



Public Health Update

Yolo County Health Department

"Investing in Our Community's Future"

Volume 1, Issue 1

January 2003

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Contact Us

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www.yolocounty.org/org/health

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(530) 666-8645
fax (530) 666-8674

500-B Jefferson Blvd.
West Sacramento, CA 95605
(916) 375-6380
fax (916) 375-6382

Related Web Sites

Pertussis

www.pertussis.com
www.cdc.gov/nip/publications/pink/pert.pdf

Smallpox and Smallpox Vaccination

www.bt.cdc.gov/agent/smallpox
www.dhs.ca.gov/ps/ddwem/environmental/epo/epobioterrorism.html

Enteric Disease

www.cdc.gov/health/foodill.htm

Communicable Disease Reporting

www.yolocounty.org/org/health/disease.asp

Pertussis

According to the CDC, more cases of pertussis were reported in the US in 2002 than in any year since 1967.

Over 140 probable and confirmed pertussis cases among Yolo County residents were reported to, and investigated by, the Health Department in 2002.* Only two cases of pertussis were reported in 2001.

This outbreak is not over; 32 new cases have been investigated since December 1, 2002 alone (14 are culture confirmed or epidemiologically linked to culture-confirmed cases).* The majority of reported cases continues to occur among Davis residents 11-18 years of age.

Timely reporting of pertussis has significant public health implications and augments the public health response to reduce the risk of additional illness, hospitalization and death in our community. With pertussis, this is especially true among newborns (case-fatality rate 0.8%), the elderly and the immune compromised.

Health care providers play a crucial role in the surveillance and control of communicable diseases, such as pertussis. Your continued involvement in controlling this outbreak by reporting suspected cases of pertussis to the Yolo County Health Department is especially

Timely reporting of pertussis has significant public health implications and augments the public health response to reduce the risk of additional illness, hospitalization and death in our community.

important. Please contact the Health Department if you have further questions about reporting pertussis or about communicable disease surveillance guidelines.

* Provisional data, Jan. 15, 2003.

Sources: CDC MMWR 52(01) Jan 2003; Yolo County Health Department .

Smallpox Vaccination

In response to the federal plan to begin smallpox vaccinations for military personnel and civilian medical workers, the Yolo County Health Department has coordinated efforts with local hospitals to vaccinate health care personnel, who will be part of the county "smallpox response team," beginning in February .

The goal of this voluntary smallpox vaccination strategy is to have a significant number of medical and public health personnel in Yolo County vaccinated. If smallpox is released as an agent of bioterrorism, these vaccinees would then be designated to provide care for those who may contract smallpox and to vaccinate others for the disease. **(cont'd on page 2)**

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(Smallpox Vaccination, cont'd)

The decision to vaccinate for smallpox is balanced by the risk that the current vaccine may cause serious side effects and, in rare cases, death. Persons with immune-compromised health or on immune-suppressive therapy, pregnant women and persons with eczema or chronic skin conditions are deferred from taking the smallpox vaccine at this time. If an actual case of smallpox were to occur, these recommendations would

change and the vaccine would be offered to everyone.

Soon after vaccination of hospital and public health teams is completed, the CDC will consider expanding the vaccination program to other health care personnel and first responders. Vaccinations for the public are being delayed until 2004 when new vaccines with a lower risk of side effects are expected to be available. For more information, please refer to the CDC and Yolo County web sites listed on Page 1 of this newsletter.

Smallpox Vaccination Frequently Asked Questions (FAQs):

How long does smallpox immunity last after vaccination?

Immunity decreases after 5 years. It is unlikely that childhood vaccinations received before 1970 would provide protection against smallpox today. It is estimated that about 45% of all persons in the US have never been vaccinated for smallpox.

What contraindications should be discussed with patients who may volunteer to receive smallpox vaccine?

Contraindications include having or living with someone who is: immune-compromised, on immune-suppressive therapy, pregnant, has a chronic skin condition (eczema). People who live with children under one year of age are also discouraged from being vaccinated.

What is the frequency of post-vaccine reactions?

Based on information from the 1950s and 1960s, it is expected that 15-50 vaccinees per 1 million vaccinated will develop serious complications, including 1-2 deaths. Careful screening of potential vaccinees for contraindications is extremely important.

What resources are available to assist in recognizing and addressing serious vaccine reactions?

The Yolo County Health Department has coordinated with local and state agencies and providers to ensure that materials and consultation are available to local health professionals over the next few months as individuals in the community begin to receive the vaccine.

Reportable Enteric Diseases

Enteric infections are often self-limiting and undiagnosed. The cases presented in the table below probably

represent only a fraction of the actual number of cases that occur annually. Specimens submitted from patients with gastrointestinal illness may play an important role in recognizing and controlling outbreaks of enteric disease.

Selected Reportable Enteric Diseases among Yolo County Residents, 1995-2001.

| Disease | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|----------------------------------|------|------|------|------|------|------|------|
| Amebiasis | 1 | 4 | 1 | 3 | 5 | 1 | 5 |
| Campylobacteriosis | 51 | 64 | 41 | 63 | 29 | 39 | 24 |
| Cryptosporidiosis | 2 | 1 | 3 | 4 | 1 | 1 | 1 |
| <i>E. coli</i> O157:H7 infection | 4 | 1 | 2 | 0 | 0 | 3 | 3 |
| Giardiasis | 33 | 50 | 33 | 25 | 10 | 16 | 15 |
| Salmonellosis | 6 | 14 | 11 | 8 | 16 | 16 | 16 |
| Shigellosis | 13 | 8 | 15 | 8 | 4 | 11 | 2 |
| Vibrio infection | 0 | 0 | 0 | 1 | 3 | 1 | 7 |

Data Source: Yolo County Health Department.



Public Health Update

Yolo County Health Department

"Investing in Our Community's Future"

Volume 1, Issue 2 February 2003

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Related Web Sites

Norovirus
www.cdc.gov/ncidod/dvrd/revb/gastro/norovirus.htm

Pertussis
www.pertussis.org

Smallpox Vaccination
www.dhs.ca.gov/ps/ddm/environmental/epo/epobioterrorism.html

Communicable Disease Reporting Guidelines
www.yolocounty.org/org/health/disease.asp

Noroviruses

According to the CDC, noroviruses, a group of caliciviruses formerly referred to as Norwalk/Norwalk-like viruses, are the most common cause of gastroenteritis in the US.

Norovirus outbreaks are often associated with closed settings, particularly in winter. An increase in the number of outbreaks across the US was noted in 2002. This included high-profile cruise ship outbreaks and a greater than expected number of outbreaks in institutional settings, such as nursing homes. The California Department of Health Services (CDHS) anecdotally reports a similar increase in the number of outbreaks statewide this winter.

The cause of this recent increase in norovirus activity is unclear. However, the CDC reports 41% of these more recent outbreaks have been associated with a single, newly identified strain of norovirus. This is unusual in that CDC surveillance prior to 2002 rarely detected identical strains between outbreaks.

Noroviruses characteristically require a

low infectious dose, are relatively stable in the environment and spread through multiple modes of transmission, making outbreaks difficult to control. It is possible that this newly identified predominant strain has characteristics of infection that increase person-to-person transmissibility.

... 41% of these more recent outbreaks have been associated with a single, newly identified strain of norovirus.

Unless complicated by underlying illness, age or dehydration, most norovirus cases are generally mild and self limiting (1-2 days) with acute onset nausea, vomiting and diarrhea. Post-infection immunity is believed to last only a few months.

Vomitus and stool of residents, staff or visitors in visiting rooms or dining areas is often implicated as a source of infection in facilities. Secondary cases typically occur 24-36 hours later. Prompt disinfection of areas (**cont'd on page 2**)

Web-Based Reporting

The Health Department is exploring the possibility of adding web-based CMR submission as an option for communicable disease reporting. This would allow health providers and staff to submit CMRs using a secure web site.

Web-based reporting would not replace direct telephone notification

of highly infectious diseases. However, it is expected to facilitate the reporting process in some offices by replacing fax and mail CMR submission.

To express an interest in this project or to pilot web-based reporting, please contact Tim Wilson at tim.wilson@yolocounty.org for further information.

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(Norovirus, cont'd) contaminated by vomitus or stool may reduce the risk of transmission.

