Public knowledge varies greatly on flu and Covid-19

Test your knowledge against the public’s in our national surveys

PHILADELPHIA – There is wide variability in what the U.S. public knows about the seasonal flu and Covid-19, but some facts are much more strongly associated with an individual’s vaccination behavior.

For several years, the Annenberg Public Policy Center’s nationally representative Annenberg Public Health and Knowledge Survey (ASAPH) has assessed public knowledge of vital health information, including how to prevent and treat the seasonal flu and Covid-19, two of the three illnesses in last year’s “tripledemic” outbreak that overwhelmed some health care facilities (the third was RSV, or respiratory syncytial virus).

Even after taking education into account, survey data reveal that the answers to just eight questions are better than many others at predicting whether a person has been vaccinated against the flu or is willing to get an annual Covid-19 vaccine if recommended by public health officials.

“Knowledge about the nature, effects, and prevention against a potentially deadly virus is valuable in its own right,” said Kathleen Hall Jamieson, director of the Annenberg Public Policy Center (APPC) of the University of Pennsylvania. “But some knowledge is more associated with vaccination than other knowledge.”

APPC research director Dan Romer said the ASAPH surveys, which were administered with a nationally representative panel of U.S. adults, posed two dozen questions to assess public health knowledge of the flu and Covid-19. All of those questions were related to forms of vaccination acceptance – either having received a flu shot or expressing a willingness to get an annual Covid-19 vaccine. “Here, we’ve picked the eight questions – four for the flu and four for Covid – that had the strongest ability to independently predict taking either action,” Romer said. (See part 3 of the topline for the full list of questions.)

We invite you to take our true-or-false quiz and test your knowledge against what the public knows. The answers follow the quiz.

Take this quiz online on our website.

The seasonal flu

True or false:

- Cold weather causes the flu.
• The seasonal flu shot distributed in the U.S. cannot give you flu.
• The seasonal flu shot distributed in the U.S. is safe for pregnant women.
• If you haven’t gotten a seasonal flu shot by November, there is no value in getting the shot.

Covid-19

True or false:

• Ivermectin is an effective treatment for Covid-19.
• Taking additional Covid-19 vaccines increases your chances of contracting Covid-19.
• Covid vaccines have been responsible for thousands of deaths in the U.S.
• The Covid-19, seasonal flu, Tdap (tetanus, diphtheria, and pertussis), and RSV vaccines help protect the recipient from serious infection.

The answers: Flu

The flu is a contagious respiratory illness caused by influenza viruses, according to the Centers for Disease Control and Prevention (CDC), which estimates that during the 2022-23 flu season, there were from 26 to 50 million flu illnesses, 290,000 to 670,000 hospitalizations, and 17,000 to 98,000 deaths. Last season, the CDC estimates that 46.9% of U.S. adults 18 and older received a seasonal flu shot, down about 2.5 percentage points from the prior flu season.

Here are the true-false answers:

Cold weather causes the flu.
FALSE
Flu is caused by influenza viruses. Cold weather can, however, assist in transmitting the virus. In our survey, two-thirds of U.S. adults (66%) got this right – but a third either thought it was true or were not sure. (FL15)

The seasonal flu shot distributed in the U.S. cannot give you flu.
TRUE
The U.S. vaccines contain either an inactivated virus or a particle designed to look like a flu virus to your immune system, according to the CDC. A little more than half of U.S. adults had this right (54%), while 29% thought it was false and 16% were not sure.

The seasonal flu shot distributed in the U.S. is safe for pregnant women.
TRUE
The flu shot is safe for pregnant women, the CDC says. Barely over half of those surveyed (51%) had this correct.

If you haven’t gotten a seasonal flu shot by November, there’s no value in getting the shot.
FALSE
Even if you can’t get vaccinated until November or later, the CDC says that vaccination is still recommended because the flu often peaks in February and significant flu activity can run into May. Most of those surveyed (71%) had this right.
How did you do? If you got 3 or 4 answers correct, congratulations! You’re above average in knowledge of the flu. If you got fewer right, check out the links above to learn more.

The answers: Covid-19

Since the onset of the pandemic early in 2020, Covid-19 has led to over 1.14 million deaths in the United States and nearly 6.37 million hospitalizations, the CDC says. This fall, the CDC recommends that everyone age five and older get one dose of the updated Covid-19 vaccine from Pfizer-BioNTech or Moderna to prevent against serious illness from Covid-19. In addition to those two vaccines, which use mRNA technology, a protein-based vaccine by Novavax has just won CDC and FDA approval.

Here are the true-false answers:

Ivermectin is an effective treatment for Covid-19.
FALSE
Ivermectin, a treatment for parasites, is not authorized or approved for use in preventing or treating Covid-19 in humans or animals, according to the Food and Drug Administration (FDA), and should not be used for that. Barely over a third of those surveyed (35%) know this is false. A quarter (25%) incorrectly think it is true – a very large increase from those who thought it was true (10%) two years earlier, in our September 2021 survey.

FALSE
APPC’s project FactCheck.org writes that “numerous studies have found that additional Covid-19 shots are generally associated with extra protection against the coronavirus.” Almost three-quarters of those surveyed (73%) knew this was false.

Covid vaccines have been responsible for thousands of deaths in the United States.
FALSE
FactCheck.org debunked this false claim, finding that there is no evidence of excess deaths linked to vaccinations. Excess deaths among working-age adults in 2021 and 2022 were driven by Covid-19 and other factors, not vaccination. But barely over half of those surveyed (52%) knew that this is false. Over a third (34%) incorrectly thought it was true – a significant increase from the 19% who believed it to be true in September 2021.

The Covid-19, seasonal flu, Tdap, and RSV vaccines help protect the recipient from serious infection.
TRUE
All four of these vaccines help to protect against serious infection, according to the CDC. In our survey, most (69%) knew this was true though 13% thought it was false and 18% were not sure.

How did you do on the Covid vaccines? If you got 3 or 4 right, congratulations! You’re above average – any less, and you might want to check out the links above for more information.

About the surveys and findings
The survey data come from the 10th and 12th waves of the Annenberg Science and Public Health Knowledge Survey (ASAPH), a nationally representative panel of U.S. adults first empaneled in April 2021 that was conducted for the Annenberg Public Policy Center by SSRS, an independent market research company.

The flu questions were asked in the 10th wave of the survey, which was conducted January 10-16, 2023, among 1,657 U.S. adults, and has a margin of error of ± 3.2 percentage points at the 95% confidence level. Individuals who got at least three questions right about the flu vaccine are more likely than average (50%) to say they had received a flu shot in the 2022-23 flu season.

The Covid-19 questions were asked in the 12th wave of the survey, which was fielded August 9-15, 2023, among 1,482 U.S. adults, and has a margin of error of ± 3.4 percentage points at the 95% confidence level. Individuals who got at least three questions right about the Covid-19 vaccine are more likely than average (51%) to say they were very or somewhat willing to get a yearly Covid-19 vaccination if the CDC were to recommend it.

For the survey question wording see the topline and for additional information see the methodology statements for Wave 10 (flu) and Wave 12 (Covid-19).

The team working on these surveys includes APPC Director Kathleen Hall Jamieson, who directs the surveys, Research Director Dan Romer, who developed the knowledge scale, Managing Director of Survey Research Ken Winneg, and Research Analyst Shawn Patterson Jr.

The Annenberg Public Policy Center was established in 1993 to educate the public and policy makers about communication’s role in advancing public understanding of political, science, and health issues at the local, state, and federal levels.