



# Public Health Bulletin

A Publication of the Public Health Department, Jeff Hamm, Health Agency Director  
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## 7-12th Graders Will Need a Pertussis Booster for School

In 2010, California had the most cases of pertussis reported in over 60 years, resulting in at least 10 infant deaths and hundreds more that have required hospitalization.

A new school vaccine requirement, recently signed into law, is an important step in stopping the spread of pertussis in California.

Vaccination is the best defense from pertussis; however, the immunity from both pertussis disease and vaccines wears off over time, necessitating booster immunization for adolescents and adults.

Beginning July 1, 2011, all students entering seventh through 12th grades will need proof of a pertussis (Tdap) booster shot before starting the 2011-2012 school year.

On July 1, 2012 and annually thereafter, students entering the seventh grade will need proof of a Tdap booster before starting school. The new Tdap requirement applies to all public and private schools. The requirement does not affect students enrolled in summer school.

Adolescents who have received only the Td booster vaccine will not have met the new pertussis

**continued on page 3**

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



## Time to Convey the Human Implications of Climate Change

It is time for members of the public health community to use their collective voices to alert, inform and guide the American people relative to climate change, which may well become the leading public health threat of the 21st century.

Dr. Georges Benjamin, executive director of the American Public Health Association, made this point quite clearly in his recent statement: “Climate change is one of the most serious health threats facing our nation. Yet few Americans are aware of the very real consequences of climate change on the health of our communities, our families and our children.”

Dr. Margaret Chan, director-general of the World Health Organization, made this point even more bluntly in stating: “We need to ... convince the world that humanity really is the most important species endangered by climate

change.”

There are three compelling reasons for American public health officials to engage in communicating the human side of climate change:

- The health of Americans is already being harmed by climate change. The magnitude of this harm is likely to get much worse if effective actions are not taken soon and communities successfully adapt. We have a responsibility to inform communities about risks and how these harms can be averted.
- Climate change efforts to date have focused primarily on the environmental consequences of the threat. These efforts have mobilized an important but still relatively narrow range of Americans. As public health professionals, we have many opportunities to convey the human consequences and impli-

**continued on page 2**

### Highlights in This Issue:

Medical Reserve Corps Needs You	2
When Your Patient Wants to Quit Smoking	3
Increased Morbidity and Mortality Associated with Air Particulates	4
Public Health Receives Child Injury Prevention Grant	4
Parents are the Key to Keeping Teens Safe on the Road	5
Reported Cases of Selected Communicable Diseases	6

## Time to Convey the Human Implications of Climate Change (cont.)

cations of climate change, and to connect the issue to American's deeply held health values. In doing so, we have opportunities to engage a broader range of Americans in the issue.

- Many of the actions that help limit climate change and help us adapt to it also improve human health in important ways completely unrelated to climate change.

These "co-benefits" include increased physical activity, decreased obesity, reduced motor vehicle related injuries and death, reduced air and water pollution and reduced morbidity and mortality associated with it, and reduced levels of depression.

Therefore, actions taken to address climate change are a "win-win" in that they help us make progress toward other high priority public health goals.

### How to Discuss Climate Change

Framing climate change in terms of public health may help promote appropriate policy decisions over the long term, and can also lead to better-informed individual decisions among members of the public. When discussing climate change, simple explanations are usually better. Consider using the following as a guide:

Our health will suffer if we don't take action. Global warming can harm people both directly and indirectly. Directly, global warming causes more

extreme weather patterns including more frequent heat waves, more violent storms, and rising sea levels – all of which can lead to people being harmed or killed. Indirectly, global warming harms the quality of our water, air and food, and our ecosystems, all of which can lead to increasing rates of disease and death. If we do not act now to limit global warming, experts at the U.S. Centers for Disease Control and Prevention say that global warming will harm people in every region of the United States. As a result of the poor air quality caused by global warming, children will become more likely to develop asthma, and the asthma they suffer from will be more severe; adults who have heart and lung diseases will become more likely to be hospitalized or die from their illness. An increasing number of extreme heat waves, floods, storms, fires and droughts caused by the changes in our climate will lead to more people being injured or killed. New infectious diseases (such as West Nile Virus) and old infectious diseases that we had previously eradicated from the United States (such as malaria and Dengue Fever) are likely to become an increasing problem for us as our climate warms.