All suspected outbreaks of illness are reportable to the Health Department, regardless of etiology. Norovirus outbreaks tend to amplify rapidly in closed settings unless control measures are promptly implemented. The Health Department relies on reports from health professionals to facilitate the timely identification and

control of such outbreaks.

Outbreak-associated stool and vomitus samples collected within 24-48 hours of illness onset are preferred for norovirus testing. Contact the YCHD Public Health Laboratory regarding specimen submission. For further information regarding norovirus outbreak control, please refer to the CDC web site listed on Page 1.

Sources: CDC MMWR 52(03) Jan 2003; California Dept of Health Services

Ongoing Activities

Pertussis

Approximately 25 new pertussis cases were reported between Jan 15 - Feb 15, 2003. Again, most are Davis residents are under age 21. Outbreak control relies upon timely reporting of **all suspected cases**.

Smallpox Vaccination

YCHD is expected to begin voluntary smallpox vaccination of Health Department and hospital staff smallpox response teams by early March 2003. YCHD will notify providers when vaccination plans are finalized and approved by the CDC and CDHS.

Newsletter Distribution

YCHD is currently compiling and updating e-mail addresses and contact information for health professionals and health facilities serving Yolo County residents. Future distribution of this newsletter will primarily occur electronically, unless otherwise requested. To receive this publication by e-mail or at an alternate e-mail address, please send your contact information to tim.wilson@yolocounty.org.

Vaccine-Preventable Diseases

Immunization against vaccine-preventable diseases is among the most effective public health preventive measures. Although many childhood illnesses now have a very low incidence, high levels of vaccination are still needed

to prevent outbreaks among vulnerable populations. The data presented below reflect the historical incidence of various reportable vaccine-preventable diseases among Yolo County residents. *Case counts of all communicable diseases reported between 1996 through 2002 will soon be updated on the Yolo County web site.*

Selected Reportable VACCINE-PREVENTABLE Diseases among Yolo County Residents, 1996-2002*.

| Disease | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|------|------|------|------|------|------|------|
| Diphtheria | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Haemophilus influenzae infection (invasive) | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Hepatitis A | 27 | 22 | 34 | 39 | 34 | 5 | 9 |
| Hepatitis B (acute & chronic) | 13 | 23 | 43 | 67 | 74 | 49 | 59 |
| Measles | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mumps | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Pertussis | 2 | 2 | 2 | 49 | 0 | 2 | 65 |
| Rubella | 1 | 0 | 0 | 1 | 0 | 1 | 0 |

Data Source: Yolo County Health Department. * Note: data are represented by report year rather than onset year. Data for 2002 are provisional.



Public Health Update

Yolo County Health Department
"Investing in Our Community's Future"

Volume 1, Issue 3 March 2003

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Related Web Sites

SARS

www.cdc.gov/ncidod/sars

Pertussis

www.pertussis.org

CDHS Influenza Surveillance

www.dhs.cahwnet.gov/ps/dcdc/VRDL/html/Flu-h5n1.htm

Smallpox Vaccination

www.cdc.gov/agent/smallpox/index.asp

SARS Update

The CDC and WHO are investigating an outbreak of severe acute respiratory syndrome (SARS) of unknown etiology. Cases have now been reported in Asia, Europe and North America.

Approximately 500 suspected cases have been identified as of March 25, including some in the United States with at least three in California.

Preliminary findings suggest that the SARS agent *may* be a paramyxovirus or a coronavirus, however these reports have not yet been substantiated.

Please report any cases meeting the case definition (see sidebar at right) to the YCHD.

For the most current and accurate information regarding SARS, please refer regularly to the CDC web site listed in this issue.

SARS Case Definition

The CDC is asking that clinicians be alert for patients with onset of illness after Feb. 1, 2003 with:

- fever $>38^{\circ}\text{C}$ (100.4°F)

AND

- one or more of the following respiratory signs: cough, shortness of breath, dyspnea, hypoxia, ARDS, radiographic findings of pneumonia

AND

- travel history to China (Hong Kong or Guangdong Province only), Hanoi, Vietnam or Singapore within 10 days of symptom onset OR close contact with persons with respiratory symptoms having the above travel history.

Pertussis Revisited

An unusually high number of pertussis cases continues to be reported among Yolo County residents. Three laboratory-confirmed (by culture and PCR) pertussis cases and several probable pertussis cases were reported in Davis, Woodland and West Sacramento residents in February.

Pertussis may reasonably be considered a differential diagnosis in persons experiencing a severe persistent cough illness without other apparent cause, especially if symptoms include paroxysmal coughing and/or

whoop and/or post-tussis vomiting.

To facilitate early rapid diagnosis, the California Department of Health Services (CDHS) is now offering limited PCR pertussis testing services for Yolo County residents. PCR results may be helpful in recognizing pertussis cases earlier which may be crucial in reducing disease transmission. For more information about obtaining swabs submitting samples for PCR pertussis testing, please contact the YCHD Public Health Laboratory.

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Influenza Surveillance

In response to recent cases of influenza A (H5N1) in Hong Kong, the CDC has issued recommendations for enhanced influenza surveillance in each state to be implemented immediately. California is in a key location to be one of the first states affected, given its many ports of entry and frequent traffic from Asia.

Surveillance for influenza is important to rapidly identify the importation of this strain or other pandemic strains into the state. For this reason, CDHS is seeking sentinel physicians to participate in outpatient influ-

enza diagnosis surveillance activities. Reports from sentinel physicians will allow CDHS epidemiologists to track the impact and intensity of influenza activity in California.

Currently, UC Davis Cowell Student Health Center participates in sentinel influenza surveillance in Yolo County. However, more Yolo County physicians are encouraged to become involved.

Providers interested in participating in the influenza surveillance program should contact Dr. Michele Cheung at mcheung@dhs.ca.gov or (510) 307-8610.

Ongoing Activities

Smallpox Vaccination

The YCHD expects to begin smallpox vaccination of about 50 public health and hospital disease investigators on March 26, 2003. Pending further CDC recommendations, there are no immediate plans to expand the smallpox vaccination program to include other health care professionals at this time.

National Infant Immunization Week

National Infant Immunization Week commences on April 16th to increase awareness of the vulnerability of un-immunized children when they are exposed to vaccine-preventable illnesses such as pertussis, influenza and pneumococcal disease. For more information about Yolo County activities planned for this event, please contact Vernetta Marsh at (530) 666-8645 or Jaime Ordoñez at (530) 406-4902.

Emergency Response Preparations

On March 17, the nation's threat level was raised from elevated risk ("yellow") to high risk ("orange"), the second highest level of the Homeland Security Advisory System. The change was prompted by concerns that terrorists might attempt to attack US targets worldwide in response to war with Iraq.

Whether dealing with a biological attack, such as smallpox, or an emerging infectious disease, such as SARS, health care professionals are key to disease identification, surveillance and control. Please consider the following actions for your facility as you prepare to respond to a local biological, chemical or radiological emergency.

- Ensure that your disease reporting protocols are in place and active in the event of any unusual disease occurrence or outbreak. Communicate promptly with the YCHD if you have concerns regarding the significance of a particular case.
- Update your contact information for public health, law enforcement, emergency medical services, hospitals and other health care providers in the community.
- Evaluate your facility and personnel to ensure the safety and security of both. Educate employees on emergency procedures for your facility.



Public Health Update

Yolo County Health Department

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Related Web Sites

- SARS
www.cdc.gov/ncidod/sars
- Pertussis
www.pertussis.org
- Tobacco Education Program
www.yolocounty.org/org/health/ph/tobacco.asp
- Child Care Linkages Project
www.ucsfchildcarehealth.org
- Sexually Transmitted Diseases
www.dhs.ca.gov/ps/dccdc/std/stdindex.htm
- Communicable Disease Reporting Guidelines
www.yolocounty.org/org/health/disease.asp

SARS Update

As of April 17, no suspect SARS cases had been reported in Yolo County. Cases have been identified in surrounding counties (Sacramento and Solano).

