

Policy brief on 'Enhancing influenza protection for Thailand's older adult population'

Summary

This policy brief is based on a roundtable discussion on improving influenza vaccine coverage among older adults in Thailand held on Wednesday 12 June 2024, co-organised by Asia Pacific Alliance for the Control of Influenza (APACI) and Ageing Asia, supported by Sanofi. The discussion convened key experts in the field (see Appendix 1 for members of the expert panel) to address the urgent need for enhanced influenza prevention strategies as Thailand's population ages. Guided by the objectives of identifying barriers to vaccine uptake, sharing global best practices, and formulating tangible solutions, experts explored challenges and opportunities related to influenza vaccine coverage among the older adult population in Thailand.

This brief synthesizes key insights from the roundtable, translating expert perspectives into concrete policy recommendations. These recommendations focus on four core pillars:

Increase influenza vaccine coverage rate among the general population, with a particular focus on the older adults	Expand access to differentiated influenza vaccine options for older adults, for example high-dose vaccines
Implement targeted disease awareness campaigns for the public and healthcare providers	Strengthen data-driven disease prevention through cost-effectiveness research and enhanced surveillance

By adopting these evidence-informed policy actions, Thailand can strengthen its commitment to protecting its ageing population from the preventable burden of influenza and promoting healthy ageing for all.

Existing challenge: High disease burden of influenza among older adults

Thailand is confronted with the critical task of protecting its rapidly ageing population from the disproportionate burden of influenza. Despite existing awareness about the disease, vaccine uptake remains suboptimal, falling short of the World Health Organization (WHO)'s target coverage of 75% among older adults – a key high-risk group identified by Thailand's Advisory Committee on Immunization Practice. This shortfall stems from barriers such as limited access to free vaccines, lack of awareness regarding differentiated flu vaccine options (e.g. high-dose vaccines), and logistical challenges in reaching vulnerable populations.

As underscored by the WHO and other leading health organisations around the world, vaccination is the most effective way to prevent infection and severe outcomes caused by influenza viruses, including hospitalisation, intensive care unit admission and even death.¹⁻³ Within this framework, preventive care, with influenza vaccines at its heart, becomes an essential strategy in mitigating the impact of influenza on older adults. Therefore, enhancing vaccine coverage emerges as a paramount policy tool.

Challenges with an ageing population

Thailand's older adult population, currently at around 20% (12.5 million) of the total population, is projected to exceed 35% (20.5 million) by 2040,⁴ transforming the country into a super-aged society. The 2021 Survey of Older Persons (Figure 1) revealed that less than half of those aged 50 and above perceive good health, with increasing reliance on care providers, predominantly family members, as people age.⁴ This presents significant societal and economic challenges, especially considering that nearly half of individuals aged 60-69 are still actively working, primarily in their own businesses.⁴

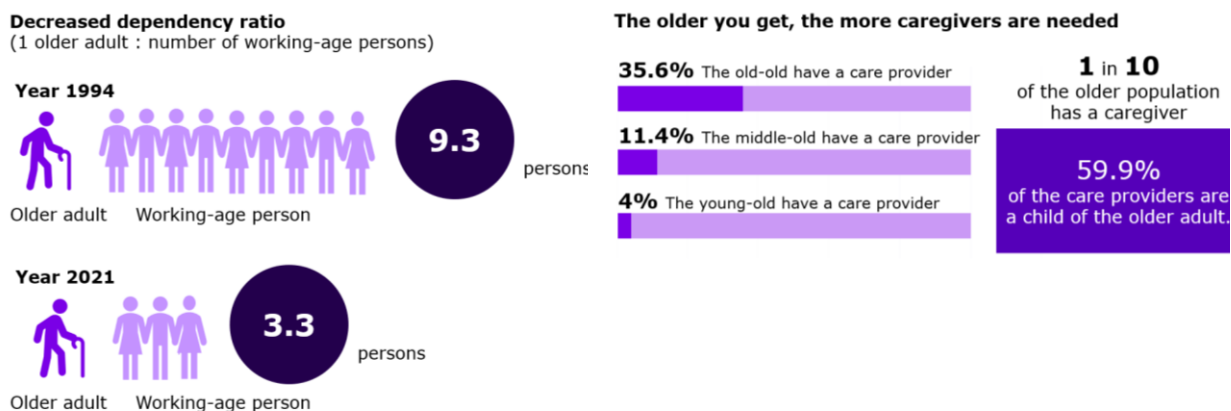


Figure 1. Key findings from the 2021 Survey of Older Persons by the Thai Gerontology Research and Development Institute amongst individuals aged 50 years or older residing in >80,000 households across the country⁴

