New Flu Strain Sparks Worldwide Watchfulness

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ABSTRACT

Every winter, the flu strikes, but this year seems to be unusual. Health officials around the world are on high alert because a new, mutated version of the H3N2 flu has appeared. This strain has already caused serious, early outbreaks in several countries during the 2025 flu season. It's concerning because this version has seven key changes that make it different from the H3N2 strain included in this year's flu vaccine. This article aimed to raise worries about how well the vaccine will work and whether this new flu could make people sicker.

Keywords: Influenza A/H3N2, Flu season, Flu strain, Flu alert, Vaccine

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Introduction

Influenza is caused by a virus. You'll find seasonal flu occurring all over the globe. Experts estimate that roughly a billion people get seasonal influenza every year, and out of those, about 3 to 5 million cases turn into serious respiratory illnesses (1). Surprisingly, a seasonal flu virus changed its form over the summer, leading to flu cases popping up much earlier than usual, more than a month ahead of schedule. The NHS has sounded an alarm, issuing a 'flu jab SOS,' as fears grow that this winter might bring particularly severe challenges (1, 2).

H2N2/A strain of flu

H3N2/A is considered the most strain of flu during the 2025-2026 season globally in several regions such as Japan, Canada, and UK (2, 3). Globally, over 600,000 people will die every year because of this virus (4). The H3N2 strain is considered a serious hazard to public health because it causes fatal respiratory diseases (5). Influenza viruses are always changing and evolving, which is the main reason why the seasonal flu shot needs to be updated each year. Experts refer to this ongoing change as a "shift and drift" pattern (1).

Why H3N2/A appeared in summer?

H3N2/A, known as subclade K, initially appeared in the summer of 2025. In regions like the UK, Canada, and Japan, flu activity has been abnormally high due to its rapid spread. According to recent statistics from the UK, over 90% of the flu samples tested belong to this particular subclade. Due to their increased susceptibility to severe sickness from H3N2 viruses, older adults are particularly affected by this, which is linked to an increase in hospital admissions (6,7). The modified form of H3N2 that initially surfaced this summer, is rapidly spreading and has been linked to an increase in hospital admissions (8).

Over the summer, the seasonal flu virus experienced a sudden change. Because of this, the flu season has started over a month earlier than usual. This particular strain seems to be able to bypass some of the immunity people already have, and it's a type that past experience tells us tends to be more severe (9). Additionally, experts are warning that the new H3N2 strain has undergone changes that may allow it to evade people's immunity from prior infections or vaccinations. This may indicate that the upcoming flu season will be more severe than previous ones (10,11). Because the number of cases is reaching all-time highs, Japan has formally declared a flu epidemic. Schools and daycare facilities have had to close as a result, demonstrating the extent to which the virus is harming community members' health. As a result of this specific strain, Canada is also seeing an earlier and more severe flu season than usual. Therefore, efforts are being made by local health authorities to try and halt the spread (12,13).

Experts have pointed out that rather than a significant pandemic shift, the changes in the influenza A (H3N2) virus are caused by antigenic drift, which is a gradual accumulation of genetic alterations (8). Although this is a typical evolutionary process, it means that continuous genetic surveillance is necessary to direct flu vaccine updates and develop public health strategies (14, 15).

World Health Organization's recommendations for seasonal flu

The World Health Organization's approach to tackling influenza involves the work of the Global Influenza Surveillance and Response System and the Pandemic Influenza Preparedness framework, which aims to bridge gaps in access to effective medical treatments and other necessary tools (1). The WHO has reminded doctors to prescribe antiviral medications early on to patients who are at high risk, as doing so can help lower the chances of complications (1).

Conclusion

This article concluded that with flu season now starting, health experts around the world are becoming more concerned about a new strain of the virus that emerged in June. This is particularly worrying because it appeared four months after the composition of this year's flu vaccines had already been set.

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