MMWR Weekly Briefing for the Week of November 25th

[Announcer] This program is presented by the Centers for Disease Control and Prevention.

This week, *MMWR* published reports on the spread of parvovirus B19 in the United States; emergency department visits for firearm injuries; and more.

Let's take a look at this week's headlines.

First, three reports describe the spread of parvovirus B19 in the United States in 2024; some groups are at increased risk for serious complications from this infection. Second, emergency department visits for firearm injuries declined from 2022 to 2023 yet were still higher than before the pandemic. Third, Rocky Mountain spotted fever continues to emerge in the California-Mexico border region. Last, CDC makes progress toward ending HIV as a public health threat by reaching more than 2 million people in 37 countries with pre-exposure prophylaxis, or PrEP.

Welcome! I'm Mary Dott, science editor of CDC's *Morbidity and Mortality Weekly Report*. I'm filling in for Charlotte Kent, *MMWR's* Editor-in-Chief. Thanks for joining me for *MMWR's* Weekly Briefing for the weeks of November 18th and November 25th.

Human parvovirus B19 is a seasonal respiratory virus, mostly spread through the air, that typically causes mild illness, sometimes called Fifth Disease. However, this infection can lead to serious health complications for certain groups, including people with weakened immune systems; people with chronic blood disorders such as sickle cell disease and thalassemia; and pregnant women.

In our first of three parvovirus B19 reports, investigators examined diagnostic testing specimens and pooled donor plasma from a large U.S. laboratory to better understand trends in these infections during 2018-2024.

During 2024, there was an increase in the percentages of positive parvovirus B19 test results in diagnostic specimens and pooled donor plasma compared with levels seen during 2018–2019.

The highest increases in percentages of positive parvovirus B19 tests were observed in children 6-11 years of age.

In our second parvovirus B19 report, investigators examined data from a large sickle cell disease center in Atlanta, Georgia, to better understand the rate of transient aplastic crisis, or severe anemia, caused by parvovirus B19 among children with sickle cell disease.

The rate of severe anemia was 3.6 times higher in the first 9 months of 2024 compared to the previous 14 years combined.

In our third parvovirus B19 report, investigators assessed pregnancy complications following reported cases of parvovirus B19 in pregnant women in Minnesota from May to August of 2024.

Among five reported cases, three fetuses required intrauterine blood transfusions for severe fetal anemia, and one pregnancy ended in a stillbirth.

Upon review of electronic health records from 10 health systems in Minnesota, parvovirus B19 diagnoses, positive test results, and pregnancy-associated complications were higher than expected during the first 10 months of 2024 compared to the previous 5 years.

Health care providers should be aware of the increased spread of parvovirus B19 and have a heightened suspicion for parvovirus B19 among patients at risk for severe outcomes such as pregnant women and people with chronic blood disorders. They can recommend testing and monitor for complications as needed.

Firearm injuries and deaths are a preventable public health problem. There are almost 50,000 firearm-related deaths in the United States each year and more than twice as many firearm injuries.

In our next report, CDC scientists analyzed average monthly counts of firearm injury emergency department, or ED, visits captured by CDC's National Syndromic Surveillance Program to assess annual changes in visit rates.

Firearm injury ED visit rates increased from 2018 to 2019, and again from 2019 to 2020. Since their 2020 peak, rates decreased each year but remained 13.5% higher than in 2019.

State and local officials can monitor firearm injuries using timely data to help with planning and evaluating prevention efforts. Officials can use CDC's Prevention Resources for Action, which include strategies and approaches based on the best available evidence, to prevent community violence, intimate partner violence, other forms of violence, and suicide.

Rocky Mountain spotted fever transmitted by brown dog ticks is on the rise in the U.S.-Mexico border region, putting locals and travelers at risk for infection. Health care providers on both sides of the border need to be aware of this deadly disease to recognize early symptoms, such as fever, rash, nausea, vomiting, and muscle aches, and begin treatment with doxycycline as soon as an infection is suspected.

In our next report, CDC collaborated with health officials from local, state, and international health agencies to investigate six cases reported to the California Department of Public Health.

Five of six patients identified with Rocky Mountain spotted fever in California during July 2023–January of 2024 initially presented with non-specific clinical signs that could have contributed to incorrect diagnoses and inappropriate or delayed treatment; three of six patients died. All six cases occurred in people with exposure in Tecate, Mexico. Six confirmed cases identified within 6 months is a marked increase in California, where there are typically three confirmed cases or fewer reported each year.

Control of Rocky Mountain spotted fever is difficult and requires a collaborative One Health approach to control ticks in the environment and on dogs. Educating the community about preventing tick bites and raising awareness among health care providers is important. If Rocky Mountain spotted fever is suspected, clinicians should start treatment with doxycycline immediately. Do not delay treatment while waiting for laboratory confirmation. Early treatment saves lives.

In 2015, the World Health Organization recommended that people at high risk of HIV infection be offered pre-exposure prophylaxis, or PrEP, to prevent new HIV infections.

PrEP is a highly effective medication that reduces the risk of getting HIV by 99% when taken consistently.

In our last report this week, researchers describe CDC contributions toward global PrEP initiations since

CDC began supporting ministries of health.

PrEP initiations supported by CDC steadily increased from 2017–2023. In 2023 alone, more than 850,000 people started taking CDC-supported PrEP, and almost all lived in sub-Saharan Africa.

Despite this progress, CDC and its partners must increase efforts to stop new infections. Continuing to find and implement new, effective, and accessible prevention approaches — such as long-acting injectable PrEP — is important to prevent new HIV infections across the globe and end HIV as a public health threat.

That's all for this week's briefing. Thank you for joining us.

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