



# COMMONWEALTH of VIRGINIA

Department of Health

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STATE HEALTH COMMISSIONER

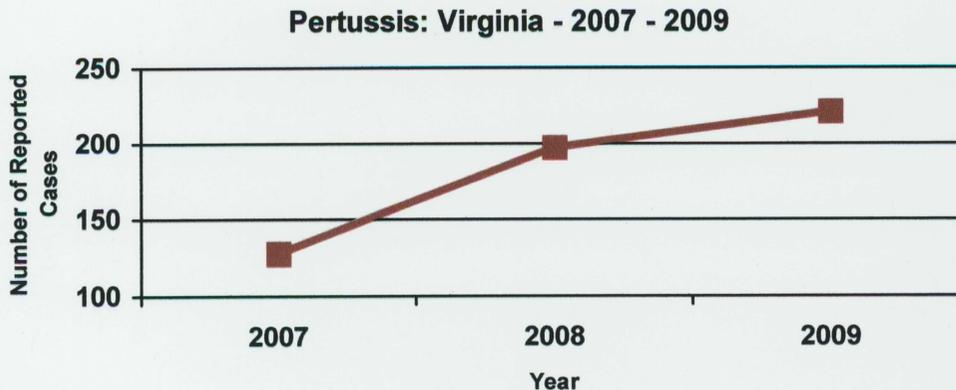
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November 12, 2010

Dear Colleague,

I write you today about a significant increase in pertussis, also known as whooping cough, in Virginia and throughout the United States. While commonly thought to be a pediatric disease, many teens and adults unknowingly contract and spread pertussis. Your understanding and early recognition of pertussis, appropriate treatment, preventive treatment of contacts, and vaccination will mitigate disease spread, hospitalizations and deaths.

The graph below highlights the recent increase in reported cases in Virginia:



From January to August of 2010 there has been a 16% increase in the number of reported cases in Virginia compared to the same time last year. In the northwestern region of the state there have been 47 reported cases compared to 19 cases in the same months in 2009. Many other states are showing increases as well. California declared a pertussis epidemic and has just confirmed its tenth infant death resulting from disease.

*B. pertussis* is easily transmissible with an 80% secondary attack rate among susceptible close contacts. Adolescents and adults are an important reservoir and often serve as the source of infection for infants too young to be protected by vaccination. These infants represent a very vulnerable group with frequent hospitalizations, use of mechanical ventilation and even death as an outcome. Many infected healthcare workers unintentionally spread pertussis, since it is not always considered early in adults with significant cough.

## Early Detection and Treatment

Often, a diagnosis of pertussis in adults and adolescents is missed because they may not have the classic symptoms. **Suspect pertussis if your adult or adolescent patient presents with an unexplained, persistent cough.** Consider pertussis in the differential diagnosis for any patient with prolonged respiratory symptoms, particularly:

- Paroxysmal cough of any duration.
- Cough with inspiratory whoop.
- Post-tussive vomiting.
- Cough illness associated with apnea in an infant.

For suspected pertussis cases, please consider the following suggested guidelines:

- PCR testing is preferred to rapidly diagnose patients, including those with mild illness.
  - Specimens should be collected from the posterior nasopharynx, not the throat, using Dacron® or calcium alginate (not cotton) swabs.
  - Serological testing is not recommended.
- Prompt treatment of patients diagnosed with pertussis can prevent severe disease and reduce disease spread.
- Advise ill patients with suspected pertussis to stay home until completion of antimicrobial therapy for five days.

## Prevention and Vaccine

**The single most effective way to prevent pertussis is vaccination.** While there is high vaccination coverage of children, it is now recommended that adolescents and adults should be **revaccinated** as protection from the childhood vaccine diminishes over time.

According to a 2009 National Immunization Survey, 83.9% of children in age 19-35 months received at least four doses of DTaP vaccine by 24 months. Among adolescents age 13-17 years, 55.6% received one dose of Tdap vaccine. As for adults, a 2008 National Health Interview Survey reported that nationwide, among those ages 18-64 years, 52.0% reported receiving Tdap.

To help increase vaccination rates, please consider incorporating the following into your clinical practice:

- Encourage your adult and adolescent patients to receive a Tdap booster.
- Promote and support the use of CDC's child, adolescent and adult immunization schedules, which can be found at <http://www.cdc.gov/vaccines/recs/schedules/default.htm>.
- Remind your colleagues and health care support staff to update their pertussis vaccinations given their close contact with vulnerable patients.
- Continue to support and use the Virginia Immunization Information System (VIIS) to document and verify immunization status. If you are not currently registered and wish to do so, please call the Virginia Department of Health's Division of Immunization at (804) 864-8055 or visit <http://www.vdh.state.va.us/viis>.

## Resources and Partnerships

If you suspect or diagnose pertussis in one of your patients, your local health department is here to help you help your patient, their family and the community. Our medical directors can provide additional guidance and assistance for managing individuals potentially exposed to pertussis. To find the local health department nearest you, please visit <http://www.vdh.virginia.gov/lhd>.

Every health department around the state can provide vaccine for the prevention of pertussis. Please refer your patients to the health department if you do not vaccinate in your facility or office. Have your patient call first to check on immunization clinic schedules.

Additional information on pertussis and its prevention is available at the CDC website: <http://www.cdc.gov/vaccines/vpd-vac/pertussis/default.htm> and on the VDH healthcare professional's webpage at <http://www.vdh.virginia.gov/clinicians/index.htm>.

A toolkit with resources for talking to parents about vaccines and vaccine safety is available through Project Immunize Virginia (PIV) at <http://www.immunizeva.org/tools/>.

While I applaud your continued focus on influenza vaccination, I ask you to recognize that pertussis (whooping cough) is another vaccine preventable disease, which is causing significant morbidity to our vulnerable populations. Pertussis impacts all age groups – I hope this information has raised awareness and provided information of value to all medical specialties. Together in partnership, we can make a meaningful impact in our communities. Thank you for all that you do to keep Virginians healthy.

Sincerely,

A handwritten signature in black ink, appearing to read "Karen Remley", with a long horizontal line extending to the right.

Karen Remley, MD, MBA, FAAP  
State Health Commissioner