



Public Health Bulletin

A Publication of the Public Health Department, Jeff Hamm, Health Agency Director
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Volunteers Needed for Local Medical Reserve Corps

The San Luis Obispo County Public Health Department and the American Red Cross are looking for current and former members of the medical community to respond and assist in local emergencies.

The SLO County Medical Reserve Corps is an organized group of health care professionals, ready to volunteer and use their valuable expertise in times of need. It prepares volunteers for emergency response roles in advance of a disaster; fulfills staffing needs critical to successful management of large-scale emergencies and offers ongoing training and networking opportunities for members.

Who we're looking for:

- Physicians
- Physician Assistants
- Nurses
- Psychiatric Technicians
- Dentists
- Pharmacists
- Veterinarians
- Paramedics and EMTs
- Mental Health Professionals
- Nurse Practitioners
- Respiratory Therapists
- Pharmacy Technicians

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Penny Borenstein, M.D., M.P.H.



Whooping Cough Making Strong Comeback in SLO County

Pertussis, or “whooping cough,” tends to follow a cyclical trend in populations. Every 3-5 years, an upswing in cases will occur. Unfortunately, 2010 is that year.

In California and San Luis Obispo, there has been at least a quadrupling of the number of pertussis cases reported this year, with 158 confirmed and 72 probable/suspect cases as of this writing. San Luis Obispo County has one of the highest rates in the state. Cases have been occurring primarily in the school aged population, but also in infants and the elderly.

The Public Health Department has launched a pertussis Web site page, at www.slopublichealth.org, with a click on the first item listed under Important Health Issues. Information regarding laboratory testing, case definition, treatment and other guidelines can be found there, as well as current updates for the media and clinicians.

Symptoms

Pertussis usually starts as a mild respiratory illness, with runny nose and intermittent dry cough. After 1-2 weeks it progresses to an intense cough with several bouts daily, worse at night, which may end with a gasp, a whoop, or vomiting. It is frequently misdiagnosed as a cold or bronchitis, especially in older children, adolescents and adults in whom symptoms may be less dramatic. The disease can be fatal to small infants who may be unable to breathe during the (paroxysmal) coughing spasms.

Testing

Laboratory testing is the best way to diagnose the illness, although classic symptoms and known contact with a confirmed case may also suffice in making the diagnosis. Currently, the San Luis Obispo County Public Health

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Whooping Cough Making a Comeback in San Luis Obispo County (cont.)

Laboratory offers polymerase chain reaction (PCR) testing for pertussis. Suspected cases of pertussis should have a nasal aspirate or nasopharyngeal swab specimen sent to the Public Health Lab for testing. Swabs for PCR testing should be placed in sterile saline and refrigerated, and must be received within 72 hours of specimen collection.

Treatment

Upon laboratory or clinical diagnosis, treatment with a five-day course of azithromycin is very effective. For those for whom cost is an issue, substitute antibiotics, such as TMP-SMX (Bactrim, Septra) for 14 days, may be a good alternative.

Prevention of Infection

Following exposure to a case of pertussis, infection can be interrupted through the use of appropriate prophylactic antibiotics. It turns out that the recommended course of treatment for exposed persons is precisely the same as that for ill and infected patients.

Vaccination

Prevention through vaccination is the mainstay of pertussis control. The national Advisory Committee on Immunization Practices (ACIP) recommends that infants, children, adolescents and adults be vaccinated with tetanus, diphtheria, and pertussis containing vaccine; either DTaP or Tdap depending on age.

Infants normally receive the

DTaP vaccine at their 2, 4 and 6 month exams, and a booster between 12-18 months. An infant does not have good protection until after they complete the third dose in the series. Children need another DTaP booster at age 4-6 years, usually before kindergarten. By the time a child turns 10, immunity has waned and another booster, Tdap vaccine, is needed.

Tdap is a relatively new vaccine, licensed since 2005 as Adacel 11-64 yrs. or Boostrix 10-64 yrs. Anyone ages 10-64 who has not received a dose of Tdap should do so promptly.

Vaccination is especially important for those who anticipate having close contact with an infant less than 6 months of age (e.g. parents, grandparents, siblings, child care providers and health care workers; including persons over 65 years old.)

Summer is the opportune time for children, adolescents and adults who have not been fully immunized, or are in need of a booster, to get those vaccines. This will help stop a surge of cases in the fall when school resumes. Tdap and DTaP vaccines are available at the Public Health Department for \$25.

Please help us contain the current pertussis outbreak by ensuring that providers, staff and patients are fully immunized, that lab-confirmed or clinical cases are effectively treated, and that close contacts of cases are provided the recommended prophylaxis.

Medical Reserve Corps (cont.)

