

# epiConnections

A BIMONTHLY NEWSLETTER OF THE COMMUNICABLE DISEASE AND EMERGENCY MANAGEMENT DIVISION OF BOULDER COUNTY PUBLIC HEALTH

## New Report Shows High Cost of Vaccine-Preventable Diseases, Increased Risk for Colorado Children and Communities

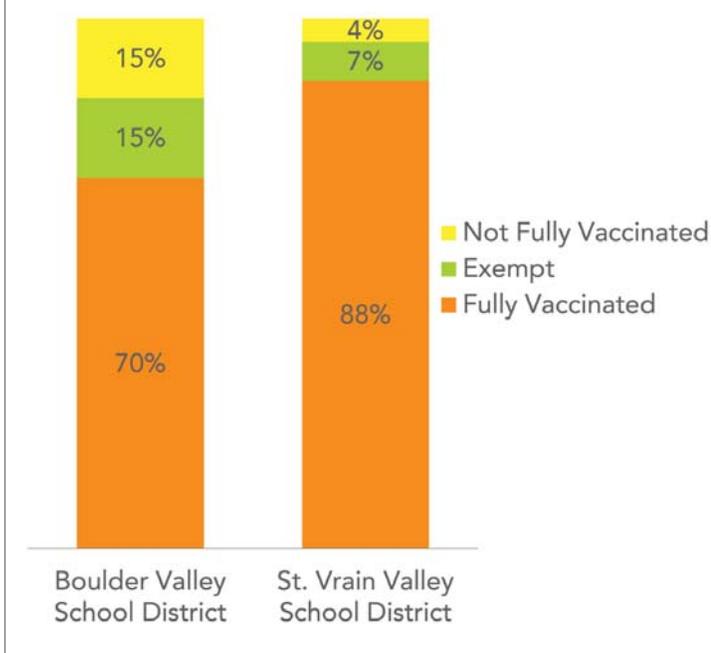
A new report by the Colorado Children's Immunization Coalition (CCIC) and Children's Hospital Colorado (Children's Colorado) states that 472 Colorado children were hospitalized with vaccine-preventable diseases in 2015, resulting in \$35 million in hospital and emergency department charges. Findings show that, despite improvement, there are significant gaps in vaccinating Colorado's children.

Colorado ranks 14<sup>th</sup> in the nation for childhood vaccination. While Colorado's overall vaccination ranking has fluctuated, the vaccination coverage level remains the same as ten years ago. In 17 Colorado counties, less than 50 percent of children are up-to-date on routine immunizations – well below the coverage level necessary to prevent the spread of vaccine-preventable diseases.

### Study Highlights:

- **Boulder County immunization coverage level ranks between 50–60 percent.**
- As seen in "The Status of Children in Boulder County in 2016" below, 70 percent of Boulder Valley School District (BVSD) and 88 percent of St. Vrain Valley School District (SVVSD) students are fully vaccinated.

Pre-Kindergarten to 12<sup>th</sup> Grade Students Vaccination Rates, BVSD and SVVSD 2014-15 School Year.  
"The Status of Children In Boulder County 2016"



Vaccination Rates, continued on page 2

## Biological and Chemical Exposure May be Terrorism

Unfortunately, the possibility of biological, chemical, or radiological terrorism in our community is real. To keep our community safe, it is critical that health care providers notify local public health officials immediately when they suspect a patient has been exposure to a biological, chemical, or radiological agent. **Agents in each of the following categories should be reported immediately to Boulder County Public Health.**

### Biological Threats

**Category A Agents:** A Category A agent is an organism that can be easily disseminated or transmitted from person-to-person, result in high mortality rates, and have the potential for major public health impact. Category A Agents are considered to be high priority due to the risk they pose to national security. These include anthrax (*Bacillus anthracis*); botulism (*Clostridium botulinum*); plague (*Yersinia pestis*); tularemia (*Francisella tularensis*); viral hemorrhagic fevers (filoviruses [e.g., Ebola, Marburg]; and arenaviruses [e.g., Lassa, Machupo])<sup>1</sup>

**Category B Agents:** Category B agents are those that are moderately easy to disseminate, result in moderate morbidity rates and low mortality rates, and require specific enhancements of the Centers for Disease Control and Prevention's (CDC) diagnostic capacity and enhanced disease surveillance. Category B agents include brucellosis (*Brucella species*), Epsilon toxin of *Clostridium perfringens*, food safety threats (e.g., *salmonella species*, *Escherichia coli O157:H7*, *Shigella*), glanders (*Burkholderia mallei*), melioidosis (*Burkholderia pseudomallei*), Psittacosis (*Chlamydoiphila psittaci*), Q fever (*Coxiella burnetii*), ricin toxin from *Ricinus communis* (castor beans), staphylococcal enterotoxin B, typhus fever (*Rickettsia prowazekii*), viral encephalitis (alphaviruses [e.g., Venezuelan equine encephalitis, eastern equine encephalitis, western equine encephalitis]), and water safety threats (e.g., *Vibrio cholerae*, *Cryptosporidium parvum*).<sup>1</sup> These are considered second-highest priority agents.

