

# Top flu expert warns of a swine flu-bird flu mix

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This Aug. 16, 1957, file photo of Dr. Joseph Ballinger giving Marjorie Hill, a nurse at Montefiore Hospital in New York, the first Asian flu vaccine shot to be administered in New York City. The hospital's entire staff is being inoculated. Some scientists are worried that the current swine flu and bird flu --possibly in Asia, where bird flu is endemic -- might combine into a new bug that is both highly contagious and lethal and can spread around the world. Experts have long feared that bird flu could mutate into a form that spreads easily among people. The past three flu pandemics -- the 1918 Spanish flu, the 1957-58 Asian flu and the Hong Kong flu of 1968-69 -- were all linked to birds, though some scientists believe pigs also played a role in 1918. (AP Photo, File)

(AP) -- Bird flu kills more than 60 percent of its human victims, but doesn't easily pass from person to person. Swine flu can be spread with a sneeze or handshake, but kills only a small fraction of the people it infects.

So what happens if they mix?

This is the scenario that has some scientists worried: The two viruses meet - possibly in Asia, where [bird flu](#) is endemic - and combine into a new bug that is both highly contagious and lethal and can spread around the world.

Scientists are unsure how likely this possibility is, but note that the new [swine flu](#) strain - a never-before-seen mixture of pig, human and bird viruses - has shown itself to be especially adept at snatching evolutionarily advantageous [genetic material](#) from other flu viruses.

"This particular virus seems to have this unique ability to pick up other genes," said leading virologist Dr. Robert Webster, whose team discovered an ancestor of the current flu virus at a North Carolina pig farm in 1998.

The current swine flu strain - known as H1N1 - has sickened more than 2,300 people in 24 countries. While people can catch bird flu from birds, the bird flu virus - H5N1 - does not easily jump from person to person. It has killed at least 258 people worldwide since it began to ravage poultry stocks in Asia in late 2003.

The [World Health Organization](#) reported two new human cases of bird flu on Wednesday. One patient is recovering in Egypt, while another died in Vietnam - a reminder that the H5N1 virus is far from gone.

"Do not drop the ball in monitoring H5N1," WHO Director-General Margaret Chan told a meeting of Asia's top health officials in Bangkok on Friday by video link. "We have no idea how H5N1 will behave under the pressure of a pandemic."

Experts have long feared that bird flu could mutate into a form that

spreads easily among people. The past three flu pandemics - the 1918 Spanish flu, the 1957-58 Asian flu and the Hong Kong flu of 1968-69 - were all linked to birds, though some scientists believe pigs also played a role in 1918.

Webster, who works at St. Jude's Children's Research Hospital in Memphis, Tenn., said bird flu should be a worry now. Bird flu is endemic in parts of Asia and Africa, and cases of swine flu have already been confirmed in South Korea and Hong Kong.

"My great worry is that when this H1N1 virus gets into the epicenters for H5N1 in Indonesia, Egypt and China, we may have real problems," he told The Associated Press. "We have to watch what's going on very diligently now."

Spokesman Dave Daigle said he could not comment specifically on how concerned the U.S. Centers for Disease Control and Prevention is about the scenario Webster describes, or what it is doing to study such a possibility.

Malik Peiris, a flu expert at Hong Kong University, said the more immediate worry is that swine flu will mix with regular flu viruses, as flu season begins in the Southern Hemisphere. It is unclear what such a combination would produce.

But he said there are indications that scenario is possible. Peiris noted that the swine flu virus jumped from a farmworker in Canada and infected about 220 pigs. The worker and the pigs recovered, but the incident showed how easily the virus can leap to a different species.

"It will get passed back to pigs and then probably go from pigs to humans," Peiris said. "So there would be opportunities for further reassortments to occur with viruses in pigs."

He said so far bird flu hasn't established itself in pigs - but that could change.

"H5N1 itself has not got established in pigs," he said. "If that were to happen and then these two viruses were both established in pigs in Asia, that would be quite a worrying scenario."

Michael Osterholm, an infectious disease specialist at the University of Minnesota who has advised the U.S. government on flu preparations, said while flu experts are discussing the scenario, he has yet to see specific evidence causing him to think it will happen.

"Everything with influenza is a huge guessing game because Mother Nature holds all the rules, and we don't even know what they are, so anything's possible," he said. "We don't have any evidence that this particular reassortment is that much more likely to pick up [H5N1](#) than any other reassortment out there."

"We don't have to put these things together," he added. "This is not chocolate and peanut butter running into each other in the dark hallway."

But there is in fact discussion of putting them together - in a high-security laboratory - to see what a combination would look like, according to Webster. Similar tests have been done at the CDC mixing bird flu and seasonal human flu, resulting in a weak product, he said.

Daigle, the CDC spokesman, refused to comment on the prospect of any such experiment.

Webster has done groundbreaking work on both swine and bird flus in his 40-year career, and has followed the evolution of the current swine flu strain from a virus that sickened a handful of people who worked with North Carolina hogs into a bug that has spread from person to

person around the world.

He is closely involved in the global effort to analyze what the virus might do next. It has killed 42 people in Mexico and two in Texas, but so far has not proven very deadly elsewhere, leading to some criticism that the World Health Organization's warnings of a potential pandemic have been overblown.

Webster said underestimating the swine flu virus would be a huge mistake.

"This H1N1 hasn't been overblown. It's a puppy, it's an infant, and it's growing," he said. "This virus has got the whole human population in the world to breed in - it's just happened. What we have to do is to watch it, and it may become a wimp and disappear, or it may become nasty."

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AP Medical Writer Maria Cheng in London contributed to this report.

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