Between April 12-14, the CDC posted six revised or new guidelines on SARS infection control. Complete revisions may be accessed at the CDC web site www.cdc.gov/ncidod/sars. Changes include:

- SARS patients should not go to work or other public areas until 10 days after the resolution of fever provided respiratory symptoms are improving.
- Persons who may have been exposed to SARS should be vigilant for fever or respiratory symptoms over the 10 days following exposure; those who develop fever or respiratory symptoms should seek medical attention and should not go to work or other public areas. If symptoms do not progress to meet the SARS case definition within 72 hours after first symptom onset, the person may return to work or other public areas.
- Patients should not be hospitalized solely for the purpose of infection

control unless they cannot be discharged directly to their home or if infection precautions for the home are not feasible

It is also recommended that all primary care, urgent and emergency care facilities post SARS triage signage advising patients to alert staff if they meet the SARS case definition and have masks available for these patients.

Most questions to the Health Department regarding SARS have to do with patients who have respiratory illness but do not quite meet the current suspect SARS case definition (so-called "pre-SARS"). Anyone not having the travel history to affected areas or close contact with an ill person with that travel history is not considered a case. For consultation regarding questionable cases, call (530) 666-8645.

The Health Department regularly receives SARS updates and alerts electronically from the CDC and CDHS. To be added to a SARS e-mail list to receive copies of relevant SARS updates, contact tim.wilson@yolocounty.org with the e-mail address of your designated SARS contact person(s).

Smoking Burden \$85 Million

According to a study released by the UCSF Institute for Health and Aging, a conservative estimate of the cost of smoking in California due to lost productivity and direct healthcare costs is nearly \$16 billion annually. Yolo County's estimated costs total over \$85 million per year (see table).

In contrast, every \$1 invested in the California Tobacco Control Program saves an estimated \$3 in direct healthcare costs and \$5 in lost productivity costs. For information regarding local tobacco control resources and activities, contact Steve Jensen at (530) 406-4906. Patients seeking to quit smoking may also be referred to the 1-800 NO-BUTTS hotline.

Estimated Annual Smoking Costs, Yolo County.

| | |
|---------------------------------------|---------------------|
| Lost Productivity (Illness and Death) | \$34,135,000 |
| Hospitalization | \$20,781,000 |
| Ambulatory Care | \$14,325,000 |
| Prescriptions | \$9,227,000 |
| Nursing Home Care | \$6,372,000 |
| Home Health | \$584,000 |
| Total Cost | \$85,424,000 |

Source: Max W. Rice DP, Zhang X, Sung H-Y, Miller L. The Cost of Smoking in California, 1999, CDHS, 2002.

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Pertussis PCR Testing

Pertussis PCR testing is available for a limited time to Yolo County providers at no cost. **PCR has been useful in recently diagnosing at least two Yolo County cases that were culture negative.** Contact the Public Health Lab regarding PCR sample submission.

Pertussis cases continue to occur primarily among junior high and high school-age children in Davis and Woodland. Circulation in this age group is problematic in that the disease tends to remain undiagnosed and/or untreated allowing for continued transmission in the community. This is most dangerous for exposed infants.

In 2002, five infants died in California due to pertussis. While no infant deaths have been associated with this outbreak in Yolo County, severe morbidity requiring hospitalization and ventilatory support has occurred.

Pertussis is a preventable disease. According to California Code of Regulations Title 17, all suspected pertussis cases must be reported within one working day. Failure to do so may result in citation and fine. Providers placing a coughing patient on antibiotics to cover the possibility of pertussis &/or submitting samples for testing, should also submit a Confidential Morbidity Report to the Health Department to help prevent spread of disease to vulnerable populations..

Ongoing Activities

Smallpox Vaccination Program: The smallpox vaccination program is scheduled to resume on April 23. Vaccination was suspended statewide following concerns that vaccinees with heart disease or at high risk for heart disease may experience post-vaccinal cardiac complications. The CDC has concluded that history of cardiac conditions is a contraindication for receiving smallpox vaccination at this time. No adverse reactions were documented in Health Department personnel vaccinated last month.

Childcare Health Linkages Project: The Health Department is now a partner in the Childcare Health Linkages Project which helps childcare programs identify their health and safety needs. Project activities include coordinating health, dental and vision screenings, ensuring families have health insurance, and reviewing health records to achieve immunization compliance, regular provider visits and dental care. For more information, contact project coordinators Judy Lehman, (530) 666-8645, or Donna Nevraumont, (916) 375-6386.

Sexually Transmitted Diseases

Sexually transmitted diseases such as chlamydial infection and gonorrhea are among the most frequently reported diseases in Yolo County. As many cases of these diseases are asymptomatic, undiagnosed or untreated,

true case numbers are likely much higher than reported. Chlamydial infection case rates (not shown) are highest among adolescents and young adults in Yolo County. Short course antibiotics are often effective treatment for sexually transmitted diseases, but only if all sexual partners also complete treatment.

Number of Selected SEXUALLY TRANSMITTED Diseases Reported among Yolo County Residents, 1996-2002*.

| Disease | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|--------------------------------|------|------|------|------|------|------|------|
| Chancroid | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Chlamydial Infection | 197 | 215 | 258 | 242 | 286 | 272 | 366 |
| Gonorrhea | 36 | 18 | 22 | 25 | 35 | 37 | 28 |
| Non-Gonococcal Urethritis | 2 | 1 | 0 | 0 | 0 | 2 | 10 |
| Pelvic Inflammatory Disease | 6 | 1 | 3 | 1 | 0 | 5 | 2 |
| Syphilis - congenital | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Syphilis - latent | 4 | 10 | 12 | 8 | 9 | 7 | 9 |
| Syphilis - primary & secondary | 5 | 0 | 0 | 0 | 0 | 2 | 1 |

Data Source: Yolo County Health Department. * Note: data are represented by report year rather than onset year. Data for 2002 are provisional.



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Volume 1, Issue 5 May 2003

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SARS Update

No suspect SARS cases have been reported in Yolo County to date.

A decline in travel to and from SARS-affected areas corresponds to a decrease in the number of suspect SARS cases reported in the US and California. However, continued surveillance and infection control activities are recommended.

As of May 15, 2003, California had a reported total of 62 cases of suspect and probable SARS from 23 local health jurisdictions.

Of the California cases:

- there have been no deaths
- 37% required hospitalization
- 95% were associated with travel
- 3 were household contacts of SARS cases
- median age was 40 years (range 1.5-85 years)
- 57% were male
- Asian/Pacific Islanders ac-

counted for 55% of the cases; 39% were White

- one patient has tested positive for SARS-associate coronavirus (SARS-Co-V).
- there is no evidence of community transmission of SARS in California.

Current SARS information is available at the CDC web site www.cdc.gov/ncidod/sars. The CDHS SARS information web site www.dhs.ca.gov/ps/dcdc/disb/sars.htm contains the daily California case count and SARS facts and travel advice in English, Chinese, and Vietnamese.

California residents can also get basic information about SARS in English and Spanish by calling the Governor's Office of Emergency Services Safety Information and Referral Line toll-free at (800) 550-5234, in Chinese and Vietnamese at (800) 750-2858, or TDD for the hearing impaired at (800) 550-5281.

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Lyme Disease

More than half of the Lyme disease cases reported in California are contracted during the late spring and early summer months. A recent study in California estimates that up to 15% of host ticks (typically *Ixodes pacificus*) in a given area may be infected with the bacterium *Borrelia burgdorferi*, and capable of transmitting Lyme disease.

Because of the small size of host ticks, frequent tick inspections while in tick habitat and a daily thorough check of the entire body should be encouraged for people who live or recreate where ticks occur. *Ixodes pacificus* is also the primary vector for human anaplasmosis, another bacterial disease. All tick-borne diseases are reportable to the Health Department.

Related Web Sites

SARS

www.cdc.gov/ncidod/sars

Pertussis

www.pertussis.org

Lyme Disease

www.cdc.gov/ncidod/dvbid/lyme/index.htm

West Nile Virus

www.westnile.ca.gov

Zoonotic Diseases

www.cdc.gov/healthypets

Communicable Disease Reporting Guidelines

www.yolocounty.org/org/health/disease.asp

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West Nile Virus

In 2002, one case of human illness caused by West Nile virus (WNV) was detected in Los Angeles County. More cases are expected among California residents this year as summer approaches.

Of those infected with WNV, it is estimated that about 80% will remain asymptomatic. About 1 out of 150 infected persons (<1%) may develop signs of severe

neurologic illness.

