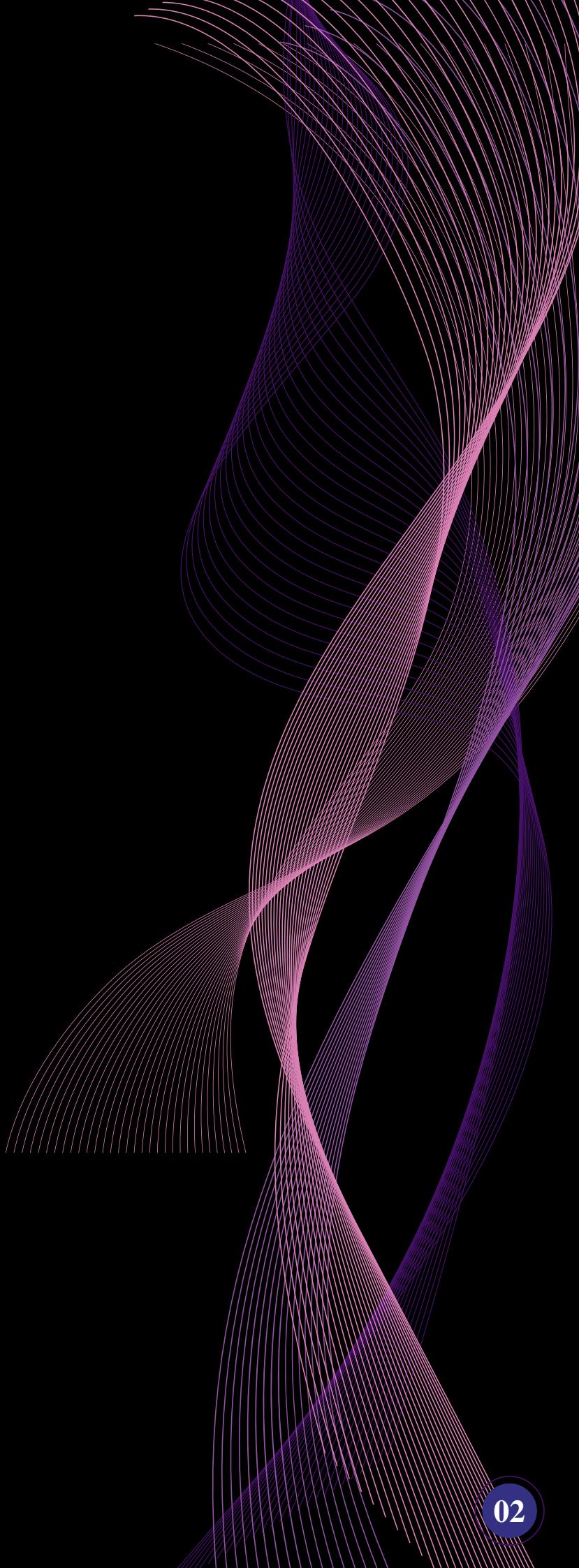


National Vaccine- Preventable Diseases Recommendation for Older Adults

Malaysian Society of Geriatric Medicine





WELCOME MESSAGE

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Chairperson, Writing Group

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MEMBERS

EXTERNAL REVIEWERS

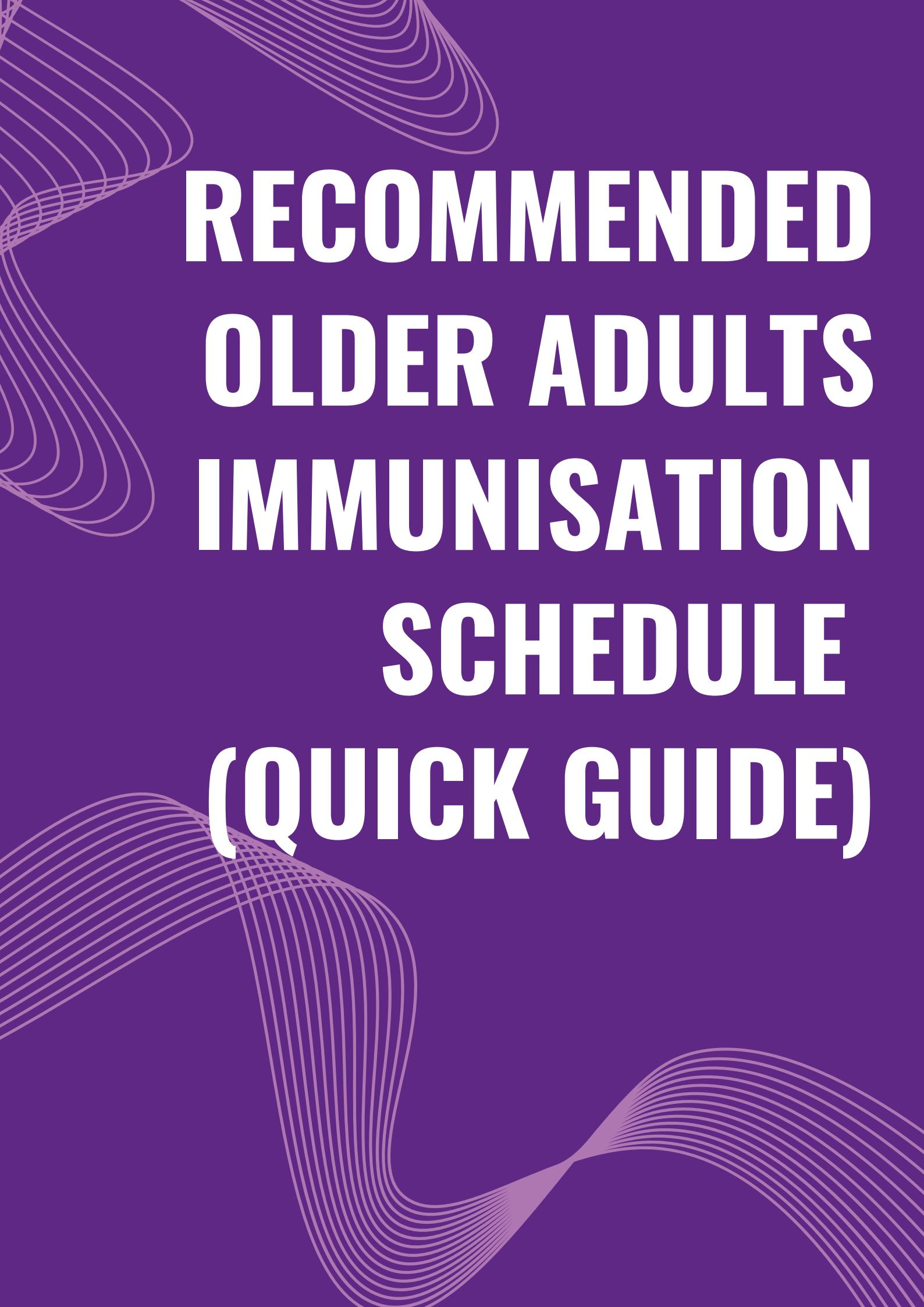
ACKNOWLEDGEMENTS

ABBREVIATIONS

ALT	Alanine Aminotransferase
ARDS	Acute Respiratory Distress Syndrome
ARI	Acute Respiratory Illness
AST	Aspartate Aminotransferase
CAP	Community-Acquired Pneumonia
CDC	Centers For Disease Control And Prevention
CKD	Chronic Kidney Disease
DHF	Dengue Haemorrhagic Fever
ESRF	End-Stage Renal Failure
FHbp	Factor H-Binding Protein
GBS	Guillain-Barré Syndrome
HAV	Hepatitis A Virus
HBV	Hepatitis B Virus
HCC	Hepatocellular Carcinoma
HZ	Herpes Zoster
HZO	Herpes Zoster Ophthalmicus
IM	Intramuscular
IMD	Invasive Meningococcal Disease
IPD	Invasive Pneumococcal Disease
LRTD	Lower Respiratory Tract Disease
mRNA	Messenger RNA
Non-IPD	Non-Invasive Pneumococcal Disease
PCV	Pneumococcal Conjugate Vaccine
PD	Pneumococcal Disease
PPSV	Polysaccharide Vaccine
PHN	Post Herpetic Neuralgia
RSV	Respiratory Syncytial Virus
RSV-ARI	RSV-Associated Acute Respiratory Infection
SAEs	Serious Adverse Effects
Tdap	Diphtheria, Tetanus, Pertussis
TTS	Thrombosis With Thrombocytopenia Syndrome
VZV	Varicella Zoster Virus
