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ENVIRONMENT, SCIENCE & SPACE

Stump The Scholar

Staff

Q: I received flu inoculations for the last 13 or 14 years, but with this year's shortage, I expect to do without, since I am 51 years old and in excellent health. Do vaccinations from previous years have residual effects that I might rely on this year, and if so, for how long and against what strains?

- Billy Marabella,
Galveston

A: The annual influenza vaccine contains three strains of the flu virus.

Each year, the flu virus mutates, and the World Health Organization and the U.S. Centers for Disease Control and Prevention adjust the strains in the flu shot to match the strains of the flu that are expected to be prevalent. This year, the vaccine includes the "Wyoming," "Shanghai" and "New Caledonia" strains. Flu strains are often named for where they are first found.

The protective effects of vaccination last a long time, on the order of 30 years or more, against the exact strains contained in the vaccines.

However, when the flu mutates or if the vaccine is not a perfect match, vaccinations become less effective. Last year, the strain that infected most people was "Fujian." One of the strains included in last year's flu vaccine was similar to Fujian. But the protection of last year's vaccine, if you received it, against "Fujian" was only modest.

Of the three components in this year's flu vaccine, "Wyoming" is the most important because it is expected to provide some protection against the widely circulating Fujian strain. However, a new strain of flu, "Wellington," is also infecting people early this season. Neither this year's nor last year's vaccine is expected to protect against Wellington.

All told, for healthy adults, missing the flu shot this season is not a great concern.

- Michael W. Deem,
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NOTES: Local experts answer your common (or uncommon) questions about science. Please send them to: eric.berger@chron.com or Eric Berger, City Desk, Box 4260, Houston, TX 77210.