Biological and Chemical Exposure, continued on page 2



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Communicable Disease Control Program  
HIV Prevention Program  
Emergency Management Program  
Immunization Program  
TB Control Program

## Health Care Providers can Improve Breastfeeding Duration

Boulder County Public Health has been working to create breastfeeding-friendly environments in Boulder County by partnering with worksites, child care settings, and public spaces to help make it as easy as possible for families to meet their breastfeeding goals. Medical offices are the next special focus.

Beyond breastfeeding management, medical offices and providers can significantly influence families' decisions, impressions, and confidence around breastfeeding. A panel of Colorado lactation experts reviewed recommendations from the American Academy of Pediatrics, the Academy of Breastfeeding Medicine, and the World Health Organization and identified six areas where medical offices can help to influence breastfeeding duration:

1. Write and implement an office lactation policy to ensure all practitioners are providing consistent messages and recommendations.
2. Assure all providers and office staff have a minimal level of lactation training.
3. Provide regular and consistent patient education throughout the prenatal and postpartum periods, including strategies for returning to work or school.
4. Provide a private space for pumping milk or nursing for staff and clients.
5. Implement a sustainable plan for billing for lactation services.
6. Provide referrals to lactation experts in the community.

The Boulder County Public Health Child Health Promotion Program would love to partner with you to become a designated breastfeeding-friendly medical office. Visit [BoulderCountyBreastfeeding.org](http://BoulderCountyBreastfeeding.org) to learn more about the resources and technical assistance available.

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*Vaccination Rates, continued from page 1*

- In 2015, 24.6 percent of Colorado children were missing 1 or more routine vaccines. **Sixty percent of Boulder County children (ages 19 – 35 months) completed the 4:3:1:3:3:1:4 series.**
- Among children in Colorado who were hospitalized for vaccine-preventable disease, 66.5 percent were 4 years of age or younger. In contrast, emergency department visits for vaccine-preventable diseases were higher in children and teens 5-17 years of age.
- Only 65 percent of Colorado teens received the HPV vaccine in 2015, with even fewer receiving the required number of doses for full protection.

The Colorado and Boulder County childhood immunization rates (for all recommended vaccines) are well below the majority of U.S. states and the national goal of 90 percent. Under-vaccination can lead to childhood illness, hospitalization, and death.

**Providers make a difference!** As you prepare students to go back to school, consider:

- Reviewing the Advisory Committee on Immunization Practices (ACIP) schedule with your clinic.
- Listening to and soliciting questions from parents to keep the conversation going. Acknowledge the benefits and risks, and consider using personal stories - too much science may frustrate some parents.

You can help parents understand the importance of their vaccination decisions and the impact these decisions can have on the community.

**Please review the enclosed flyer.**

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Sources: CDPHE, Colorado Immunization Information System. Colorado Children's Immunization Coalition.

*Biological and Chemical Exposure, continued from page 1*

**Chemical Threats: Patients exposed to chemical agents when you cannot rule out terrorism should also be reported.** Scientists often categorize hazardous chemicals by the type of chemical or by the effects a chemical would have on people exposed to it.

Chemical exposures that should be reported are determined by the chemical type and its effect on humans. This includes biotoxins from plants or animals; chemicals that severely blister the eyes, respiratory tract, and skin on contact; poisons that affect the body by being absorbed into the blood; drugs that make people unable to think clearly or that cause an altered state of consciousness (possibly unconsciousness); poisons that prevent blood from clotting properly, which can lead to uncontrolled bleeding; metallic poisons; nerve agents; organic solvents; riot control agents, such as tear gas; and toxic alcohols and chemicals that cause nausea and vomiting.<sup>2</sup>

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Sources:

1. Centers for Disease Control and Prevention. Public Health Preparedness: Mobilizing State by State Appendix 6. <https://www.cdc.gov/phpr/publications/2008/appendix6.pdf>. Published 2008.
2. Centers for Disease Control and Prevention. Emergency Preparedness and Response: Chemical Categories. <https://emergency.cdc.gov/agent/agentlistchem/category.asp>. Accessed May 1, 2017.