VCD	Virologically Confirmed Dengue
VPD	Vaccine Preventable Disease
WHO	World Health Organization

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RECOMMENDED OLDER ADULTS IMMUNISATION SCHEDULE (QUICK GUIDE)

RECOMMENDED OLDER ADULTS IMMUNISATION SCHEDULE (QUICK GUIDE)

Vaccines	Age Group				
	50 - 59	60 - 64	65 - 69	70 - 74	≥75
COVID-19	1 dose (an additional dose recommended if moderate-severely immunocompromised) ~	2 doses ~			
Dengue	2 doses ~	Ongoing studies, no evidence yet in adults ≥60			
Hepatitis A (Hep A)	2 doses*^				
Hepatitis B (Hep B)	3 doses ~	3 doses*^			
Influenza	1 dose annually ~				
Meningococcal	1-2 doses**				
Pneumococcal	1 or 2 doses* PCV 13 → PPSV23 (1 year, unless immunocompromised group – 8 weeks) PCV15 → PPSV 23 (1 year, unless immunocompromised group – 8 weeks) PPSV 23 – as sequential therapy, with additional booster after 5 years (if received PCV 13/15 earlier) If received only PPSV 23 prior, then a single dose of PCV20 or PCV15 or PCV 13 ≥ 1 year after the last PPSV23 dose PCV 20 – 1 dose ~				
Respiratory Syncytial Virus	1 dose ~				
Tetanus, diphtheria, pertussis (Tdap/Td)	1 dose Tdap, then Td booster dose every 10 years ~				
Shingles	2 doses ~				

~	Recommended vaccination for adults who meet age requirement, lack documentation of vaccination or lack evidence of immunity
