

Pfizer-BioNTech COVID-19 vaccine-related risk of anaphylaxis

Early safety monitoring data in the US suggest that the risk of anaphylaxis after vaccination with the Pfizer-BioNTech COVID-19 vaccine [tozinameran] is approximately 11 cases per million doses, reports the CDC* COVID-19 Response Team in *Morbidity and Mortality Weekly Report*.

Between 14 December and 23 December 2020, a total of 175 cases of possible severe allergic reaction within one day after first doses of the tozinameran were reported to the US Vaccine Adverse Event Reporting System (VAERS); 21 cases were determined to be anaphylaxis and were reported after administration of 1 893 360 first doses of tozinameran (11.1 cases per million). Most (71%) of these reactions occurred within 15 minutes of vaccination. Of the patients who experienced anaphylaxis, 17 had a history of allergies or allergic reactions and seven of these patients had a history of anaphylaxis. The time to symptom onset ranged from two to 150 minutes (median 13 min). No deaths from anaphylaxis were reported.

Among the other 154 cases reported, 86 were considered to be nonanaphylaxis allergic reactions, 61 were determined to be nonallergic adverse events, and seven cases remain under investigation.

In addition, a further 83 cases of nonanaphylaxis allergic reaction were reported to VAERS during the study period, of which 87% were classified as nonserious. The most frequently reported symptoms were pruritus, exanthema, itchy or scratchy throat, and mild respiratory symptoms. Overall, 67% of these patients had a history of allergies or allergic reactions.

"Locations administering COVID-19 vaccines should adhere to CDC guidance for use of COVID-19 vaccines, including screening recipients for contraindications and precautions, having the necessary supplies available to manage anaphylaxis, implementing the recommended postvaccination observation periods, and immediately treating suspected cases of anaphylaxis with intramuscular injection of epinephrine," advised the CDC.

* Centers for Disease Control and Prevention

CDC COVID-19 Response Team. Allergic Reactions Including Anaphylaxis After Receipt of the First Dose of Pfizer-BioNTech COVID-19 Vaccine - United States, December 14-23, 2020 *Morbidity and Mortality Weekly Report* : 6 Jan 2021. Available from: URL: <http://dx.doi.org/10.15585/mmwr.mm7002e1>

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