The California Department of Health Services (CDHS) recommends screening for WNV for all cases of encephalitis, aseptic meningitis and atypical Guillain-Barré Syndrome. For specifics regarding WNV testing, please contact the Yolo County Public Health Laboratory at (530) 666-8645. For more information about West Nile virus infection and disease reporting, please contact Public Health Nursing at (530) 666-8645.

Ongoing Activities

Pertussis: As of May 15, 19 pertussis cases (4 lab-confirmed) have been diagnosed among Yolo County residents with date of onset on or after April 1. Of these, 84% were Woodland USD students. Students who may have been exposed to known cases may receive letters from their school advising prophylaxis.

Adult Immunization Satellite Broadcast: The Adult Immunization Update 2003 may be viewed June 26 9:00-11:30 am at the Yolo County Administration Building, 625 Court St., Woodland. Program objectives include discussion of vaccines recommended for adults and strategies to increase adult immunization. Registration (\$5 fee) is open to all interested healthcare professionals; complimentary continental breakfast, CEU/CME available. Please RSVP with CJ Evans at (530) 666-8645.

Norovirus: Several outbreaks have been reported in long-term care facilities in many Bay Area counties since the beginning of the year (none in Yolo County this year).

Zoonotic Diseases and Vector-Borne Diseases

Selected diseases transmissible from animals to humans (zoonoses) and diseases transmitted by mosquitoes, ticks and fleas (vector-borne diseases) are reportable to the Health Department.

While some of these diseases occur relatively rarely, prompt diagnosis and reporting of single cases may trigger significant disease control, vector control and investigation activities (e.g., rabies, hantavirus, plague, anthrax, West Nile virus.)

Number of Selected VECTOR-BORNE or ZONOTIC Diseases Reported among Yolo County Residents, 1996-2002*.

| Disease | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|-------------------------------|-----------------------|-----------------------|------------------------|--------------|--------------|--------------|----------------|
| Hantavirus | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Ehrlichiosis | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lyme disease | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Malaria (acquired outside US) | 1 | 1 | 1 | 3 | 4 | 2 | 2 |
| Q-fever | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rabies in Animals | 4 (3 skunk, 1 bat) | 5 (4 skunk, 1 bat) | 12 (6 skunk, 6 bat) | 3 (3 bat) | 4 (4 bat) | 6 (6 bat) | 12 (12 bat) |
| Rabies in Humans | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rocky Mountain Spotted Fever | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| West Nile virus | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Data Source: Yolo County Health Department. * Note: data are represented by report year rather than onset year. Data for 2002 are provisional.



Public Health Update

Yolo County Health Department

"Investing in Our Community's Future"

Volume 1, Issue 6 June 2003

Inside this Issue

- **Monkeypox**
- **Tuberculosis**
- **Diabetes & Obesity Prevalence**
- **CD Updates**
 - * Toxic Shock Syndrome
 - * SARS
 - * Influenza
- **Pertussis Case Rate**

Monkeypox

As of June 18, 87 cases of monkeypox have been investigated in Illinois, Indiana, and Wisconsin. Preliminary findings indicate that the primary route of transmission to humans is from close contact with infected mammalian pets (especially prairie dogs).

For most patients, a febrile illness is accompanied by a papular rash; respiratory symptoms, lymphadenopathy, and sore throat were also prominent signs and symptoms. A total of 20 (27%) patients have been hospitalized, including a child with severe encephalitis.

Monkeypox is caused by an orthopoxvirus that clinically resembles varicella and smallpox but differs both biologically and epidemiologically. After an incubation period of 7–17 days, the disease is characterized by the onset of fever, headache, backache, and fatigue. A major clinical difference between monkeypox and smallpox is pronounced lymphadenopathy in a majority of patients with monkeypox. Relatively inefficient person-to-person transmission has been documented for monkeypox, and

the case-fatality rate has been approximately 1%–10% in Africa, with higher death rates among young children.

The CDC recommends that persons seeking medical care with unexplained fever, rash, or prominent lymphadenopathy should be asked about expo-

. . . persons seeking medical care with unexplained fever, rash, or prominent lymphadenopathy should be asked about exposure to unusual or exotic pets . . .

sure to unusual or exotic pets, especially small mammals such as prairie dogs or Gambian giant rats.

If monkeypox infection is suspected, standard, contact, and airborne precautions should be applied in all healthcare settings. Providers who suspect monkeypox should report cases to the Health Department. Additional information is available at www.cdc.gov/ncidod/monkeypox.

Source: CDC MMWR 52 (24) June 20, 2003.

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Related Web Sites:

CDC
www.cdc.gov

CA Dept. of Health Services
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World Health Organization
www.who.int

Tuberculosis in 2003

In the first five months of 2003, 6 cases of active tuberculosis (TB) were reported to the Health Department. Cases resided in all areas of Yolo County and included members of all race/ethnic groups. All 6 were reactivated cases of TB and included 5 sputum (+) pulmonary cases (1 multi-drug resistant) and 1 extra-pulmonary case.

It is unlikely these cases signal a trend in Yolo County, however the fact that 4 of the 6 were ultimately diagnosed in urgent care settings (after seeking primary care for respiratory symptoms) may suggest that early tuberculosis screening of symptomatic cases with tuberculin skin testing and chest X-ray may be of benefit in some situations, especially among individuals with known risk factors for TB (age > 65, born outside US, underlying chronic disease, etc.)

For further information regarding tuberculosis control, please contact Yolo County Tuberculosis Control Coordinator, Marge Davison, at (916) 375-6380.

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Diabetes and Obesity Prevalence

According to a recent report by the UCLA Center for Health Policy Research, 19% of all Yolo County adults are obese and an additional 32% are overweight. This same study estimates that 5,950 Yolo County adults (4.6% of the adult population) suffer from diabetes.

Being obese or overweight and not engaging in regular physical activity significantly elevates the risk of developing type 2 diabetes. Besides diabetes, many other

chronic conditions can be prevented or more easily managed among people who exercise regularly.

Agencies and health care providers interested in addressing obesity and related chronic diseases in Yolo County are invited to participate in the newly formed Yolo County Y-Fit Task Force. This group meets monthly to discuss interventions, policy and opportunities to encourage people to be fit and remain active. Contact Cheryl Boney at (530) 666-8645 for more information.

Toxic Shock Syndrome: Two cases of TSS involving women using super-absorbent tampons were recently reported in San Diego County. These two cases illustrate that the use of super-absorbent tampons continues to be a risk factor for the development of TSS. On average, 21 cases are reported in California annually. No TSS cases have been reported in Yolo County in the past 5 years.

SARS: No cases have been reported in Yolo County to date. Persons traveling from SARS-affected areas are advised upon arrival in the US to follow CDC guidance regarding self-monitoring of health status and to seek medical care if they experience fever or respiratory illness.

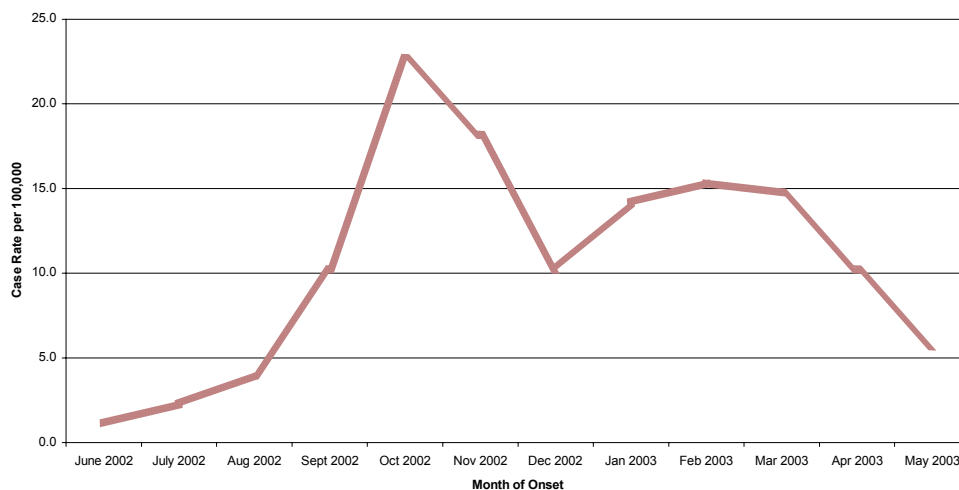
Influenza Surveillance: Surveillance results for the past influenza season (2002-03) suggest that Yolo County experienced a light flu season with only 15 influenza A/B positive cases detected by sentinel surveillance sites.

