CDC Reports 5,300 Errors in COVID Vaccine Dose Delivery in Kids

Prior to the authorization of new booster shots, more than 5,300 errors in vaccine dose delivery in children alone were reported, according to data from the Centers for Disease Control and Prevention (CDC). These errors include giving the wrong dose or the wrong product for a recipient's age, using an undiluted vaccine when dilution was needed or administering a vaccine past its expiration date.

A search in the CDC's Vaccine Adverse Events Reporting System (VAERS) shows reports of toddlers being given 10 times the amount of vaccine they were meant to receive. In at least one report, a child under the age of 2 was given the full contents of a 10-dose vial in error.

According to the CDC, there is no evidence administration errors have triggered more severe adverse events than are typically reported in children who have been given the correct dose of a vaccine, although it's unclear how the agency

arrived at this conclusion.

Yet, the CDC's vaccine advisory panel on Sept. 1 "voiced serious concerns" about the difficulties of keeping as many as 11 different brands and formulations of COVID-19 vaccines straight – as doctors' offices, clinics and pharmacies across the U.S. give a primary series to young children, regular booster shots to older children and new bivalent boosters for people over the age of 12.

The current COVID-19 vaccine schedule allows doses of multiple vaccines to be administered in different volumes, some after dilution and many not, with intervals between doses ranging from three weeks to several months.

When someone administers a COVID-19 vaccine in error, they are required to report it to VAERS. Historically, VAERS has been shown to report only 1% of actual vaccine adverse events, which means the 5,300 number is likely significantly underreported.

Four brands of COVID-19 vaccines are currently available in the U.S. – Pfizer, Moderna, Johnson & Johnson and Novavax.

Pfizer has a bivalent booster for people 12 and older and a monovalent vaccine for the primary series. Both arrive in vials with gray caps and the only difference is text on the vial that identifies whether a vaccine addresses the original SARS-CoV-2 virus or the BA.4/BA.5 Omicron subvariants.

Pfizer also has different formulations for children aged 6 months to 4 years and 5 to 11 years in vials containing different colored caps. The formulations for kids must be diluted before use, which is not needed for the adult formulation or for Moderna's vaccines.

In addition, Pfizer also has the Comirnaty, which is a different formulation than the Pfizer-BioNTech vaccine.

Moderna’s new bivalent booster is distributed in vials with dark blue caps, which could easily be confused with the company’s monovalent vaccine for kids aged 6 to 11. Labels for the bivalent booster in the 6 to 11 age group have a gray border and the monovalent formula has a purple label.

Different brands are administered at different intervals between doses, depending on the age of the recipient and whether the individual is immunocompromised. In addition, expiration dates on the labels of vaccines are not always accurate.