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EDITORIAL

Flu vaccines 2026–2027: An early season leaves no time to wait

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The Northern Hemisphere flu season is starting weeks ahead of schedule. The very beginning of the epidemic is caused by an H1N1 virus carrying a mutation that worries virologists and epidemiologists. This vaccine prepared for the 2026/2027 season has been rebuilt in all three of its components. Both facts point to the same advice: we should vaccinate earlier than usual, and the shot should not be a simple formality.

The season is already running ahead of schedule, with influenza positivity unusually high for early autumn in the United Kingdom and on the United States (US) West Coast. In Japan, the exceptionally early outbreak observed already in August and early September provoked the closure of some schools.[1]

What is different about the virus? In the week ending September 26, 2026, H1N1 accounted for 96% of subtyped positive cases in the US, H3N2 for almost 4%, and influenza B was not detected, according to the Centers for Disease Control and Prevention (CDC) surveillance.[2] This early-season subtype distribution contrasts with that observed during the previous influenza season, when H3N2 subclade K predominated.

Sequencing points to a mutation in H1N1 called G155E. Alex Greninger's laboratory at the University of Washington found it in 13 of 17 H1N1 samples from Seattle with sufficiently complete sequences. In a preprint from Jesse Bloom's laboratory,[3] antibodies in 260 blood samples from Australia and the US recognized some G155E-bearing strains less well, especially in sera from teenagers and young adults, who have probably not met similar H1N1 viruses before.

The preprint has not yet been peer-reviewed. It measured pre-existing antibodies, not those produced by this year's vaccine. And a handful of Seattle sequences is not a national picture. None of this is a reason for alarm; all of it is a reason for attention and further surveillance.

Meanwhile, the vaccine for the 2026/2027 season has been rebuilt in all three components. The World Health Organization recommendation of February 27, 2026,[4] replaces every strain. All vaccines carry an A/Missouri/11/2025 (H1N1)pdm09-like virus. Egg-based vaccines add A/Darwin/1454/2025 (H3N2) and B/Tokyo/EIS13-175/2025 (B/Victoria); cell-, recombinant- and nucleic-acid-based vaccines use A/Darwin/1415/2025 and B/Pennsylvania/14/2025. The European Medicines Agency followed this recommendation.[5]

The choice was made in February 2026, 7 to 10 months before the season, as the Bloom preprint noted.[3] That lead time is the structural weakness of egg- and cell-based manufacture: the virus keeps changing while the vaccine is being made. Whether the

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new H1N1 strain covers G155E-bearing viruses well is not something the sources available now settle, and it is too early to claim it. Laboratories will test it in the coming weeks, and agencies should publish those results promptly.

None of this changes the case for vaccination. A vaccine that matches only partly still tends to protect better against severe disease than no vaccine, which is the outcome that fills hospital beds.

The unusually early start to the season also calls for a second look at vaccination timing. The standard counsel has been to vaccinate in September or October, and to avoid July or August because immunity can wane over the season, especially in people aged 65 and over. CDC interim guidance for 2026–2027[6] keeps that logic, preferring completion by the end of October while encouraging vaccination for as long as viruses circulate. It is reasonable to consider receiving the influenza vaccine as soon as possible.

The reason to delay was a possible loss of protection by February 2027. However, the reason to go now is an epidemic that may peak sooner than usual. Last year, Europe saw influenza detections three to four weeks earlier than in the two previous seasons. This year, it comes even faster. Anyone who has not yet been vaccinated, and above all those aged 65 and over, pregnant women, patients with chronic conditions, and health workers, should do so this month. Someone who got a shot in September need not do anything more, and CDC advises no booster dose for people already fully vaccinated this season.

Alongside these timing concerns, new vaccine tools are emerging amid uncertainty surrounding the institutions responsible for vaccine guidance. A newly approved mRNA influenza vaccine is entering the US market for this season. On August 5, the Food and Drug Administration approved Moderna's mFLUSIVA for adults aged 50–64 and granted accelerated approval for those aged 65 and over.[7] It was tested in more than 20,000 adults. The attraction is speed. Whether mRNA shots deliver better protection in everyday use remains to be shown, and only real-world effectiveness data can judge that.

The institutions that should help people choose among products are less settled. After the US Department of Health and Human Services replaced the members of the CDC vaccine advisory committee in June 2025, federal court orders halted implementation of that committee's later votes, and CDC September 1 interim guidance says the July 2025 recommendations remain in effect for 2026–2027.[8] The same guidance is silent on mFLUSIVA. Professional societies such as the American Academy of Family Physicians[9] and the American Academy of Pediatrics[10] have published their own recommendations. That helps, but it leaves clinicians, pharmacists, and patients, especially adults over 65, choosing between high-dose, adjuvanted, recombinant, and now mRNA products with less clarity than a season like this deserves.

Against this backdrop, several immediate actions are warranted. The public should get vaccinated this month if eligible and not yet done. We should not wait for a better-matched product, because none is coming before the approaching season peak. Adults aged 65 and over should ask for a high-dose, recombinant, or adjuvanted vaccine where available, as CDC's guidance prefers.

Clinicians and pharmacies should prioritize older adults, pregnant patients, people with chronic conditions, and care staff, and say plainly that the vaccine is to prevent severe disease.

Health agencies should publish early-season vaccine effectiveness estimates for H1N1 as soon as the data allow. They should report subtype and G155E frequency openly, so that everyone can follow the season as it unfolds.

Regulators and advisory bodies should give clear, timely guidance on newer products such as mFLUSIVA, and restore a functioning, trusted process for national vaccine recommendations.

Researchers should test whether antibodies induced by the 2026–2027 vaccines neutralize G155E viruses and share results as preprints within days, not months. The early signals may fade, and the season may prove ordinary. If they do not, the weeks ahead are the ones that count.

Conflict of interest

Jacek Z. Kubiak serves as one of the Editors-in-Chief of this journal, but was not in any way involved in the editorial and peer-review process conducted for this paper, directly or indirectly. The author also declares that he has no known competing financial interests or personal relationships that could have influenced the work reported in this paper.

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