Declining Pertussis Case Rate

In May 2003, 10 new pertussis cases were reported among Yolo County residents, including 2 lab-confirmed cases. Most cases were junior high school students or were contacts of junior high school students. The majority of cases were reported in Woodland with cases also reported in Davis and Esparto.

The pertussis case rate in Yolo County has declined steadily over the past 2 months (see graph). However, other Northern California counties report increased case rates. It is especially important to continue to keep pertussis in mind as a differential diagnosis for cough illness and to promptly report suspected cases to the Health Department for effective disease control.

Pertussis Case Rate by Month of Onset, Yolo County 2002 - 2003.





Public Health Update

Yolo County Health Department

“Investing in Our Community’s Future”

Volume 1, Issue 7 July 2003

Inside this Issue

- Foodborne Outbreak Management
- West Nile Virus Testing
- WIC Formula Change
- CD Updates: Hemodialysis Alert, Hepatitis A, SARS, Monkeypox, Pertussis
- Avoidable Hospitalizations

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Cooperative Management of a Foodborne Disease Outbreak

On July 6-7, at least 25 people presented to county emergency rooms for acute onset of severe gastrointestinal illness (primarily vomiting and nausea). Patients were treated symptomatically with most symptoms resolving within 12-24 hours of onset. One patient required hospitalization for severe dehydration. All patients reported having attended a baby shower at a private residence on July 6.

The Health Department was promptly notified of a possible foodborne outbreak by hospital emergency room personnel. Preliminary investigation suggested that the outbreak was not ongoing and that illness was limited to attendees who reported having eaten at the baby shower. Food sources were investigated to prevent further consumption of any contaminated food items.

Food histories were obtained from most attendees and food samples were obtained for possible testing. Stool samples were also obtained from two ill attendees.

About 61% of attendees reported illness. *Staphylococcus aureus* has been isolated in three of the food items

served at the baby shower.

The onset, symptomatology and duration of this outbreak are characteristic of food contamination by bacterial toxin, especially toxins produced by *S. aureus* and *Bacillus cereus*. Improper food handling/refrigeration are often

Preliminary investigation suggested that the outbreak was not ongoing and that illness was limited to attendees who reported having eaten at the baby shower.

associated with outbreaks of this nature. On rare occasions, intentional pesticide poisoning and heavy metal contamination of food have also been reported to cause similar outbreaks.

A coordinated and timely response to an outbreak is key in controlling further disease in the community. In this outbreak, emergency room, infection control, public health personnel and private citizens were all actively involved in promptly detecting, reporting and investigating this outbreak. Much thanks to all involved!

West Nile Testing at County Lab

As of July 23, 11 cases of WNV have been identified in the US (none in California). This is similar to the number reported in the US at this time last year. Decreased incidence of WNV has been observed in states like New York where much of the human population has been exposed to the virus over the last few years and has presumably acquired some immunity to the disease.

The Yolo County Public Health Lab and

CDHS are now providing testing services to assist in the evaluation of cases of encephalitis, aseptic meningitis (>16 yo) and acute flaccid paralysis/atypical Guillain-Barré Syndrome. Contact the Lab for more information about WNV testing at (530) 666-8644.

Please find enclosed the WNV brochure developed for Yolo County residents. You may download more copies from the Yolo County Health Department web site for distribution or request copies from the Health Department.

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WIC Formula Change

Effective August 1, the California Women, Infants and Children (WIC) Supplemental Nutrition Program will change its formula contract to provide Similac Advance and Isomil as the standard infant formulas for WIC infants who receive formula each month.

Almost two-thirds of infants born in California participate in the WIC program and approximately 90% of

them receive some amount of formula. Therefore, this change will have a wide impact on families. Changing formula should not cause health problems and any discomfort related to formula change is generally temporary. WIC actively supports breastfeeding and the program's provision of infant formula is not intended to compete with breastfeeding. For more information, please contact Yolo County WIC Coordinator Lisa Webster at (530) 666-8447.

Outbreak among Hemodialysis Patients: CDHS is investigating an outbreak of bloodstream infections caused by *Candida parapsilosis* in hemodialysis patients at a dialysis center in another county. Dialysis centers statewide are being asked to report unusual clusters of bloodstream infections in their patients and to immediately report them.

Hepatitis A: A multi-state outbreak of Hepatitis A associated with attendance at outdoor concerts involving the band The String Cheese Incident has been identified by the CDC. There is concern that fans following the band from concert to concert may be unwittingly facilitating disease transmission. The String Cheese Incident will be playing in San Francisco July 24 - 27 and in Trinity County July 29 - 30. The CDC and CDHS are asking California health care providers and public health personnel to report Hepatitis A cases associated with outdoor concert attendance.

SARS: The CDC has ended all SARS-related travel alerts. No new SARS cases have been identified worldwide since June. A new case definition based on convalescent serology will be used for future SARS cases beginning August 1.

Monkeypox: No new cases of monkeypox have been identified in the US since June. All cases identified to date have been associated with contact with infected prairie dogs.

Pertussis: Few cases have been reported in Yolo County in June or July. Several neighboring California counties are reporting pertussis cases.

"Avoidable Hospitalizations" among Children

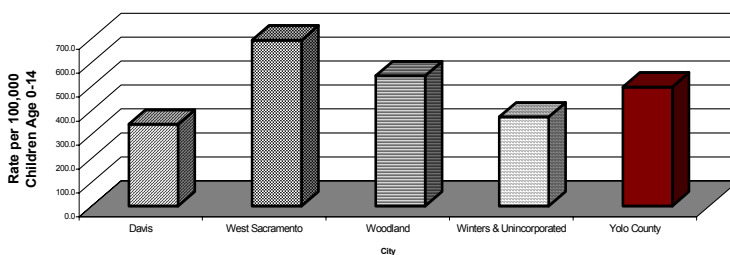
Ambulatory care sensitive (ACS) conditions can often be managed on an outpatient basis and generally do not require hospitalization if managed properly.

ACS hospitalizations reflect both the ability to effectively manage certain diseases at home as well as the ability to access/utilize quality primary care when it is needed.

ACS conditions resulting in hospitalization among Yolo County children include asthma, bacterial pneumonia, dehydration, gastroenteritis and diabetes.

ACS hospitalization rates are highest among West Sacramento and Woodland children. Regardless of city of residence, children from low income families represent about 50% of these hospitalizations.

ACS Illness Hospitalization Rate among Children, Yolo County, 1996-2000.





Public Health Update

Yolo County Health Department

“Investing in Our Community’s Future”

Volume 1, Issue 8 August 2003

Inside this Issue

- **Latent Tuberculosis**
- **West Nile Virus**
- **Influenza Surveillance**
- **Viral Meningitis**

Latent Tuberculosis

To date, 12 cases of active tuberculosis (TB) have been reported to the Health Department in 2003. The majority of these cases were diagnosed radiologically in urgent care settings often after seeking primary care for respiratory symptoms.

We are urging physicians and infection control practitioners to:

- **MAINTAIN a high index of suspicion of tuberculosis** with patients born in TB-endemic areas (esp. Mexico, Central America, former USSR, Southeast Asia) with a history of cough, weakness or weight loss *regardless of age*
- **INSTITUTE airborne infection control precautions in the clinical setting** for all suspected cases of tuberculosis until it is ruled out as a diagnosis
- **INSTRUCT suspected cases** regarding appropriate home isolation and infection control.
- **NOTIFY the Health Department** about all suspected case by telephone at (916) 375-6380 or by faxing a Confidential Morbidity Report form to (530) 669-1549.

For further information or assistance regarding tuberculosis control, please contact Yolo County Tuberculosis Control Coordinator, Marge Davison, at (916) 375-6380.

Contact Us

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World Health Organization
www.who.int

West Nile in California

WNV activity has been detected in Southern California in mosquito pools and in sentinel chicken flocks. No human cases of disease acquired in California have been reported to date.

Additionally, preliminary tests suggest WNV infection in at least three Californians who are believed to have become infected while traveling out of state. One of these patients was hospitalized with acute flaccid paralysis. Confirmatory tests for the cases are pending.