For more information see the Center for Climate Change Communication Web site at: <http://climatechangecommunication.org/>.

## Medical Reserve Corps Needs YOU

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.

The Corps 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

To learn about the next volunteer orientation on March 1, 2011 or for other information about the San Luis Obispo County Medical Reserve Corps, please contact: American Red Cross San Luis Obispo County Chapter  
225 Prado Road, Suite A  
San Luis Obispo CA 93401  
805-543-0696  
[www.slo-redcross.org](http://www.slo-redcross.org)

## 7-12th Graders Will Need a Pertussis Booster for School (cont.)

immunization requirement.

In response to the recent pertussis outbreak, in July 2010, the California Department of Public Health (CDPH) released broader recommendations for Tdap immunization. In summary:

1. CDPH strongly recommends a Tdap booster shot for all adolescents and adults (7 or more years of age) who have not yet received a documented dose, regardless of when they received their last Td booster\*.
2. Immunization with Tdap is especially important for:
  - Women of childbearing age - preferably before pregnancy, else during or immediately after pregnancy;
  - Other close contacts (family members and caregivers) of infants, including those older than 64\*;
  - Health care workers, particularly those who have direct contact with infants and pregnant women;
  - Patients 7 years and older with wounds should receive Tdap instead of Td or TT when immunization is indicated to prevent tetanus.
3. CDPH strongly recommends that all infants receive their recommended doses of DTaP on time. The first dose has been typically given at 2 months of age but may be given as early as 6 weeks to begin protecting infants sooner. Children 7-9 years of age who did not receive all of their routine childhood DTaP vaccine doses are recommended to receive Tdap to help protect them against pertussis\*.

Vaccinating youth now helps protect them against the ongoing threat of pertussis, meet the new school requirement, and reduce the last-minute rush: more than a million California middle, junior, and high school students will need a Tdap vaccine before the 2011-2012 school year starts. Starting now, recall all your preteen and teen patients who haven't yet received Tdap. This is also a good time to check whether your adolescent patients are up-to-date with other recommended vaccines: meningococcal conjugate, HPV, influenza and a 2nd varicella booster.

Finally, health care providers are reminded that vaccine products have similar names and abbreviations which can be confusing to school staff, who must keep records of compliance with the new law. Please ensure clear and accurate documentation which can be particularly confusing in relation to differences between Tdap, DTaP, and Td.

\* Similar expanded recommendations were issued by the federal Advisory Committee on Immunization Practices (ACIP), October 2010.

### When Your Patient Wants to Quit Smoking

CenCal now covers the following products for SBHI, SLOHI and PP2 members which can help with nicotine cravings:

- Nicotine patches
- Nicotine gum or lozenges
- Zyban
- Chantix

Those members who want to use any of these products must enroll in a smoking cessation program for behavior modification and to obtain a certificate of enrollment.

Your patients may call the California Smokers Helpline, 1-800-NO-BUTTS (Spanish 1-800-456-6386), the San Luis Obispo County Public Health Department (805) 781-5564, or the Santa Barbara County Public Health Department (805) 681-5407 for South Santa Barbara County; (805) 346-7275 for North Santa Barbara County, from Lompoc dial 737-7775 extension 7275.

If CenCal health members need assistance with getting their prescription or certificate, please have them call Member Services at 1-877-814-1861.

## Increased Morbidity and Mortality Associated with Air Particulates

Minute airborne particles, or particulate matter, are also called PM10. Even smaller particles are called PM2.5. Epidemiologic studies have linked these particles to heart attacks, strokes, asthma and lung disease, although most of the studies connected to PM10 and PM2.5 study urban air quality that is associated with traffic and factories. However, studies of persons commonly exposed to dust and dirt have also shown a strong association between air quality and adverse health outcomes, including increased exacerbation of chronic illness and increased hospitalizations.