Health and economic impact of influenza among Thai older adults

Influenza is a year-round concern in Thailand, and its impact on public health including mortality rates, is relatively high compared to other countries.⁵ The virus is a leading cause of severe pneumonia requiring hospital admission and a significant cause of febrile illnesses leading to outpatient clinic visits. Older adults, particularly those over 65 are more susceptible and experience the greatest burden of disease, with increasing incidence of infections, hospitalisations (Figure 2) and substantial annual healthcare costs.⁶

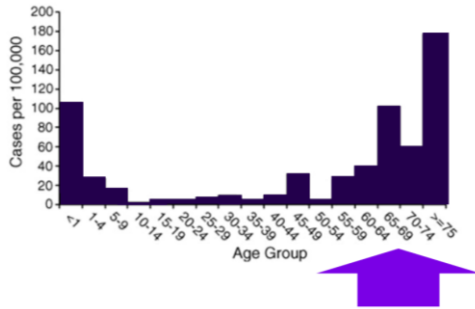


Figure 2. Age-specific incidence of influenza pneumonia in Thailand⁶

Over the years, surveillance data shows an upward trend in influenza infections, with a notable surge in treatment demand this year.

- The emergence of new COVID-19 variants and relaxed physical distancing measures have complicated the situation, resulting in more co-infections and superinfections among influenza patients.⁷
- Data indicates that approximately 25% of older patients develop secondary bacterial infections due to influenza, increasing the risk of death and complications.⁷
- This heightened risk is especially concerning given the rising mortality rates from influenza over the past two decades, largely due to an ageing society and comorbidities such as respiratory diseases, cancer, and renal disease.
- Notably, those over 65 have a higher number of deaths and rates per 1,000,000 than those under 65 (Figure 3)⁸ Influenza significantly contributes to acute exacerbations of chronic obstructive pulmonary disease (COPD), with the influenza vaccine offering protective benefits for these patients.⁶

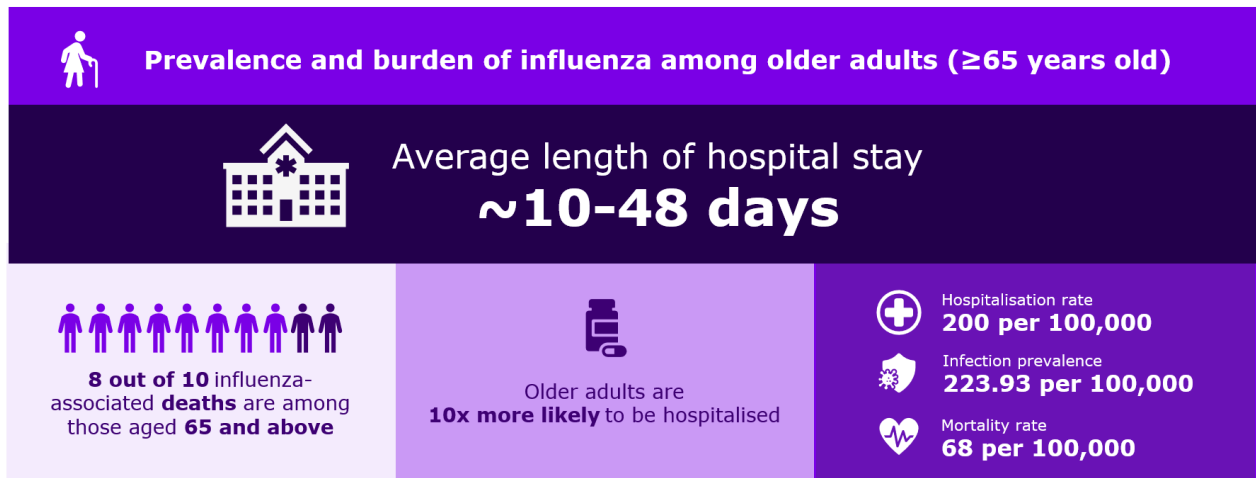


Figure 3. Influenza-associated morbidity and mortality among Thai older adults^{5,8-10}

Economically, influenza places a substantial burden on patients, the healthcare system, and Thai society (Figure 4). Costs of influenza are especially high among older adults over 65 with underlying health conditions, primarily due to lost productivity and direct medical expenses during hospitalisation.

- Factors such as comorbidities like COPD and heart disease, non-vaccination status, and severe influenza illness exacerbate this burden.⁵
- Quarantine processes during an outbreak also add to the economic strain, with labour-intensive sectors such as services being the most affected.⁵

Therefore, prevention through vaccination is a key strategy to mitigate the economic impact of influenza by reducing its overall incidence.

