



Health Alert Network

Tri-County Health Department

Serving Adams, Arapahoe and Douglas Counties

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The pages that follow contain information critical to protecting the health of your patients and the citizens of Colorado.

HAN ADVISORY

Number of pages including cover: 4

Subject: **Advisory - Prevention of Influenza and Pertussis Among Pregnant Women and Infants, October 21, 2019**

Message ID: 10/21/2019 3:00:00 PM

Recipients: HAN Community Members.

From: TRI-COUNTY HEALTH DEPARTMENT

Adams, Arapahoe and Douglas County, Colorado

Recipient Instructions: **For your information. No response required.**

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Health Update: Provides updated information regarding an incident or situation; unlikely to require immediate action.

Info Service/Public Health Brief: Provides general information that is not necessarily considered to be of an emergent nature.

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<http://www.tchd.org/259/Health-Alert-Network>



HAN Advisory

Subject: Advisory - Prevention of Influenza and Pertussis Among Pregnant Women and Infants, October 21, 2019

Key Points

- Influenza and pertussis cause substantial disease burden among pregnant women and infants too young to be vaccinated.
- Maternal vaccination against influenza and pertussis protects mothers who are at risk of experiencing complications of influenza infection and protects infants from acquiring these infections
- Data from a national CDC survey indicated that approximately half of eligible pregnant women reported receiving influenza and Tdap vaccines during a recent pregnancy; lower vaccine coverage was observed among women with lower socioeconomic status. A higher percentage of pregnant women in Colorado received Influenza or Tdap vaccines in 2017 (69% and 87%, respectively).
- ACIP recommends that all women who are or will be pregnant during influenza season receive influenza vaccination (which can be administered anytime during pregnancy), and receive one Tdap booster for each pregnancy (preferably during the early part of gestational weeks 27-36).
- CDC and provider organizations' resources are available to help providers convey strong, specific recommendations for influenza and Tdap vaccination that are responsive to pregnant women's concerns.

Background Information

In the U.S., from 2010-11 to 2017-18, pregnant women aged 15-44 years accounted for 24-34% of influenza-associated hospitalizations per season, and the rate of hospitalization in infants aged <6 months (133 per 100,000) was higher than other age groups in children and young adults. During Colorado's 2018-19 season, 3,832 influenza hospitalizations from 59 counties were reported, and 952 (25%) influenza hospitalizations occurred among residents of Adams, Arapahoe, and Douglas counties [Tri-County Health Department (TCHD) jurisdiction].

From 2010-2017, pertussis was reported in 27,370 infants aged <12 months nationally. In Colorado, 616 cases of pertussis were reported in 2018 (10th highest incidence rate in the U.S.); 12 infant cases occurred in TCHD's jurisdiction.



Influenza vaccination reduces pregnant women's risk for influenza-associated hospitalization by an average of 40%; maternal vaccination also reduces influenza-associated hospitalization risk in infants aged <6 months by an average of 72%. Third-trimester maternal Tdap vaccination is 78% effective in preventing pertussis cases and 90% effective in preventing pertussis hospitalizations in infants aged <2 months.

Despite the effectiveness of maternal vaccination, uptake rates are suboptimal. Based on a 2019 survey conducted by the CDC to estimate maternal influenza and Tdap (tetanus, diphtheria, acellular pertussis) vaccination coverage, only 54% of women who were recently pregnant reported receiving an influenza vaccine before or during pregnancy, and 55% reported Tdap vaccination during pregnancy; receipt of both influenza vaccine and Tdap was reported by 35%. In 2017, Colorado's Pregnancy Risk Assessment Monitoring System (PRAMS) reported 69% of pregnant women were vaccinated for influenza within the 12 months prior to giving birth and 87% of women received a Tdap vaccination before, during, or following pregnancy.

The CDC survey data showed that vaccination coverage was lower among black pregnant women and those of lower socioeconomic status (i.e., less educated, living in poverty, and publicly insured or uninsured). Fewer than half of black women (47%) accepted influenza vaccine when offered or referred, compared with approximately two thirds (69%) of white women; similarly, Tdap coverage was 53% among black women, compared with 77% among white women (and 66% among Hispanic women), offered or referred for vaccination. The most commonly reported primary reason for not receiving influenza vaccination was believing the vaccine is not effective (18%). For Tdap, the most commonly reported primary reason for non-vaccination was not knowing vaccination is needed during each pregnancy (38%). For both vaccines, the second most common reason for non-vaccination was concern about safety risks to their infant (influenza 16%; Tdap 17%).

Recommendations/Guidance

Provider recommendations are a powerful predictor of vaccination among pregnant women and providers remain their most trusted source of vaccine information. TCHD encourages providers to engage in discussions regarding the benefits of maternal vaccination, strongly recommend influenza and Tdap vaccines, and either offer them or provide referrals to another vaccinator if vaccines are not stocked onsite.

- Maternal vaccination against influenza and pertussis protects mothers who are at risk of experiencing complications of influenza infection and protects infants from acquiring these infections.
- Make educational materials available to your patients and encourage discussions promoting vaccination during pregnancy-related health care visits.



- ACIP recommends that all women who are or will be pregnant during influenza season receive influenza vaccination (which can be administered anytime during pregnancy), and receive one Tdap booster for each pregnancy (preferably during the early part of gestational weeks 27-36).
- If feasible, offer influenza and Tdap vaccination to pregnant women directly in your office. Alternatively, provide a strong, specific vaccination recommendation to your patients and share resources on how to readily access vaccine.

For More Information

Patient education resources:

- Pregnant Women and Influenza: www.cdc.gov/flu/highrisk/pregnant.htm
- Flu Vaccine Safety and Pregnancy: www.cdc.gov/flu/highrisk/qa_vacpregnant.htm
- Misconceptions about Seasonal Flu and Flu Vaccines
www.cdc.gov/flu/prevent/misconceptions.htm?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fflu%2Fabout%2Fqa%2Fmisconceptions.htm
- Seasonal Influenza Vaccine Safety: A Summary for Clinicians
www.cdc.gov/flu/professionals/vaccination/vaccine_safety.htm
- Addressing Concerns Pregnant Women Might Have about Flu Vaccine Safety
www.cdc.gov/flu/professionals/vaccination/vaccination-possible-safety-signal.html
- Make a Strong Flu Vaccine Recommendation
www.cdc.gov/flu/professionals/vaccination/flu-vaccine-recommendation.htm

References:

- Morbidity and Mortality Weekly Report: “*Vital Signs*: Burden and Prevention of Influenza and Pertussis Among Pregnant Women and Infants — United States”
www.cdc.gov/mmwr/volumes/68/wr/mm6840e1.htm?s_cid=mm6840e1_e&deliveryName=USCDC_921-DM10321
- Morbidity and Mortality Weekly Report: “Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices — United States, 2019-20 Influenza Season:
www.cdc.gov/mmwr/volumes/68/rr/rr6803a1.htm
- Morbidity and Mortality Weekly Report: “Prevention of Pertussis, Tetanus, and Diphtheria with Vaccines in the United States: Recommendations of the Advisory Committee on Immunization Practices (ACIP)”
www.cdc.gov/mmwr/volumes/67/rr/rr6702a1.htm?s_cid=rr6702a1_w
- Tri-County Health Department: Influenza Resources
www.tchd.org/603/Flu