South County residents living in close proximity to the Oceano Dunes are exposed to high concentrations of particulate matter, especially in the spring when high winds can kick up sand and dust.

The effects can cause respiratory and cardiovascular problems due to chronic irritation of the lungs in mucus membranes. The mechanisms that cause increased morbidity and mortality are not completely understood, but several hypotheses have been offered. Data from some epidemiologic investigations suggest that pre-existing pulmonary inflammation and or chronic conditions could “facilitate PM induced release of pro-inflammatory mediators, resulting in additional pulmonary inflammation, bronchoconstriction, hypoxia and cardiac effects, including ventricular fibrillation and death.” Another proposed theory linked exposure to ultra-fine particles to alveolar inflammation, and increased blood coagulability.

Regardless of the mechanism, we urge providers in the South

County region to be aware of the risks associated with exposure to particulate matter in the form of sand and dirt during the windy period in the spring. Patients with chronic respiratory and cardiac conditions should be encouraged to avoid exposure to particulates present on windy days, and monitor air quality in order to make informed decisions regarding outdoor exertion. Providers should be aware of the potential for chronic condition exacerbation, especially after many days of poor air quality in the Oceano Dunes/Nipomo Mesa region.

Daily air quality forecasts are available on the Air Pollution Control District web site, [www.slocleanair.org](http://www.slocleanair.org). You can also receive daily e-mail air quality forecasts by registering at [www.slocleanair.org/air/AirForecasting.php](http://www.slocleanair.org/air/AirForecasting.php).

1 Godleski, JJ, Cedec C, Cutler M, and Koutrakis P. Death from inhalation of concentrated air particles in animal models of pulmonary disease. Proceedings of the Second Colloquium on Particulate Air Pollution and Human Health. Park City, Utah, May 1-3 1996. Vol 4, pp136-143.

2 Ostro B, Broadwin R, and Lipsett M. Coarse and fine particle and daily mortality in the Coachella Valley, California; a follow up study. Journal of Exposure Analysis and Environmental Epidemiology (2000) V10 412-419.

3 Seaton A, MacNee W, Donaldson K, and Godden D. Particulate air pollution and acute health effects. Lancet- 1995, 345:176-178

## Public Health Receives Child Injury Prevention Grant

Thanks to the combined efforts of child safety and health advocates, the California legislature passed a bill in 1992 allowing for the sale of Kids' Plates motor vehicle license plates. Revenue from the sale of Kids' Plates is returned to local communities in the form of grants, with a goal of reducing or eliminating unintentional injuries in children and adolescents under the age of 18.

The Public Health Department was fortunate to have recently received a 20-month grant from the California Kids Plates Program. This is a very competitive grant process and it will enable Public Health to re-create the comprehensive child injury prevention program which operated from 1994 to 2004.

One of the primary focuses of the program will be to decrease

misuse and improper installation of car seats from infants through booster seat age. It is well documented that motor vehicle crashes are the leading cause of death for children, and while 96% of parents think they are properly installing car seats, about 80% of them are not done correctly. Car seats may not be age or weight appropriate, they may have missing straps

**continued on page 5** 

## Parents are the Key to Keeping Teens Safe on the Road

This fact may surprise you: car crashes are the number one killer of teens, taking about 3,000 young lives in the United States every year. That's eight teen deaths each day that can be prevented.

To help avoid these deadly crashes, the Centers for Disease Control and Prevention (CDC) is helping parents to play a key role in keeping their teens safe on the road. Through its "Parents Are the Key" campaign, CDC offers parents safe teen driving tools—including flyers, fact sheets, e-cards, and a parent-teen driver agreement—for free at [www.cdc.gov/ParentsAreTheKey](http://www.cdc.gov/ParentsAreTheKey).

Leading experts agree that parents who get involved with their teens' driving can help prevent a tragic crash. To do so is simple. First, the best message to parents is to extend their teen's supervised driving period. Help the teen develop the experience he or she needs by providing as many supervised practice driving hours as possible. Include at least 30 to 50 hours of practice over at least six

months. Make sure to practice on a variety of road conditions and at different times of day.