To learn more about the next volunteer orientation planned for August 26 or for other information about the San Luis Obispo County Medical Reserve Corps contact: American Red Cross San Luis Obispo County Chapter 225 Prado Road, Suite A San Luis Obispo CA 93401 543-0696 (ask to speak with the Emergency Services Director) www.slo-redcross.org

Vision Screening Training Offered

Vision screening training for CHDP provider staff will be scheduled this fall. Please call Children's Medical Services programs at 781-5527 for locations and additional information about this CHDP training opportunity.

Save the Date for Health Summit

Mark your calendars for the Healthy Eating Active Living summit on Friday, October 22 at the Embassy Suites Hotel in San Luis Obispo. The program is titled *Healing our Community: Turning the Tide of Obesity*.

Breakout sessions will include: Building a Vibrant Food System, How to Effect Behavior Change, Strategic Growth & the Environment and Wellness at the Workplace.

For more information go to www.healslo.com. Contact Pam at pray@co.slo.ca.us to register.

Fetal Alcohol Spectrum Disorder Awareness Day is Sept. 9

People all around the world gather for events to raise awareness about the dangers of drinking during pregnancy and the plight of individuals and families who struggle with Fetal Alcohol Spectrum Disorders (FASD).

The first FASD Day was celebrated on 9/9/99. That date was chosen so that on the ninth day of the ninth month of the year, the world will remember that during the nine months of pregnancy a woman should abstain from alcohol.

The damage from alcohol exposure is 100% preventable. Alcohol

does more damage to a developing brain and body than any illegal drug.

From 2004 through 2009, 2,589 infants in our county were exposed to alcohol during pregnancy. We know the number is much higher because only 60% of the women in our county are being screened for substance use during pregnancy.

Kathryn Page, Ph.D., an expert in FASD and its effect on the child and the family, will be speaking at the SLOCAP forum on Thursday, September 9 from 8:30 to 10:00 a.m. at the Veterans

Memorial Building in San Luis Obispo. White flags representing every baby who has been exposed to alcohol in our county since 2004 when substance screening began will be placed on the SLO Vets Hall grounds. A minute of silence will be observed at 9:09 a.m. on 9/9/2010 for those affected by FASD in hopes of educating our community on the dangers of alcohol and pregnancy.

Check local papers for events surrounding this day and join in educating our community on the importance of not drinking alcohol when pregnant.

Physician Orders for Life-Sustaining Treatment (POLST)

Physician Orders for Life-Sustaining Treatment (POLST) is a physician order that gives patients more control over their end-of-life care.

Produced on a distinctive bright pink form and signed by both the physician and patient, POLST specifies the types of medical treatment that a patient wishes to receive towards the end of life.

It encourages communication between providers and patients, enables patients to make more informed decisions, and clearly communicates these decisions to providers.

As a result, POLST can prevent unwanted or medically ineffective treatment, reduce patient and family suffering, and help ensure the patients' wishes

are honored.

Although it is similar, POLST does not replace an Advance Health Care Directive. It is recommended that a seriously ill patient have both a signed POLST form and an Advance Directive.

One of POLST's most important features is that it travels with patients as they move from one residential or medical setting to another, thereby ensuring that the physician orders travel with them.

POLST is making a difference. Studies have shown that among patients with POLST forms, treatment preferences were respected 98% of the time, and no one received unwanted CPR, intubation, intensive care, or feeding tubes.

As a result, POLST has helped to close the gap between what end-of-life treatment patients want and

what they receive.

Finally, the use of POLST is protected by California law. Under the law, health care providers are required to treat individuals in accordance with their wishes.

The POLST form is an effective tool to communicate those wishes, and POLST law gives immunity from civil or criminal liability to those who comply in good faith with patients' POLST requests.

To learn more about California POLST, call the California Coalition for Compassionate Care at (916) 489-2222 or go to: www.capolst.org.

You can also contact Jean Raymond, RN, MSN at French Hospital Medical Center at 542-6607.

City of San Luis Obispo Adopts Outdoor Smoking Ordinance

Congratulations to the City of San Luis Obispo! The San Luis Obispo City Council has voted to adopt a no smoking ordinance in outdoor areas in the City of San Luis Obispo.

The new ordinance that went into effect on May 20, 2010, extends current regulations to

provide residents and visitors with protection from secondhand smoke in all outdoor places where the public may be present.

This includes, but is not limited to, sidewalks, parking lots, recreation areas, outdoor dining areas, multi-unit common areas and within 20 feet of any enclosed area

where smoking is prohibited.

Enforcement of this ordinance is triggered by a complaint to the City. If you feel uncomfortable asking someone to stop smoking, or your attempts to do so are refused, you may call the Police Department at 781-7317.