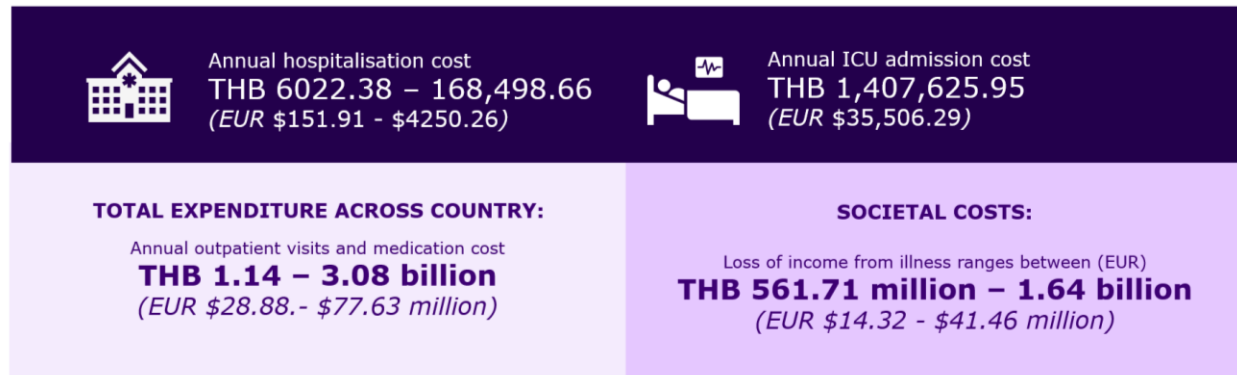


Figure 4. Economic burden associated with influenza infections and hospital visits among older adults in Thailand aged ≥65 years old⁵

To ensure Thailand can reach the WHO-recommended 75% flu vaccine coverage rate among older adults and to enable more older adults in Thailand to access influenza vaccination, what are the current barriers to vaccinating older adults?

Influenza vaccination implementation in Thailand faces significant challenges despite existing strategies. These barriers contribute to a considerable gap in vaccine uptake among older adults (Figure 5), including:

- Vaccine misinformation leading to mistrust among the general population and older adults;
- Lack of awareness about the severe impact of influenza on older adults; and
- Issues with vaccine availability and accessibility.

Following recommendations by Thailand’s Advisory Committee on Immunization Practice (ACIP), influenza vaccines are provided free of charge to high-risk groups, including older adults aged ≥65 years and persons with chronic diseases. However, the number of vaccines procured is estimated to cover only 25% of the high-risk population.¹¹

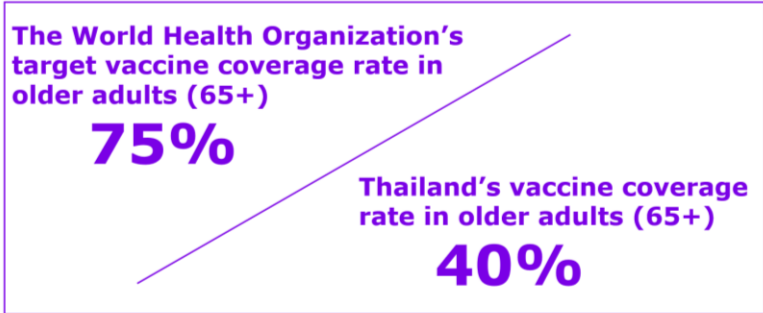


Figure 5. Target influenza vaccine coverage rate recommended by WHO and current estimated influenza vaccination rate among older adults in Thailand aged ≥ 65 years old*
*Estimates from local market research.

Current influenza protection landscape in Thailand

Thailand's current approach to influenza protection reveals a critical gap between scientific evidence and public access. While standard-dose influenza vaccines are available for free through public health programmes, evidence from real-world studies and clinical trials show that high-dose vaccines contain four times the antigen (substances that trigger the body's immune response) compared to standard-dose vaccines, leading to significant reductions in influenza cases and hospitalisations, as well as improved immune response in seniors.^{12,13}

High-dose influenza vaccines demonstrated greater effectiveness in adults ≥ 65 years compared to standard-dose vaccines

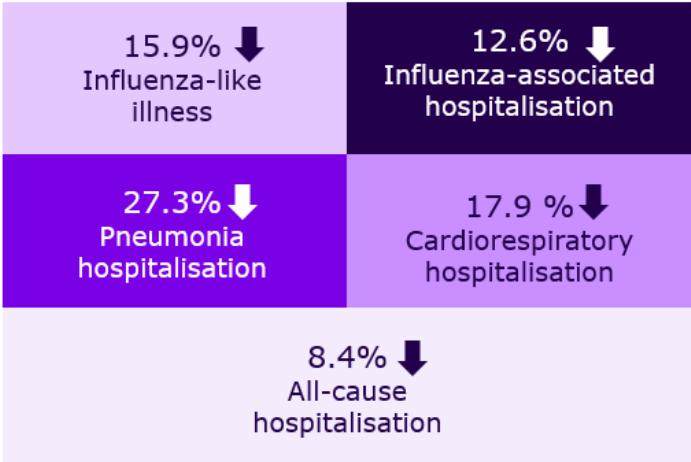


Figure 6. Relative vaccine effectiveness of high-dose influenza vaccine compared to standard-dose influenza vaccine.¹²