As of August 27, the CDC reported 1,442 confirmed human cases in the US, including 21 deaths.

WNV infections in humans in the US tend to peak in late summer/early fall.

West Nile Testing

The Yolo County Public Health Lab is equipped to screen for WNV in the evaluation of cases of encephalitis, aseptic meningitis (>16 yo) and acute flaccid paralysis/atypical Guillain-Barré Syndrome. All specimens are then forwarded to the state Viral and Rickettsial Disease Lab for additional testing

Please contact Stan Kwan at the Yolo County Public Health Lab for more information about WNV testing at (530) 666-8644.



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Influenza Surveillance: As influenza season approaches, the California Department of Health Services is seeking the assistance of sentinel sites for outpatient flu surveillance. Influenza surveillance is especially important this year in light of the recent identification of human infections with avian influenza strains abroad and the need for heightened alertness for possible pandemics. In addition, monitoring for influenza-like illnesses overlaps with many aspects of bioterrorism surveillance and SARS surveillance. There is currently one sentinel influenza site in Yolo County.

Sentinel participants may consist of any primary care physician, nurse practitioner, or physician assistant who is willing to report once a week on the number of patients with influenza-like illness (CDC definition) and the total number of patients they see each week. Reporting takes just a few minutes a week and in return, participants will receive weekly summaries on influenza activity, and free subscriptions to the CDC MMWR and Emerging Infectious Diseases journals. Please contact Michele Cheung, MD at mcheung@dhs.ca.gov or (510) 307-8610 for further information regarding this project.

CDHS is also recruiting additional laboratories to report weekly on the number of influenza, RSV, and other respiratory virus detections and isolations they receive. For more information, please contact Hugo Guevara at hguevara@dhs.ca.gov or (510) 307-8565.

For more information about the CDHS Influenza Surveillance Program, please visit www.dhs.ca.gov/dcdc/vrdl/html/fluintro.htm

Viral Meningitis

Several California counties, including Sacramento, Imperial and Riverside, have observed an increase in the number of reported aseptic meningitis cases this year. Other states have reported a similar increase (MMWR August 15, 2003 52:32). Of those cases where an etiologic agent has been identified, enteroviruses (esp. echovirus 9 and echovirus 30) have been most frequently isolated.

Yolo County has also experienced a slight increase in aseptic meningitis cases with 17 cases reported for calendar year 2003. Yolo County typically reports about 5 to 12 cases of aseptic meningitis per year.

Treatment of aseptic meningitis is symptomatic with most patients recovering in about 1 week. Severe ill-

ness and death due to aseptic meningitis are uncommon.

Enteroviral infections occur most frequently June-Oct (much like WNV). Transmission occurs from person to person through fecal-oral and oral-oral routes, respiratory droplets and fomites. Good hygienic practices, such as frequent and thorough hand washing, disinfection of contaminated surfaces with household cleaners, and avoidance of shared utensils or drinking containers are recommended to help interrupt transmission.

Encephalitis and meningitis are reportable conditions regardless of etiology (viral, bacterial, fungal, or parasitic). The table below shows the number of cases reported among Yolo County residents diagnosed with encephalitis, aseptic meningitis and meningococcal infection (includes meningococcal meningitis and meningococemia).

Number of ENCEPHALITIS and MENINGITIS Infections Reported among Yolo County Residents, 1997-2003*.

| Disease | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 to date (8/27/03) |
|-------------------------|------|------|------|------|------|------|------------------------|
| Encephalitis | 0 | 2 | 0 | 0 | 2 | 0 | 0 |
| Aseptic Meningitis | 9 | 12 | 5 | 6 | 5 | 10 | 17 |
| Meningococcal Infection | 1 | 1 | 5 | 0 | 2 | 4 | 2 |

Data Source: Yolo County Health Department. * Note: data are represented by report year rather than onset year.



Public Health Update

Yolo County Health Department
“Investing in Our Community’s Future”

Volume 1, Issue 9 September 2003

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- WNV Surveillance Update
- WNV Poliomyelitis-like Syndrome
- SARS case in Singapore
- Viral Hepatitis

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Multidrug-Resistant TB Clinical Consultation Service

Multidrug-resistant tuberculosis (MDR-TB) is defined as resistance to at least isoniazid and rifampin, the two most potent anti-tuberculosis drugs.

In 2002, 43 incident cases of MDR-TB were reported in California. This represented 1.9% of all TB cases reported in the State, and was the highest annual proportion of MDR-TB cases in California since drug susceptibility testing was initiated in 1994. The majority were male (63%), the median age was 38 years, and 35 (81%) were foreign-born. Many had known risk factors for MDR-TB, including 10 (23%) who had a previous diagnosis of TB. Of the foreign-born cases, most originated in Mexico, the Philippines, or Vietnam. On average, cases were resistant to five anti-TB drugs, with reported resistance to as many as nine drugs in one individual.

Yolo County Health Department is currently overseeing the treatment of its first MDR-TB case which was reported in 2003. Prior to this case, three one-drug resistant TB cases had been reported over the past 5 years to the Health Department.

The clinical management of MDR-TB cases is challenging and necessitates treatment for at least 18-24 months, often with drugs that have greater toxicity than usual first-line anti-TB drugs. Such cases have higher rates of relapse and

mortality than do pan-sensitive cases of TB. Because of these factors, the recently released California Department of Health Services/California Tuberculosis Controllers Association (CDHS/CTCA) tuberculosis treatment guidelines advise that all cases of MDR-TB should receive consultation by an expert in the treatment of MDR-TB.

In response to the increased need for such consultation, the CDHS TB Control Branch has implemented an MDR-TB clinical consultation service. This service takes direct

In 2000 . . . 1.9% of all TB cases reported in the State [were MDR-TB] . . . the highest annual proportion of MDR-TB cases in California since drug susceptibility testing was initiated in 1994.

requests for consultation from treating physicians and local health departments throughout the State. It provides clinical and case management guidance, as well as assistance in drug procurement and susceptibility testing. The service also provides consultation on the treatment of latent TB infection in contacts to MDR-TB cases. To obtain clinical consultation for cases of MDR-TB and their contacts, call either Dr. Sundari Mase at (510) 540-2313 or Ann Raftery at (916) 202-0639. For further information regarding TB Control, please contact Yolo County Tuberculosis Control Coordinator Marge Davison at (916) 375- 6380.

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West Nile Virus Surveillance

- On September 15, CDHS announced that a dead crow found in Los Angeles County tested positive for WNV. This follows detection of WNV in mosquito pools and sentinel chicken flocks in other Southern California counties.
- No human cases of WNV acquired in California were reported as of September 16.
- At least 8 imported cases (cases of disease acquired outside California) have been reported in California this year.
- As of September 16, 3,659 cases (including 67 deaths) were reported in the US in 2003.

West Nile Virus Poliomyelitis-Like Syndrome

WNV poliomyelitis-like syndrome (also described as acute flaccid paralysis (AFP) or atypical Guillain-Barré Syndrome) is an emerging clinical syndrome in the US.

This condition is rare (less than 1% of all WNV-infected persons). Limited data suggest that unlike encephalitis cases who are typically elderly or immune compromised, poliomyelitis-like cases tend to be younger and often lack co-morbid medical conditions. Although long term follow-up data is not yet available, it appears that many of these patients experience significant disability and delayed recovery following infection.

WNV screening for patients who meet clinical criteria is available through the Yolo County Public Health Lab. Contact Lab Director Stan Kwan for more information.

Singapore Reports "New Probable" SARS Case: On September 9, 2003, the Singapore Ministry of Health reported what health officials there are calling "a new probable case" of severe acute respiratory syndrome (SARS) in Singapore on the basis of preliminary laboratory test results.

According to a statement on the WHO SARS Web site, "The Singapore case is mild, isolated, and has not produced secondary cases, and therefore is not regarded as a public health concern."

Investigations are under way to confirm SARS-CoV infection and determine possible exposures of the patient. CDC will continue to work with Singapore Ministry of Health officials to monitor the situation. (CDC Press Release, 9/10/03.)

