

Aluminum in Vaccines: What you should know

Q. Is the amount of aluminum in vaccines safe?

A. Yes. The best way to answer this question is to look at people who are harmed by aluminum. These people can be divided into two groups: severely premature infants who receive large quantities of aluminum in intravenous fluids, and people with longstanding kidney failure who receive large quantities of aluminum, primarily in antacids. (The average recommended dose of antacids has about 1,000 times more aluminum than a vaccine does.) Both of these groups of patients can suffer brain dysfunction, bone abnormalities or anemia because of the very high quantities of aluminum that have accumulated in their bodies.

For aluminum to be harmful, two criteria must be met: people must have kidneys that don't work well or don't work at all, AND they must receive very large quantities of aluminum for months or years. In these situations, a lot of aluminum enters the body and not enough leaves the body.

Q. Isn't it possible that aluminum in vaccines could be harmful to some healthy babies?

A. No. The quantity of aluminum in vaccines is tiny compared with the quantity required to cause harm. Here's another way to think about this: All babies are either breast-fed or bottle-fed. Because both breast milk and infant formula contain aluminum, all babies have small quantities of aluminum in their bloodstreams all the time. The amount is very small: about 5 nanograms (billionths of a gram) per milliliter of blood (about one-fifth of a teaspoon). Indeed, the quantity of aluminum in vaccines is so small that even after an injection of vaccines, the amount of aluminum in a baby's blood does not detectably change. In contrast, the amount of aluminum



in the bloodstreams of people who suffer health problems from aluminum is at least 100 times greater than the amount found in the bloodstreams of healthy people.

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Q. What is the harm in spacing out vaccines containing aluminum?

A. Delaying vaccines will only increase the time during which children are liable to catch vaccine-preventable diseases. Certain diseases, such as whooping cough and pneumococcus, still occur commonly in the United States. Given that aluminum is common in food and water, delaying vaccines will not significantly lessen a child's exposure to aluminum; it will only increase the child's chance of suffering a severe and potentially fatal infection.

References

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
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