#	Recommended vaccination based on shared clinical decision-making and risk factors
^	Recommended vaccination for adults with an additional risk factor or another indication
*	See notes below (Please refer to the relevant sections for more details)

COVID-19

Hepatitis A

Hepatitis B

Meningococcal

Pneumococcal

**The minimum interval between any 2 doses of PPSV 23 is 5 years.
It is recommended for older adults to receive no more than 3 doses
of PPSV 23**

Respiratory Syncytial Virus (RSV)

**Till date, RSV vaccine is recommended
as a single lifetime dose only. Persons
who have already received RSV
vaccination are NOT recommended to
receive another dose.**

Zoster/Shingles

STRATEGIES FOR IMPROVING LOCAL VACCINATION UPTAKE

STRATEGIES FOR IMPROVING LOCAL VACCINATION UPTAKES



01

Patient Education about the Benefits and Risks of Vaccination

Provide clear information: Emphasize the importance of vaccines in preventing severe illness, hospitalization, and death from diseases.

Use credible sources: Share information from trusted organizations such as Ministry Of Health Malaysia, [MSIDC](#), [CDC](#)

Tailor messaging: Address misconceptions directly and emphasize that vaccines are generally safe and effective, especially for older adults who may have weaker immune systems.



02

Leverage Trusted Messengers

Healthcare providers: Encourage your team doctors, nurses, and pharmacists to initiate conversations about vaccination during regular visits.