Viral Hepatitis

Different viruses may cause infection and inflammation of the liver. Illnesses caused by hepatitis viruses are reportable diseases. The table below shows the number

of cases reported for viral hepatitis in Yolo county 1996-2002. The apparent increase in reported hepatitis C cases since 1997 is attributed to changes in case definition and reporting requirements in 1998.

Number of VIRAL HEPATITIS Infections Reported among Yolo County Residents, 1996-2002*.

| Disease | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------------------------|------|------|------|------|------|------|------|
| Hepatitis A | 26 | 23 | 33 | 38 | 34 | 5 | 9 |
| Hepatitis B (acute and chronic) | 13 | 23 | 43 | 64 | 74 | 49 | 59 |
| Hepatitis C (chronic) | 62 | 63 | 159 | 150 | 181 | 141 | 95 |
| Hepatitis D | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Hepatitis Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Data Source: Yolo County Health Department. * Note: data are represented by report year rather than onset year.



Public Health Update

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"Investing in Our Community's Future"

Volume 1, Issue 10 October 2003

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- Prematurity Campaign
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Bats and Rabies

Since September 1, eight bats submitted from Yolo County have tested positive for the rabies virus. This is not unusual for Yolo County at this time of year. The bats were from areas near Woodland, in the Capay Valley and Davis. No human contact with any of these bats was confirmed, however prophylaxis with rabies immunoglobulin was required by persons where exposure could not be ruled out.

Rabies is almost invariably fatal. A Trinity County man died from rabies last month after being bitten by a rabid bat in his home. The patient sought medical care several weeks after the bite with symptoms of rabies infection. Administration of rabies immunoglobulin soon after the bite would likely have saved this man's life.

These events are reminders that any bats, healthy, sick or dead, that have come in contact with people, pets or livestock should be isolated and contained for testing whenever possible. Bat bites often go unnoticed, therefore bats found inside homes should be

reported immediately at (530) 666-8646 or Yolo County Animal Services at (530) 668-5287.

Other wild animals in our area known to carry rabies virus are skunks and foxes. Pet owners are advised to have pets vaccinated against rabies and to keep vaccination current.

Bat bites often go unnoticed, therefore bats found inside homes should be reported to the Health Department

The California Code of Regulations requires health care providers and veterinarians to report all animal bites to the Health Department. These reports are promptly investigated to evaluate risk of rabies exposure, ensure proper medical follow up and testing or quarantine of animals for rabies.

Please contact the Health Department for further information regarding animal bites and rabies at (530) 666-8646.

Pertussis Case

One culture-confirmed case of pertussis in a 3-month old West Sacramento infant was reported in September. The case required hospitalization. Unfortunately, the case was reported only after culture results came back positive rather than at the time of sample submission. This delay in reporting increased the number of people exposed to pertussis and referred for prophylaxis. Contact follow-up of this case

was completed by the Health Department. No new cases have since been reported.

Pertussis is endemic in Northern California. Every year California infants die from this preventable disease. It is crucial that patients with persistent severe cough for whom pertussis may be considered a differential diagnosis be reported to the Health Department within one working day of identification for contact follow up (California Code of Regulations, Title 17).

Prematurity Awareness Day: Nov 18

Premature or preterm birth is the leading obstetrical problem in the United States affecting over 476,000 infants each year.

Premature infants have a higher risk of death in their first year of life and often suffer from chronic problems that can lead to lifelong disability and disease as a result of being born prematurely. Since 1981, the rate of premature births has increased 28% with an annual cost of \$11 billion for in-patient care alone. In Yolo County, one out of every 12 infants is born prematurely each year.

To reverse the escalating rate of prematurity in the

United States, the March of Dimes is partnering with other health care organizations to launch a 5-year, \$75 million campaign. This campaign seeks to reduce prematurity and infant death through advocacy, professional education, community outreach and research support. This program is similar to the previously successful campaign by the March of Dimes directed at polio. This campaign is scheduled to begin on November 18, 2003, the first ever National Prematurity Awareness Day.

For more information about this campaign or to participate in activities planned for November 18, please contact the March of Dimes at (916) 922-1913 or Alida Hrivnak at (530) 666-8645.

West Nile Virus Human Case in CA: The first 2003 California case in a human was reported in Riverside County on Oct. 9. The patient was diagnosed with aseptic meningitis and has since recovered. Multiple surveillance sites in Southern California have detected WNV in mosquito pools, sentinel chicken flocks and dead birds. Mosquito activity decreases through late October/November and with it (hopefully) the likelihood of WNV reaching Northern California this year also declines.

Lead Poisoning

In September, a two-year old Yolo County child was identified with multiple elevated blood lead levels as high as 75 µg/dL (normal <10 µg/dL). This child was asymptomatic but had been observed peeling and eating paint from walls in the home. Testing was requested by a sibling who had heard that eating paint could cause lead poisoning. The child was hospitalized and underwent chelation therapy for lead poisoning.

Multiple sources of lead in the environment still result in cases of lead poisoning in our area . .

The paint in the home was subsequently tested and found to contain lead. No other sources of lead were identified and no other children in the home were found to have elevated blood lead levels. The family has moved to another home and the child is doing well.

Lead poisoning is less common in the United States today than in years past with removal of lead from gaso-

line and banned use of lead-based paint in homes in 1978. However, multiple sources of lead in the environment still result in cases of lead poisoning in our area. Lead-based paint in older homes is the most common source of lead poisoning.

Other lead sources:

- Food cooked or stored in lead-glazed pottery.
- Lead dust on clothing of family members who work with lead (e.g., radiator repair, battery recycling)
- Cultural remedies and cosmetics: *Greta* and *azarcon* (home remedies for stomachache), *alkohl* or *kohl* (cosmetic placed around the eyes)

Lead poisoning is often asymptomatic. Even relatively low blood lead levels may result in developmental delays, learning disabilities and behavioral problems. These problems may be irreversible. In rare cases, lead poisoning may result in death

Lead poisoning resources and links for providers and families are available at www.yolohealth.org. For more information regarding lead poisoning prevention, screening and treatment, please contact the Childhood Lead Poisoning Prevention Program at (530) 666-8645.



Public Health Update

Yolo County Health Department

"Investing in Our Community's Future"

Volume 1, Issue 11 November 2003

Inside this Issue

- Respiratory Etiquette
- SARS Surveillance
- Regional SARS Meeting

Respiratory Etiquette in the Age of SARS

To reduce the risk of transmission of not only SARS but other seasonal infections such as influenza, a **patient respiratory hygiene program should be developed and implemented in all healthcare facilities.**

Patients entering any healthcare facility should be educated about the importance of the respiratory hygiene program. This can be accomplished by posting signs in appropriate languages at all entrances used by patients who enter hospitals, emergency departments, physicians' offices or outpatient clinics. In addition to signs, a respiratory hygiene program should:

- Provide surgical masks to all patients with symptoms of a respiratory illness (fever or cough) with instructions on proper use and disposal.
- Place a box of surgical masks as close to the entry as possible.
- Instruct patients to cover their nose and mouth with a tissue when coughing or sneezing.
- Provide a small paper or plastic bag for mask and tissue disposal.
- Provide a readily accessible waterless hand hygiene product and instruct patients to decontaminate their hands after contact with respiratory secretions and before contact with a healthcare worker, family member and registration personnel.
- Separate patients with respiratory illness from other patients by either placing them into a cubicle,

examination room, or physical separation from others by at least 3 feet.

These recommendations are based upon the recently released California Department of Health Services (CDHS) SARS Planning Guide for Healthcare Facilities. A electronic version of this 15-page document is also available at www.yolohealth.org.

The Health Department will be distributing the laminated sign shown below to health care providers.

