

Specific Influenza Vaccines for Specific Ages — The UK's Approach to a Successful Influenza Vaccination Campaign

Dr. George Kassianos, interviewed by Laura Tamblyn Watts (CEO, CanAge)

The UK has one of the highest vaccination rates for older adults among Organisation for Economic Co-operation and Development (OECD) countries,¹ and record uptake among seniors in 2020-21 with more than 80% of those aged 65 and over getting vaccinated.² There is much we can learn about how the UK attains such high vaccination rates for seniors.

Three Pillars for Success in Vaccinating Older Adults

The United Kingdom has built a successful immunization program on support from the following core stakeholder groups:

Government Support

- A strong commitment has been made to prevent influenza through immunization
- Policymakers follow healthcare experts' advice
- There is a national program with clear, consistent communications and public education led by Public Health England
- Healthcare providers can access a national electronic health system that tracks infection and vaccinate rates with real time reporting
- Patient information can be shared between physicians and pharmacists
- Easy access: children are vaccinated at school and the rest of the population are vaccinated through primary care and pharmacies

Primary Care

- Providers are held accountable and compensated for achieving high vaccination rates; capitated models also encourage a focus on prevention and protection
- Providers are encouraged to offer convenient and innovative programs to proactively capture patients and provide better access
- Real-time monitoring of uptake allows providers to compare progress to coverage goals being against other local practices and performance is audited regularly
- Front-line doctors and pharmacists determine how many vaccine doses are needed and are incentivized against over-ordering, reducing waste

Patients

- An annual national marketing campaign highlighting the serious health risks posed by seasonal influenza, raising awareness of at-risk groups and driving patients to vaccination clinics
- Strong patient organizations raise awareness and promote vaccination



Protecting Older Canadians

Seniors are at highest risk for serious complications and hospitalization from the flu due to a natural weakening of the immune system with age. Influenza vaccines are formulated each year to protect against the circulating flu strains that are likely to cause the most infection. However, vaccines produced using traditional egg-based manufacturing methods are less effective against the H3N2 strain. In addition, the vaccine's impact progressively declines against this strain after it is administered; three to four months later it may be ineffective in protecting older people.

Three factors causing lower effectiveness:



- 1** Mutation of the flu virus as it circulates through the population (**antigenic drift**)
- 2** **Immunosenescence:** Weaker immune response to the vaccine in older people
- 3** **Egg Adaptation:** Tendency of antigen in a flu vaccine to mutate as it is prepared

While **antigenic drift** cannot be prevented, vaccines can be made to address the other two factors and potentially offer better protection to older people:

- **Immunosenescence** – enhancing vaccine with a booster (adjuvant) or by increasing the dose of antigen (high dose)
- **Egg adaptation** – innovative manufacturing methods like growing antigen in cells rather than chicken eggs or recombinant vaccines

The UK Approach to Vaccines

In Britain, an expert panel (the Joint Committee on Vaccines & Immunisations) makes recommendations on which vaccines to procure. The National Health Service decides on reimbursement. In the current 2020-21 season:

- **Adjuvanted vaccines** are recommended for adults aged 65 years and over. If adjuvanted vaccine is unavailable, cell-based vaccine is used. High dose vaccine is also recommended but not reimbursed given its higher cost.
- **Cell-based vaccines** are recommended for people under 65 who are eligible for public programs. If cell-based vaccine is unavailable, egg-based is used.



Speaker

Dr. George Kassianos is the National Immunisation Lead of the Royal College of General Practitioners and the recipient of the Royal College of General Practitioners' Foundation Council Award (2018), the most prestigious award for services to the College and General Practice. In October 2020, Her Majesty the Queen appointed Dr. Kassianos a Commander of the Order of the British Empire (CBE) for his services to General Practice and Travel Medicine.



Event Host

Laura Tambllyn Watts is President and CEO of CanAge – Canada's National Seniors' Advocacy Organization. She is a highly sought-after expert regarding matters involving older adults in Canada and around the world. She currently teaches at the University of Toronto, where she is also a Fellow of the Institute for Life Course and Aging.

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