Community leaders: Engage religious leaders, senior centre coordinators, and local influencers whom older adults respect.

Family involvement: Empower family members to advocate for vaccinations during discussions with their older relatives.



03

Make Vaccines Accessible

Convenient locations: Offer vaccinations in familiar, easily accessible places such as community health clinics, community centres like Pusat Aktiviti Warga Emas.

Flexible scheduling: Provide extended hours, including weekends, to accommodate different schedules.

Mobile clinics: Deploy mobile units to reach rural or underserved areas.

STRATEGIES FOR IMPROVING LOCAL VACCINATION UPTAKES



04 Offer Incentives and Address Barriers

Cost reduction: Offer discounted prices for subsequent doses, remind public that vaccinations are tax-deductible.

Transportation assistance: Provide free rides or partner with local organizations to ensure transportation is not a barrier.

Social incentives: Promote the idea of vaccination as a way to protect loved ones and remain active in social settings.



05 Engage Through Targeted Campaigns

Culturally sensitive materials: Use language and imagery that resonate with our local Malaysian older adults with multilingual ie Malay, Chinese, Tamil, English.

Personalized outreach: Send reminders via phone calls and text messages, specifically targeting older adults.

Digital campaigns: Use social media platforms or email campaigns tailored to older adults who are tech-savvy, and broadcast via popular radio channels and air during prime time in local TV channels.



06 Host Community Events

Organize vaccination drives combined with social events like health fairs or wellness workshops, and even during festivities eg Raya, Chinese New Year, Christmas and Deepavali.

Involve peer networks where older adults can hear testimonials from others who've benefited from vaccination.

STRATEGIES FOR IMPROVING LOCAL VACCINATION UPTAKES



07

Address Concerns about Side Effects

Be transparent about possible mild side effects (e.g., soreness, fatigue) while explaining that these are temporary and normal.

Reassure them about monitoring for rare adverse events and the availability of care if needed.



08

Highlight Disease Risk

Use both statistics and real-life stories to highlight the increased risk of complications from vaccine-preventable diseases in older adults.

Clearly compare these risks with the relatively low risk of vaccination. These messages should also be incorporated into informative TV and radio advertisements.



09

Policy and Systematic Approach

Develop a national immunisation programme for older adults, similar to the existing framework for the paediatric population. Widespread use of such recommendations and policy papers can help drive vaccine uptake.

UNDERSTANDING EACH VACCINE PREVENTABLE DISEASE (VPD)

