213) 351-7800. ☎

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Highlights of Recent Presentations on Mortality Trends

These findings were presented at the annual meeting of the American College Preventive Medicine by the Data Collection and Analysis Unit.

Overall declining mortality trends in Los Angeles County but diabetes on the rise

During the period 1990 to 2000, significant declines in mortality rates among the residents of Los Angeles County were observed for most of the leading causes of death: cancer (15%), stroke (17%), heart disease (26%), cirrhosis (29%), unintentional injuries (32%), suicide (32%), homicide (45%), and HIV/AIDS (77%). However, a significant increase in mortality was observed for diabetes (53%). During this period, all-cause mortality rates declined by 14% in African Americans, 15% in whites, 14% in Asians/Pacific Islanders, and 21% in Latinos. Age-adjusted diabetes mortality was more than two times higher in African Americans (44/100,000) and one and one half times higher in Latinos (30/100,000) than in whites (19/100,000) and Asians/Pacific Islanders (18/100,000).

Mortality rates for many important conditions have declined substantially in Los Angeles County, which might reflect success of intervention efforts. However, diabetes mortality rates continue to rise and racial disparities persist and may be widening. These findings highlight the importance of focused primary and secondary prevention efforts, especially for diabetes.

Varicella-related mortality declining in California

Although surveillance for varicella in the United States has documented a reduction in cases since vaccine licensure in 1995, limited information has been published on varicella-related mortality trends since vaccine introduction. Between 1989 and 2000 in California, 219 varicella-related deaths were identified. Age-adjusted varicella mortality rates in California showed a downward trend during the 12-year study period, dropping from a high of 0.97 per million in 1990 to a low of 0.22 per million in 1999. Average varicella mortality rates declined by 47% in the period after vaccine introduction, dropping from 0.72 per million pre-vaccine to 0.38 per million

Despite declines in mortality rates for many leading causes of death, deaths due to diabetes continue to rise.

post-vaccine. Infants had the highest mortality rate for the period, followed by those over age 75. At least one high-risk immunocompromising condition was noted in 82 (37%) deaths. Pneumonia was the most common complication listed on the death records.

Varicella-related mortality has declined in California since vaccine implementation; however, potentially preventable varicella-related deaths continue to occur. To prevent further deaths, vaccination efforts will not only need to reach those of pre-school age, but also susceptible adults and women of childbearing age. Special focus should be placed on protecting infants and immunocompromised individuals from varicella infection.

Preventable Hepatitis A-related mortality

Hepatitis A is a significant cause of morbidity in the United States despite the availability of an effective vaccine. Approximately 30,000 cases are reported annually, yet there is a lack of information on mortality resulting from these infections and few population-based studies have been undertaken to examine hepatitis A-related mortality. 331 hepatitis A-related deaths were identified from 1989-1998 in California, representing an annual crude mortality rate of 1.05 deaths per million persons (95% CI = 0.94, 1.16). Mortality rates increased with age and men experienced higher age-adjusted rates than women (RR = 1.78; 95% CI = 1.41, 2.25). Latinos and American Indian/Alaska Natives experienced the highest age-adjusted mortality rates (Latinos: 1.59 per million, 95% CI = 1.20, 1.99; AI/AN: 2.42 per million, 95% CI = 0.29, 4.55). No significant seasonal or temporal trends in mortality were observed. Several types of medical conditions listed on death certificates were more common among hepatitis A-related deaths than deaths with

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Mortality Report (from page 6)


no mention of hepatitis A. These conditions include other viral hepatitis infections, liver cancer, and other liver conditions. AIDS/HIV was about twice as likely to be listed for hepatitis A-related deaths than for all other deaths.

Hepatitis A is an important cause of preventable mortality in California. Further exploration of current vaccination practices by means of epidemiologic and cost-benefit analyses should be undertaken and expanded vaccination programs should be considered.

Pneumococcal disease mortality in California

Pneumococcal disease continues to cause vaccine-preventable deaths, yet scarce population-based data exist on the actual magnitude of pneumococcal-related mortality. Pneumococcal disease mortality and its demographic correlates were evaluated in California from 1989 to 1998. The overall age-adjusted pneumococcal disease mortality rate was 2.04 deaths per 100,000. Mortality was elevated in elderly individuals

(38.20/100,000 after age 85), infants (1.10/100,000), African Americans (2.96/100,000), Native Americans (2.40/100,000 population), and males (2.67/100,000). A trend of increasing mortality with increasing age was noted and, beginning with the age group 45-54, mortality rates exceeded those observed in infants. The majority (80.8%) of individuals who died of pneumococcal disease fell into risk groups indicated for vaccination. Mortality was seasonal, reaching a peak in the winter months. A trend of decreasing mortality was observed over the 10-year period examined.

Pneumococcal disease is an important cause of vaccine preventable mortality in the California population. Greater efforts should be made to vaccinate at-risk individuals, especially those in demographic groups at highest risk of pneumococcal-related death. Consideration should be given to expanding pneumococcal immunization to persons under the age of 65. 