However, access to these differentiated vaccine options including high-dose vaccine is currently limited to private healthcare providers, creating a cost barrier for a large portion of the population. Furthermore, there is a concerning lack of awareness among the public, even within the private sector, regarding the availability and benefits of influenza vaccines.

These issues underscore the need for policy interventions to bridge the gap between evidence-based prevention strategies and equitable access for vulnerable populations.

A multi-pronged approach to protecting older adults from influenza

Drawing from successful initiatives in the US, Hong Kong, and South Korea, protecting older adults from influenza requires a comprehensive strategy:

Accessible vaccination	
Ensure easy and free access to influenza shots across public and private healthcare systems for older adults and high-risk individuals	
Targeted vaccination programmes	Differentiated vaccine strategy
Prioritise vaccination programmes for older adults in nursing homes and aged care facilities to protect this vulnerable population segment	Recommend and promote high-dose or adjuvanted vaccines for those aged 65 and above due to their enhanced protection
Clear public health messaging	Healthcare provider education
Develop clear and consistent messaging aimed at older adults about the importance of influenza shots and the availability of tailored vaccines	Educate healthcare providers on current vaccine recommendations and encourage them to actively promote influenza shots to older patients

Safeguarding older adults from influenza calls for strategic policy decisions, effective communication, and robust healthcare partnerships.

Policy and implementation recommendations

To enhance influenza vaccine coverage and address the challenges identified, the following strategies have been proposed by the Expert Panel (see Appendix 1 for members of the Expert Panel):

1. Improve vaccine access and affordability

- **Increase government funding:** Advocate for an annual increase in government funding for the National Immunization Program (NIP) to ensure adequate supply of free influenza vaccines for the ageing population year-long
- **Prioritise differentiated vaccine options, for example, high-dose vaccines:** Based on cost-effectiveness data and additional research, expand free high-dose vaccine provision through the NIP to individuals aged ≥65 years and high-risk groups, including:
 - Residents of nursing homes and long-term care facilities who are aged 65 years or above
 - Individuals with chronic diseases and comorbidities including cardiovascular disease and frailty*

- Immunocompromised individuals*

*The use of high-dose influenza vaccines is not currently indicated for these conditions at this time and requires regulatory approval.

2. Boost awareness and education

- **Implement targeted campaigns via multiple channels:** Use social media and community engagement to educate older adults and their caregivers about the risks of influenza and the benefits of vaccination, increase awareness of differentiated vaccine options (e.g. high-dose vaccines), and combat vaccine hesitancy and misinformation
- **Engage healthcare providers:** Develop targeted education programmes for healthcare providers across all levels of care, including primary care physicians and specialists, to:
 - Reinforce the importance of routine influenza vaccination for older adults
 - Provide up-to-date information on differentiated vaccination strategies such as high-dose vaccine options and appropriate patient selection
 - Equip them with effective communication strategies to address patient concerns and promote vaccine acceptance

3. Uphold robust data monitoring and surveillance

- **Leverage cost-effectiveness analyses:** Evidence comparing the cost-effectiveness of standard-dose and high-dose influenza vaccines in the Thai context, particularly among high-risk populations, can not only provide crucial insights for healthcare providers, but also for healthcare purchasers and the Thai NHSO (National Health Security Office) to inform policy decisions about the inclusion of differentiated vaccine options such as high-dose vaccines in the NIP
- **Strengthen influenza surveillance:** While Thailand already has a robust surveillance system, it would be beneficial to enhance data collection on influenza-related morbidity and mortality among specific high-risk groups. This would provide a more detailed understanding of the disease burden and inform targeted interventions

Conclusion

There is an urgent need for a comprehensive strategy to enhance influenza vaccination rates among Thailand's older adult population. By addressing the barriers to vaccine access, awareness, and affordability, and by harnessing the strengths within the healthcare system alongside innovative solutions, Thailand can significantly reduce the burden of influenza on this vulnerable group. A proactive and collaborative effort between policymakers, healthcare providers, and the public is essential. Supporting healthy ageing through effective influenza prevention not only improves the quality of life for our older adults but also translates into significant cost savings for the healthcare system, and ensures that older adults in Thailand have the opportunity to live longer, healthier lives.

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Appendix 1: Expert panel

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