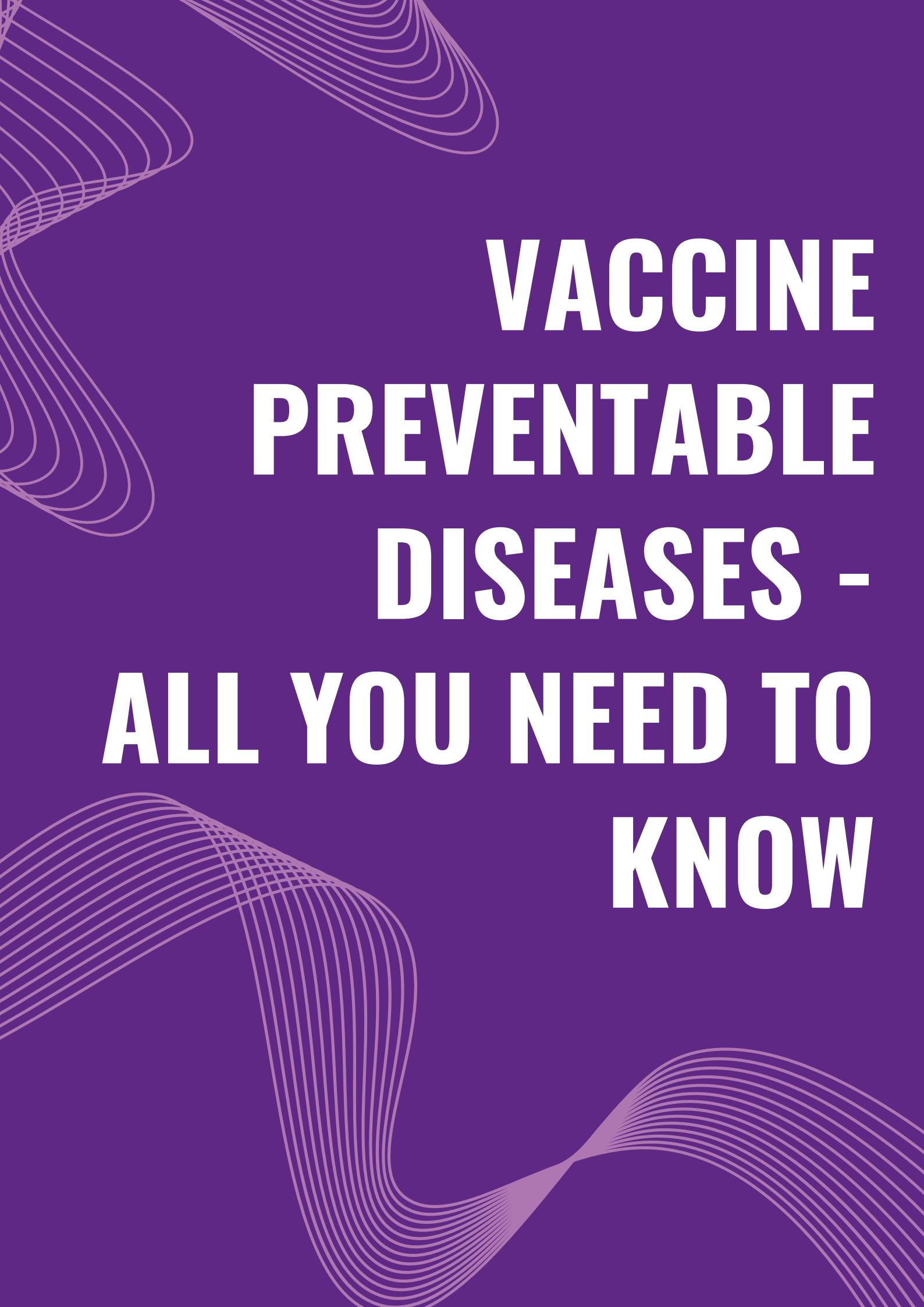
UNDERSTANDING EACH VACCINE PREVENTABLE DISEASE

	 Brands available in Malaysia	 Vaccine Type	 Dosing schedule	 Storage	 Contraindication
Covid-19	Comirnaty Dispersion for Injection (mRNA vaccine)	mRNA vaccine	<p>Single dose, at least 3 months after the most recent dose (if any, regardless of Covid 19 vaccination history)</p> <p>Additional dose recommended for adults aged >65 after 6 months and those aged 50-64 with moderate-severe immunocompromising conditions.</p>	Store in a freezer at -90°C to -60°C	<ul style="list-style-type: none"> Hypersensitivity to active ingredient or any of the excipients. For detailed contraindication, consult specific product information.
Dengue	Qdenga	Live, attenuated	2 doses, 3 months apart	Keep refrigerated. Between 2°C to 8°C. Do not freeze. Protect from light.	<ul style="list-style-type: none"> Hypersensitivity to the active ingredient or any excipients. Immunodeficiency (congenital, acquired, or on immunosuppressive therapy within 4 weeks, e.g., chemotherapy or corticosteroids ≥ 20 mg/day or ≥ 2 mg/kg/day for ≥ 2 weeks). Symptomatic or asymptomatic HIV with evidence of impaired immune function.
Diphtheria, tetanus, pertussis (Tdap)	<ul style="list-style-type: none"> Boostrix Adacel 	Combined vaccine (bacterial toxoids)	<p>Primary: 3 doses — