

# Single flu dose or two? Why doctors aren't sure

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(AP) -- Why do scientists warn it may take two doses of vaccine to protect against swine flu when one dose is the norm in a regular flu season? Blame your naive immune system.

It takes the immune system a while to ramp up to fight unique types of [influenza](#). Since we've never been exposed to this brand-new virus, formally called the 2009 H1N1 strain, scientists assume our bodies will act like those of young children.

When children under age 9 get their first flu [vaccine](#) - the kind that protects against regular winter flu - one dose doesn't spark as much immune protection as the doses they'll get over the next years. So those first-timers are given two shots, a month apart, for good protection.

Back in 2006, the same problem occurred when scientists tested a vaccine against the notorious Asian bird flu, or H5N1 flu. It took two very high doses to generate any protection.

Fortunately the swine flu isn't nearly as foreign to people's bodies as bird flu is, so scientists do expect the soon-to-come H1N1 vaccine to work more easily.

Indeed, Chinese officials say they're about to approve vaccines that seem to protect against swine flu in one dose, results that the [World Health Organization](#) calls encouraging although experts say more results are needed from other vaccine makers. Different companies make different

formulations.

In the U.S., scientists insisted that studies of [swine flu](#) vaccine include two doses for everyone, about three weeks apart, so they could measure the booster effect before making a final decision on whether one dose or two is best. Only in the last few days have children begun getting their first dose.

"In the same way that children often need booster shots ... there might be differences in different populations to the first and second dose," Dr. Bruce Gellin, head of the National Vaccine Program Office, said in an interview Wednesday.

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