Then, set the rules of the road. While practicing driving will empower the teen, parents' rules will provide much needed limitations to keep him or her safe. Advise parents to start with these three rules and build from there: 1) Make sure your teen always wears a seat belt. 2) Limit your teen's nighttime driving. 3) Restrict the number of passengers your teen can have in the car.

Finally, enforce rules of the road with a parent-teen agreement. Tell parents to work with their teen to draft and sign the agreement. Be sure to include clearly written rules and consequences for breaking the rules.

"All beginner drivers, even straight-A students and 'good kids,' are likelier than experienced drivers to be involved in a fatal crash—it's a fact," said Dr. Grant Baldwin, director of the Division of Unintentional Injury Prevention within CDC's National Center for

Injury Prevention and Control.

The following factors also increase the odds of a young driver being in a deadly crash: driving while distracted, driving drowsy, driving recklessly, and drinking alcohol.

"These injuries and deaths can be prevented. We're encouraging parents to talk with their teen about the most dangerous driving situations and how to avoid them," said Dr. Baldwin. "Remind your teen that driving is a privilege and that your rules of the road need to be followed."

CDC also recommends that parents understand and support their state's specific graduated driver licensing (GDL) laws, which are proven to reduce teen crashes and deaths. GDL systems help new drivers gain skills under low-risk conditions. As drivers move through stages, they are given extra driving privileges.

For more information on playing a key role in teen safety on the road, please visit [www.cdc.gov/ParentsAreTheKey/](http://www.cdc.gov/ParentsAreTheKey/).

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## Public Health Receives Child Injury Prevention Grant (cont.)

and buckles, may not be secured tightly enough, not facing the right direction, or not even connected to the vehicle itself. Some are being used even though they have been recalled. Public Health will reconvene the Injury Prevention Coalition and will train car seat technicians to offer car seat check-up events. Public Health will also distribute free car seats to local families in need.

In addition to car seat safety, Public Health will also be collaborating with the San Luis Obispo Bike Coalition to offer bicycle safety classes at local elementary schools with high rates of free or reduced price lunches. In 2008, there were 155 bicycle injury collisions in the County. About half of all bicycle crashes in children are single-rider falls caused by poor control of the bike. The Bike

Coalition will offer a course called Street Skills, taught by certified League of American Bicyclist instructors, which will teach children how to avoid crashes, improve their visibility, ride through intersections, and the legal rights and obligations of cyclists.

For more information, please call Kathleen Karle at 781-4929.

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**San Luis Obispo County Reported Cases of Selected Communicable Diseases - Winter 2011**

Disease	4th Quarter	Total	4th Quarter	Total
	2009	2009	2010	2010
<b>AIDS/HIV</b>	<b>Not available</b>	<b>8/26</b>	<b>Not available</b>	<b>3/19</b>
Campylobacteriosis	19	96	17	98
<b>Chlamydial Infections</b>	<b>156</b>	<b>641</b>	<b>136</b>	<b>694</b>
Coccidioidomycosis	26	87	39	102
<b>Cryptosporidiosis</b>	<b>6</b>	<b>25</b>	<b>7</b>	<b>24</b>
E. Coli	7	10	4	13
<b>Giardiasis</b>	<b>4</b>	<b>10</b>	<b>3</b>	<b>9</b>
Gonorrhea	6	39	12	28
<b>Hepatitis A</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>
Hepatitis B (Chronic)	1	55	6	36
<b>Hepatitis C (Community)</b>	<b>n/a</b>	<b>260</b>	<b>75</b>	<b>274</b>
Hepatitis C (Correctional)	n/a	877	131	582
<b>Lyme Disease</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>
Measles (Rubeola)	0	0	0	0
<b>Meningitis (Bacterial)</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>4</b>
Meningitis (Viral)	7	27	14	35
<b>MRSA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Pertussis	2	2	19	382
<b>Rubella</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Salmonellosis	3	14	7	35
<b>Shigellosis</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>5</b>
Syphilis (Primary/Secondary)	0	2	0	0
<b>Tuberculosis</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>4</b>

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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