Information about these projects and vital statistics for Los Angeles County are available at:
www.lapublichealth.org/dca/index.htm

DHS Staff Recent Publications

HIV Prevalence Among Foreign-Born and US-Born Clients of Public STD Clinic

Am J Public Health. 2002;92:1958-1963. Available at: www.ajph.org/cgi/content/full/92/12/1958

Authors: Nina T. Harawa, PhD, MPH,* Trista A. Bingham, MPH, MS,* Susan D. Cochran, PhD, MS, Sander Greenland, DrPH and William E. Cunningham, MD, MPH

A study of sexually transmitted disease clinic clients at several Los Angeles County public health centers found that foreign-born immigrants who were infected with HIV most likely contracted the virus after immigration. Of approximately 61,000 patients in the study, 23,000 were foreign-born, with the largest percentage born in Central America/Mexico. HIV infection was highest among female immigrants from Sub-Saharan Africa (5.7%) and elevated among male immigrants from North Africa/Middle East and the Caribbean/West Indies (about 4%) compared to U.S.-born clients. Based on their age, the age they immigrated and the number of years they lived in the U.S., most of those who were HIV-positive likely contracted the virus after arriving in the U.S. The findings suggest a need to ensure that HIV prevention and treatment interventions reach African and possibly Caribbean and Middle Eastern immigrant communities. Despite having similar levels of infection as U.S.-born clients, Central American and Mexican immigrants composed 84% of the HIV infected clients seen. Hence, culturally appropriate Spanish-language HIV-prevention interventions are also crucial to serve the large and growing at-risk Latino immigrant population of Los Angeles County. 

* From the Los Angeles County HIV Epidemiology Program.

Botulism Reporting: Now More Important Than Ever

A suspected case of botulism is considered a public health emergency. In 2000, the CDC classified botulism as a disease of highest priority for reporting because of its potential for being used as a bioterrorist agent. As such, every suspected case of food-borne or wound botulism should be reported immediately to Acute Communicable Disease Control (ACDC). In addition, any laboratory that receives a specimen for diagnosis of botulism must immediately contact ACDC. ACDC will provide botulinum immunoglobulin, when appropriate, and authorization for laboratory confirmation.

The Los Angeles County Public Health Laboratory performs botulism toxin testing by mouse bioassay only on order from ACDC. Tests can be run on food, serum, stool, and gastric contents. In suspected wound botulism, attempts should be made to culture *C. botulinum* from wounds by anaerobic culture techniques.

In the event of possible food-borne botulism, ACDC will mobilize appropriate staff to pick up suspected items to prevent additional intoxication as well as for laboratory confirmation.

Note to residency program directors and clinical faculty: please train residents and fellows in disease reporting procedures. The manual for communicable disease reporting in Los Angeles County is available at: www.lapublichealth.org/acd/procs/b73/b73index.htm

For reporting or questions call:

213-240-7941 during regular hours (7:30am - 5:00pm) or 213-974-1234 after hours and weekends (Emergency Operator)

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Newsletter for Medical Professionals in Los Angeles County



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DEPARTMENT OF HEALTH SERVICES
Public Health

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Selected Reportable Diseases (Cases)¹ - December 2002

Disease	THIS PERIOD Dec 2002	SAME PERIOD LAST YEAR Dec 2001	YEAR TO DATE		YEAR END TOTALS		
			2002	2001	2001	2000	1999
AIDS ²	122	164	1,787	1,354	1,354	1,648	1,870
Amebiasis	5	19	109	139	139	109	134
Campylobacteriosis	73	84	1,092	1,141	1,141	1,273	1,089
Chlamydial Infections	3,008	2,296	34,477	31,658	31,658	30,642	27,561
Encephalitis	3	1	63	41	41	49	39
Gonorrhea	684	545	7,366	7,468	7,468	7,212	6,053
Hepatitis Type A	32	42	482	542	542	839	1,120
Hepatitis Type B, Acute	3	5	27	44	44	65	61
Hepatitis Type C, Acute	0	0	3	1	1	28	21
Measles	0	0	0	8	8	5	1
Meningitis, viral/aseptic	36	24	669	530	530	491	390
Meningococcal Infections	4	7	46	58	58	53	49
Mumps	0	0	16	17	17	29	24
Non-gonococcal Urethritis (NGU)	82	74	1,258	1,343	1,343	1,575	1,742
Pertussis	18	9	167	103	103	102	238
Rubella	0	0	0	0	0	3	0
Salmonellosis	129	68	990	1,006	1,006	990	1,101
Shigellosis	117	57	922	684	684	849	669
Syphilis, primary & secondary	21	19	327	181	181	136	88
Syphilis, early latent (<1 yr.)	13	18	303	191	191	194	335
Tuberculosis	205	233	1,025	1,046	1,046	1,065	1,170
Typhoid fever, Acute	2	0	34	17	17	21	16

1. Case totals are provisional and are subject to change following publication.

2. Case totals are interim and may vary following periodic updates of the database.