Myocarditis Adverse Event Less Common After COVID-19 Vaccine Booster

The risk of adolescents developing myocarditis is lower after a booster dose of the BNT162b2 (Pfizer-BioNTech) COVID-19 vaccine than after the second dose, according to a CDC analysis of data from the Vaccine Adverse Event Reporting System (VAERS).

Myocarditis is a rare but serious adverse event associated with COVID-19 mRNA vaccination. To assess whether this adverse event was also associated with booster doses administered to adolescents, the authors analyzed reports submitted to the VAERS system and v-safe between December 9, 2021, and February 20, 2022.

During the study period, roughly 2.8 million US adolescents received a BNT162b2 booster dose. About 92% of the 914 reports submitted to VAERS were not serious. Improper vaccine storage, dizziness, and fainting were the most common nonserious events.

Serious reports included 64 myocarditis cases. Provider interviews and chart reviews confirmed that 32 of these cases—all of which occurred among boys—met the CDC’s myocarditis definition. Of the confirmed cases, 27 patients required hospitalization, but all were discharged and had recovered or were recovering. The confirmed myocarditis rate after a booster dose was 11.4 per 1 million administered doses among adolescent boys aged 12 to 17 years. By comparison, the myocarditis rate after the second dose in the primary vaccine series was 70.7 per 1 million among 12- to 15-year-olds and 105.9 per 1 million doses among 16- to 17-year-olds.

V-safe, a voluntary smartphone-based system created by the CDC to monitor post-COVID-19 vaccination symptoms, collected data from 3418 adolescents who received a BNT162b2 booster dose. About 80% reported a local or systemic reaction, most commonly injection site pain, fatigue, headache, and muscle pain. The authors noted that clinicians, parents, and adolescents should be aware that reactions are common after receiving a booster dose but that serious adverse events are rare.

Food Insecurity Common Among US Children

About 1 in 10 US children lived in a food-insecure household, according to a new report from the CDC’s National Center for Health Statistics (NCHS).

The authors analyzed data from the 2019-2020 National Health Interview Survey (NHIS), which includes a sample of about 87 500 persons living in 35 000 households each year. The survey asked 10 questions assessing household food security during the past 30 days. It found that 10.8% of US children up to age 17 years experienced food insecurity during the study period and that there were disparities in which children were affected.

Black and Hispanic children were disproportionately affected, with 18.8% of Black children and 15.7% of Hispanic children living in food-insecure households compared with 6.5% of White children. Almost 1 in 5 children with a disability lived in a food-insecure household—about double the rate of food insecurity among children without disabilities. Children living in a household with 1 parent and no other adults were about 2.5 times more likely to experience food insecurity than children with other living situations. Households with 3 or more children also experienced food insecurity at a higher rate than those with fewer children.

“Access to sufficient and nutritious food is a key social determinant of health,” the authors wrote. “As such, disparities in food insecurity may contribute to inequalities in child health status.”

Food insecurity among children is linked to worse overall health, more acute and chronic health conditions, and poor health care access. — Bridget M. Kuehn, MSJ

Note: Source references are available through embedded hyperlinks in the article text online.