Contact Us

Yolo County Health Department
www.yolocounty.org/org/health

Fax CMRs to (530) 669-1549

10 Cottonwood St.
Woodland, CA 95695
(530) 666-8645
fax (530) 666-8674

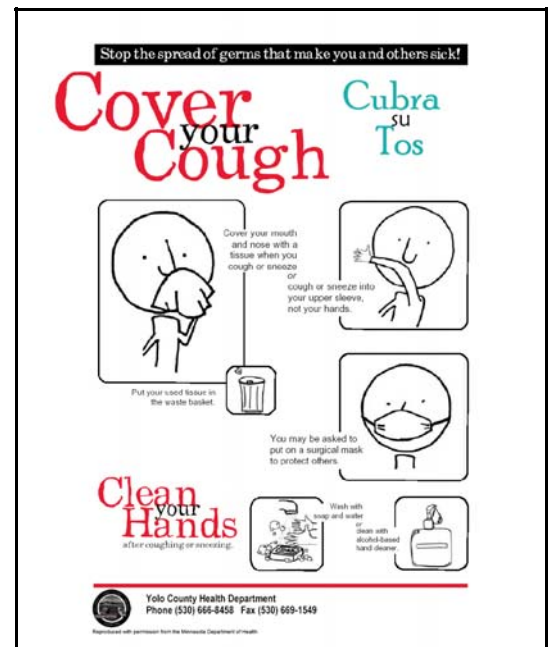
500-B Jefferson Blvd.
West Sacramento, CA 95605
(916) 375-6380
fax (916) 375-6382

Related Web Sites:

CDC
www.cdc.gov

CA Dept. of Health Services
www.dhs.ca.gov

World Health Organization
www.who.int



Additional copies may be requested from Vernetta Marsh at (530) 666-8645. This sign and other SARS information may also be found at www.yolohealth.org.

SARS Surveillance Now

If SARS were to return, it will likely be in a setting outside the United States. At transmission level 0, when there is no SARS activity anywhere in the world, it is important to set an index of suspicion that can detect early cases but not impose an unreasonable work load on health care providers and local health departments. Surveillance at transmission level 0 is designed to identify persons with pneumonia who have known exposure risk factors for SARS. **In order to identify such persons, every patient hospitalized with radiographic evidence of pneumonia should be screened with the following questions:**

In the 10 days prior to the onset of respiratory symptoms:

- Have you returned from travel to China, Hong Kong or Taiwan or had close contact with any person returning from those places who is ill with a respiratory infection?
- Are you employed as a healthcare worker?

- Have you had close contact with a person(s) recently diagnosed with pneumonia for which an alternative pathogen has not been identified?

If the answer is yes to any question, the infection control practitioner and the local health department should be notified and the patient placed on isolation precautions.

All patients admitted to the hospital with fever and respiratory symptoms, including pneumonia, should at a minimum be placed upon droplet precautions until they can be evaluated clinically and for SARS exposure risk factors as described below. If there is a high suspicion for SARS, isolation precautions for SARS, including placement in an airborne infection isolation room (AIIR), should be considered. SARS infection control recommendations were previously issued by CDHS on June 12, 2003, and can be accessed at www.dhs.ca.gov/ps/dcdc/disb/sars.htm. New SARS infection control recommendations are currently under development by CDC.

Regional SARS Meeting Outcomes

On November 10, 2003, personnel from CDHS, several local health departments and hospitals held a forum to discuss SARS surveillance in the Sacramento Region as well as strategies for mitigating the coming influenza incidence. The following points were agreed upon:

- 1) SARS remains reportable immediately by telephone to the Health Department. Call (530) 666-8645 day or night if you are considering SARS as a diagnosis in a patient you are seeing.
- 2) All healthcare providers should report immediately any healthcare workers, recent travelers to China, Hong Kong or Taiwan or clusters of two or more cases with pneumonia of unknown etiology.
- 3) If a healthcare provider is considering the diagnosis of SARS, they should screen those accompanying the patient for symptoms. If the companions have respiratory symptoms, give them a mask to wear and restrict their movement in your facility.
- 4) "Respiratory Etiquette" will be the byword this influenza season.
- 5) Local health departments will begin a public education campaign to "Cover your Cough" and to get the public used to the idea of wearing a mask in healthcare waiting rooms if they have a cough.
- 6) When further information comes from CDHS, it will be distributed to all hospitals and clinics.



Public Health Update

Yolo County Health Department

“Investing in Our Community’s Future”

Volume 1, Issue 12 December 2003

Inside this Issue

- Influenza Update
- Influenza Vaccine
- Pediatric Influenza Surveillance
- SARS Case in Taiwan
- Inpatient Flu Admissions Northern California Kaiser

Update: Influenza Activity in California

Influenza activity continues to escalate in California, with laboratory influenza A detections, “flu” admissions, influenza antiviral usage, and outpatient influenza-like illnesses higher than in previous years in early December. Although the number of lab flu detections may be influenced by testing and reporting biases, the percent of specimens testing positive for influenza (>30%) across the United States is also unusually high for this time of year. Nationally, 71% of influenza A H3N2 isolates characterized by the CDC thus far this season were similar to the A/Fujian strain.

To date, 19 influenza isolates have been characterized by the California Department of Health Services (CDHS). Of the 18 influenza A isolates, 16 (89%) were characterized as A/Fujian H3N2. The A/Fujian strain is a new drifted variant related to the H3N2 component of the vaccine. It is expected that the current (2003-04 season) influenza vaccine in the US will provide some cross-protection and reduce the severity of disease even from this new strain. (Source: CDHS Influenza Surveillance Project.)

Yolo County currently has one influenza sentinel site, but more are needed. Any physician, nurse practitioner or physician assistant who is willing to report weekly may become a sentinel. Contact Michele Cheung, MD at (510) 307-8610 for more information.

Contact Us

Yolo County Health Department
www.yolohealth.org

Fax CMRs to (530) 669-1549

10 Cottonwood St.
Woodland, CA 95695
(530) 666-8645

500-B Jefferson Blvd.
West Sacramento, CA 95605
(916) 375-6380

Influenza Vaccine

Influenza vaccine is recommended for the following persons at high risk for complications from influenza disease:

- Healthy children aged 6-23 months
- Adults aged 65 or older
- Pregnant women in their second or third trimester during influenza season
- Persons aged 2 or older with underlying chronic conditions

Next priority for vaccination should be those at greatest risk for transmission of disease to persons at high risk, including household contacts and healthcare workers

Healthy persons aged 5-49 years may consider intra-nasally administered vaccine (FluMist).

ALL PERSONS WISHING TO BE VACCINATED ARE BEING ADVISED TO CONTACT THEIR HEALTHCARE PROVIDER. THE HEALTH DEPARTMENT HAS DEPLETED ITS SUPPLY OF VACCINE AND WILL NOT BE PROVIDING FURTHER VACCINATION CLINICS. ANY FURTHER SUPPLY OF VACCINE WILL BE PROVIDED TO PRIVATE HEALTH CARE PROVIDERS TO USE WITH THEIR HIGH RISK PATIENTS. PROVIDERS MAY CONTACT PUBLIC HEALTH NURSING AT (530) 666-8645 FOR MORE INFORMATION.

Related Web Sites:

CDC
www.cdc.gov

CA Dept. of Health Services
www.dhs.ca.gov

World Health Organization
www.who.int

Pediatric Influenza Surveillance

The 2003-04 influenza season has raised serious concerns regarding influenza-related morbidity and death among children. Complications have included encephalopathy, seizures, respiratory failure and secondary bacterial pneumonia. To facilitate diagnosis and treatment, the CDC has asked that all severe pediatric influenza cases be reported. Please report cases that meet the following case definition to the Health Department at (530) 666-8645:

All hospitalized or deceased patients less than 18 years who have a clinical syndrome consistent with influenza (or complications of influenza) OR a lab-confirmed diagnosis of influenza.

The Public Health Lab ((530) 666-8644) will facilitate submission of specimens for enhanced diagnostic testing, including antigen detection, viral isolation, PCR and subtyping for patients meeting the above case definition.

SARS Case in Taiwan: On December 17, the Taiwanese Department of Health reported a single case of infection with SARS-associated coronavirus (SARS-CoV) in a research scientist in Taiwan. This appears to be a laboratory-acquired infection with no evidence of secondary transmission reported to date. For more information on SARS surveillance and the respiratory etiquette "COVER YOUR COUGH" Campaign, go to www.yolohealth.org.

Inpatient Flu Admissions

The Influenza Surveillance Project compiles data from laboratories, Kaiser inpatient flu admissions, pharmacy influenza antiviral usage, and outpatient influenza-like illnesses from sentinel sites.

Shown below are the percentage of inpatient admissions due to flu for Northern California Kaiser for both the 2002-03 and 2003-04 influenza seasons. Data are shown by report week (week 50 corresponds to the week of 12/13/03).

Inpatient "Flu" Admissions, Northern California Kaiser
(Source: CDHS Influenza Surveillance Project)

