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 - Health advisories for per- and polyfluoroalkyl substances - June 22, 2022
Message ID: 6/23/2022 8:45:00 AM
Recipients: HAN Community Members.
From: TRI-COUNTY HEALTH DEPARTMENT
Adams, Arapahoe and Douglas County, Colorado

Recipient Instructions: Tri-County Health Department is forwarding you the attached HAN. You may have already received this broadcast if you are on the CDPHE distribution list, however, we wanted to ensure you did not miss this important information. No response is required.

You have received this message based upon the information contained within our Health Alert Network Notification System. If you have a different or additional e-mail or fax address that you would like us to use, or if you have additional questions, call 720-200-1477.

Categories of Health Alert Network Messages:
Health Alert: Conveys the highest level of importance; warrants immediate action or attention.
Health Advisory: Provides important information for a specific incident or situation; may not require immediate action.
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.

You may download a copy of this HAN from the TCHD website at http://www.tchd.org/259/Health-Alert-Network
HEALTH ALERT NETWORK BROADCAST  
MESSAGE ID: 06222022 17:45  
FROM: CO-CDPHE  
SUBJECT: HAN Advisory - Health advisories for per- and polyfluoroalkyl substances  
RECIPIENTS: Local Public Health Agencies  
RECIPIENT INSTRUCTIONS: Local Public Health Agencies - Please forward to healthcare providers  

**HEALTH ADVISORY | Health advisories for per- and polyfluoroalkyl substances | June 22, 2022**  
Health care providers: Please distribute widely in your office  

---  

**Key points**  
- In June 2022, the U.S. Environmental Protection Agency (EPA) issued updated health-based advisories for two per- and polyfluoroalkyl substances (PFAS) in drinking water and added advisories for two others.  
- The advisories for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) indicate the potential for human health impacts at much lower levels than scientists previously understood.  
- Health care providers should take a proactive approach to managing potential health impacts associated with PFAS exposure for people who may be at higher risk.  
- The Colorado Department of Public Health and Environment added guidance for health care providers and information for patients on its website at [cdphe.colorado.gov/pfas-health](http://cdphe.colorado.gov/pfas-health)  

---  

**Background information**  
Per- and polyfluoroalkyl substances (PFAS) are a group of many-thousand human-made chemicals that are pervasive in our environment. They are persistent, bioaccumulative, and some are associated with health effects in humans and animals. Almost every person living in the United States has some amount of PFAS in their blood, but higher levels are associated with a greater risk of certain health effects. PFAS’ risks to human health are often a topic of media interest, and patients may ask about these chemicals.  

Scientists have the most evidence about two of the chemicals, PFOA and PFOS. There is strong evidence that these chemicals affect the immune system, decrease infant birth weight, impact liver function, and increase cholesterol. There is moderate evidence that PFAS are associated with preeclampsia and high blood pressure during pregnancy and have effects on thyroid hormones. There is also increasing evidence that PFOA increases the risk for kidney and testicular cancer.  

In June 2022, the U.S. Environmental Protection Agency (EPA) issued lower health advisories for two PFAS in drinking water and added advisories for two others. The advisories are based on human health studies and reflect the most current science, which shows the potential for adverse health effects at lower levels than previously understood.
● Interim advisory for PFOA = 0.004 ppt.
● Interim advisory for PFOS = 0.02 ppt.
● Final advisory for GenX chemicals = 10 ppt.
● Final advisory for PFBS = 2,000 ppt.

EPA advises people to talk with their health care provider about exposure and risk, so CDPHE has developed resources for patients and providers.

Recommendations / guidance

There is no recommendation for a deviation from the standard of care for people who have not been highly impacted by PFAS. Use these steps to guide patient care.

1. Determine if a patient might have been exposed to high levels of PFAS.
   
   A yes answer to any of these questions indicates the possibility of exposure to high levels of PFAS.
   
   - Do you know if you live in an area that has or has had PFAS contamination?
   - Do you know the level of PFAS in your drinking water? (Levels above the health advisory indicate a potential for risk.)
   - Do you now or did you ever use class B aqueous film-forming foam (AFFF) for fire suppression or work in an occupation that frequently uses ski wax?
   - Have you ever worked in a factory that made PFAS or used PFAS in manufacturing processes?

2. For people who may have been exposed to high levels, or who may be concerned, discuss ways to reduce exposure.
   
   - Consider treating or finding an alternate source of drinking water if PFAS levels are above a health advisory.
   - Avoid eating fish locally caught near areas of known contamination.
   - Reduce exposure to PFAS in consumer products by checking labels for ingredients that include the words “fluoro” or “perfluoro.”

2. Take a proactive approach to managing potential health impacts associated with PFAS exposure.
   
   - Consider screening tests.
     ○ Lipid panel (cholesterol, LDL, HDL, triglycerides).
     ○ Liver function tests.
     ○ Serum creatinine and urine protein and urine albumin.
     ○ Thyroid tests.
     ○ Regular testicular examinations.
     ○ Home blood pressure monitoring during pregnancy.

3. Ensure adherence to the recommended vaccination schedule, including boosters.

Pregnancy and breastfeeding considerations

- Unborn and young children are the most susceptible to health effects from PFAS, so people who are pregnant, planning to become pregnant, or breast/chest feeding need special consideration. PFAS have a long half-life. Children exposed during pregnancy or lactation still may be exposed to these chemicals. However, reducing exposure will help ensure a healthier pregnancy and baby, in addition to helping patients manage anxiety and stress.
- PFAS pass into human milk, and patients may be concerned. Centers for Disease Control and Prevention and the American Academy of Pediatrics recommend people continue to breast/chest feed, even when there might be contaminants such as PFAS in their environment.

Blood testing considerations
Results of blood testing show how the levels of PFAS in the human body compare to average levels in people’s bodies throughout the United States.

PFAS blood levels do not indicate whether people will experience any specific health outcome, nor do they indicate next steps for treatment.

Blood testing is expensive and may not be covered by insurance.

Providers who want to order a test should use ICD-10 diagnosis code Z13.88. If ordering a test through Quest, use Test Code 39307 and CPT code 82542.

Several labs in North America currently offer PFAS blood testing to individuals: AXYS Analytical, EmpowerDX, and Eurofins. AXYS and Eurofins measure PFAS in blood serum. EmpowerDX offers a home finger-prick test. These tests have the same limitations as a physician-ordered test.

More information

- For patients
  - Reducing your exposure: cdphe.colorado.gov/pfas-health
  - Blood testing: bit.ly/pfas-blood
  - Talking to your doctor about PFAS: bit.ly/PFAS-doctor

- For health care providers
  - University of Cincinnati PFAS Update for Clinicians course: bit.ly/uc-pfas

- ToxCall, CDPHE’s toxicology hotline: 303-692-2606 | cdphe_toxcall@state.co.us