Study: New Flu Inefficient In Attacking People

Randolph E. Schmid, AP Science Writer

WASHINGTON (AP) — With swine flu continuing to spread around the world, researchers say they have found the reason it is — so far — more a series of local blazes than a wide-raging wildfire.

The new virus, H1N1, has a protein on its surface that is not very efficient at binding with receptors in people's respiratory tracts, researchers at the Harvard-MIT Division of Health Sciences and Technology report in Friday's edition of the journal Science.

"While the virus is able to bind human receptors, it clearly appears to be restricted," Ram Sasisekharan, lead author of the report, said in a statement.

But flu viruses are known to mutate rapidly, the research team noted, so this one must be watched closely in case it changes to become easier to spread.

Even if it doesn't mutate, it's causing plenty of illness here and abroad already — and vaccine makers are working "at full speed" to develop shots for use in the fall if the government deems it enough of a threat, Dr. Anthony Fauci, infectious disease director of the National Institutes of Health, said Thursday.

Within a few weeks, Fauci expects to receive the first test batches for government-led studies in volunteers to see if the vaccine triggers signs of immune protection, at what dose and is safe.

The results of those tests will help the U.S. government decide whether to distribute swine flu vaccine in the fall, how much, and whether children or others should be first to get it.

The government wants public input before it makes any decisions, Dr. Anne Schuchat of the Centers for Disease Control and Prevention told a meeting of the American Association for the Advancement of Science on Thursday.

Good news: The swine flu virus circulating today "is molecularly strikingly similar" to the spring's first cases, making it likely that any vaccine could be "a perfect match," Fauci added.

Worldwide, more than 300 people have died and more than 70,000 cases have been confirmed, according to the World Health Organization, which last month officially declared the virus a pandemic.

It's currently flu season in the Southern Hemisphere, and viral spread in Argentina

has prompted schools there to give students an early vacation. But swine flu hasn't abated in the Northern Hemisphere, unusual since influenza usually retreats from summer's high heat and humidity. Confirmed U.S. cases have reached nearly 34,000 — a fraction of the infected are tested — and deaths rose 34 percent in the past week to hit 170, the CDC said Thursday. England's health minister said Thursday that his country faces a projected 100,000 new swine flu cases a day by the end of August.

Also Thursday, Health and Human Services Secretary Kathleen Sebelius said the U.S. will provide 420,000 treatment courses of the anti-viral medicine Tamiflu to the Pan-American Health Organization to help fight the flu in Latin America and the Caribbean. "All of us have a responsibility to help support one another in the face of this challenge," Sebelius said at a meeting of health ministers in Mexico.

Sasisekharan's paper, meanwhile, warned that the H1N1 strain might just need a single change or mutation to make it resistant to Tamiflu.

The researchers also noted that the new virus is more active in the gastrointestinal tract than seasonal flu, leading to intestinal distress and vomiting in about 40 percent of those infected.

The research was funded by the Singapore-MIT Alliance for Research and Technology and the National Institutes of General Medical Sciences.

AP Medical Writer Lauran Neergaard contributed to this report

Source URL (retrieved on *12/13/2013 - 3:28am*):
http://www.surgicalproductsmag.com/news/2009/07/study-new-flu-inefficient-attacking-people?qt-most_popular=0