Fewer Babies Face Health Risks of an Early Birth

The nation's pre-term birth rate dropped for the second consecutive year to 12.3 percent, according to the report, "Births: Preliminary Data for 2008," which was released in early April by the National Center for Health Statistics. That is down from the 2007 preliminary rate of 12.7 percent.

The declines follow a more than 20 percent increase in the pre-term birth rate between 1990 and 2006. March of Dimes officials say they are encouraged and hope that the decline is a new trend in infant health. The data are based on 99.9 percent of U.S. births and the improvement must be confirmed in the final data.

"We're beginning to see the benefits of years of hard work by the March of Dimes and its partners. The decline, although small, is heartening," said Dr. Jennifer L. Howse, president of the March of Dimes. "It means about 14,000 babies were spared the health risks of an early birth.

We hope that this is just the beginning of what's possible, and that efforts such as health care reform and our programs to make women and their doctors aware of things they can do to lower the risk of pre-term birth will continue to bear fruit in years to come."

Premature birth is a serious and costly problem, the March of Dimes says. Even with the decline in the pre-term birth rate, more than a half million babies are born too soon in the United States each year, costing the nation more than \$26 billion annually.

Babies who survive an early birth often face lifelong health challenges, including cerebral palsy, blindness, hearing loss, learning disabilities, and other chronic conditions. Even infants born "late pre-term" - between 34 and 36 weeks gestation - have a greater risk of re-hospitalization, breathing problems, feeding difficulties, temperature instability (hypothermia), jaundice, delayed brain development and learning problems. The March of Dimes

says 79 percent of the decline in the pre-term birth rate occurred among late pre-term babies.

There are known strategies that can lower the risk of an early birth—such as smoking cessation programs, progesterone treatments for women with a history of pre-term birth, avoiding multiples from fertility treatments and avoiding unnecessary c-sections and inductions before 39 weeks.

The March of Dimes is the leading nonprofit organization for pregnancy and baby health. With chapters nationwide and its premier event March for Babies, the March of Dimes works to improve the health of babies by preventing birth defects, premature birth and infant mortality. To join an event near you, visit www.marchforbabies.org.

For more information, go to the March of Dimes Web site at www.marchofdimes.com or its Spanish language Web site at www.nacersano.org.

National, California Vaccine Coverage Among Adolescents

Since 2006, the CDC has conducted an annual National Immunization Survey-Teen (NIS-Teen) for adolescents age 13-17. The breakdown of results for 2008 show California was close to or performed better than the national average for routine adolescent immunizations:

	≥1 Td or Tdap	≥1 Tdap	≥1 MCV4	≥1 HPV
National	72.2	40.8	41.8	37.2
California	71.3	43.7	48	46.6

The ACIP recommends that all teens receive an adolescent physical exam between ages 11-12 years, which includes appropriate vaccinations: Tetanus, Diphtheria and Acellular Pertussis (Tdap), Meningococcal Conjugate (MCV4), and Human Papillomavirus (HPV). Also the teen should be evaluated for two doses of MMR, two doses of Varicella (or history of disease), and three doses of Hepatitis B vaccine.

Vaccinate B4U Graduate Campaign

Remind parents to vaccinate before their teen enters or graduates from high school. Many young adults need proof of vaccinations for college and work, which can be expensive if not covered by their parents' insurance.

The HPV Vaccine: What Health Care Providers Need to Know

Early diagnosis via Pap screening and follow-up treatment has significantly reduced death from cervical cancer in the United States. Despite this, in 2009, an estimated 11,270 women were diagnosed with cervical cancer, and 4,070 women died from it. More than half of women with cervical cancer have not had a recent Pap test.

What is HPV?

There are more than 100 different types of HPV; over a third of these strains infect genital epithelial cells (skin and mucous membranes). Genital HPV types are subdivided into high-risk types that can cause cancer and low-risk types that can cause genital warts. Nearly all cervical cancers are caused by high-risk HPV. Types 16 and 18 account for about 70 percent of cervical cancers in the United States and about 40 percent of vulvar and vaginal cancers. The

high-risk HPV types 16 and 18 also have been associated with oropharyngeal cancers and anal cancer in both genders and penile cancer in men. Low-risk types 6 and 11 account for about 90 percent of genital warts in men and women. The vast majority of HPV infections are asymptomatic and resolve without causing disease.

How is HPV Transmitted?

Genital HPV is transmitted sexually through genital contact and cannot be entirely prevented by condom use.

How Common is HPV Infection?

HPV is among the most common sexually transmitted infections in the United States. Well over half of sexually active people become infected with genital HPV at some point in their lives. An estimated 20 million men and women are currently infected, and there are about 6.2 million new

infections each year.

How Many HPV Vaccines are There?

There are currently two HPV vaccines. Gardasil®, produced by Merck, is a quadrivalent vaccine against HPV types 6, 11, 16, and 18 and licensed for use in females and males ages 9 through 26 years. Cervarix®, developed by Glaxo-SmithKline, is a bivalent vaccine against HPV types 16 and 18 licensed for females ages 10 through 25 years. Neither vaccine contains the preservative thimerosal.

For those patients who have no health insurance, HPV vaccine is covered through the Vaccines For Children (VFC) program, ages 9-18 years. The PHD, CHCCC, and most pediatricians in the County participate in the VFC program. Please call 781-5500 and ask for the Immunization Coordinator to hear more about becoming a VFC provider or to discuss vaccines.

Detection of Mycobacterium Tuberculosis

M. tuberculosis remains a formidable infectious disease adversary, causing over a billion cases of infection worldwide and millions of deaths.

In the United States, the partnership of the public health and the medical communities has resulted in a decrease in the number of tuberculosis (TB) cases after a resurgence of disease in the 1980s.

But that resurgence, due largely to loss of funding support for public health TB control programs, saw the appearance of multi-drug resistant TB (MDR-TB) in large numbers.

More recently, extremely drug-resistant TB (XDR-TB) has been recognized as an enormous problem in Africa and Asia. Modern travel and immigration means these problems will arrive here in due time.

Fortunately laboratory methods for the rapid detection of TB have also advanced.

An array of laboratory tests have made their way into the medical defense system, and for the service of local medical and public health authorities by the San Luis Obispo County Public Health Laboratory.

M. Tuberculosis Amplification Test

This molecular amplification test can be performed in a day on almost any specimen and provide an accurate indication of the presence of MTB.

The method, called Transcription Mediated Amplification, is very sensitive (90-95%) for acid-fast smear- positive specimens, 80-90% sensitive in smear-negative specimens. False positive results are extremely rare. This test has the greatest value in the rapid assessment of symptomatic patients.

Quantiferon (In Tube Gold) Test

This test detects the production of gamma

interferon by T cells in response to genetically-engineered specific MTB antigens.

This test is 80-85% sensitive and is especially useful to evaluate patients with a history of vaccination with BCG vaccine, and/or a positive PPD skin test. Quantiferon has special value in the setting of Latent TB infection or LTBI.

Mycobacterial Culture and Identification

This gold standard is still the method of choice for diagnosis of the symptomatic patient and is coupled with the traditional acid-fast smear.

Although only 60-70% sensitive, the acid-fast smear can be performed in about three hours (actually two tests: both a fluorochrome exam and a kinyoun stain may be examined microscopically). Combined liquid and solid medium cultures are incubated with daily examination for six weeks.

Hybridization Probes

Molecular probes for MTB, M.avium-intracellulare (MAC) complex, M.kansasii, and M.gordonae can be performed on culture isolates and smear-positive liquid culture medium bottles. Unlike amplification methods, hybridization probes require culture growth to be performed, but produce a result in as little as two hours.

Rapid Drug Susceptibility Testing (performed by the State Laboratory):

Isolates of MTB can be referred to the Microbial Diseases Laboratory for advanced molecular beacon testing for some of the most common mutations conferring resistance to Isoniazid and Rifampin.

This test can also be performed in a day and can be pivotal in therapy choice for a newly recognized TB case.

San Luis Obispo County Reported Cases of Selected Communicable Diseases - Summer 2010

Disease	2nd Quarter	Total	2nd Quarter	Year-to-date
	2009	2009	2010	2010
AIDS/HIV	4/0		3	12
Campylobacteriosis	24	92	29	50
Chlamydial Infections	164	641	177	371
Coccidioidomycosis	17	87	16	42
Cryptosporidiosis	8	25	10	12
E. Coli	1	11	1	2
Giardiasis	1	10	0	1
Gonorrhea	8	39	6	9
Hepatitis A	0	1	0	0
Hepatitis B (Chronic)	11	51	13	20
Hepatitis C (Community)	70	260	60	128
Hepatitis C (Correctional)	165	877	83	308
Lyme Disease	0	4	0	0
Measles (Rubeola)	0	0	0	0
Meningitis (Bacterial)	2	3	1	2
Meningitis (Viral)	6	27	8	14
MRSA	0	0	0	0
Pertussis	0	2	188	190
Rubella	0	0	0	0
Salmonellosis	4	14	0	19
Shigellosis	1	3	2	2
Syphilis (Primary/Secondary)	1	8	0	0
Tuberculosis	1	3	1	1

Case counts reflect those reported diseases that meet case definitions as established by the California Department of Public Health. Cases reported by health care providers that do not meet the case definitions are not included in case counts. All cases are for San Luis Obispo County residents only. Persons who do not list San Luis Obispo County as their primary residence and are reported as having communicable disease are reported in their primary county of residence.



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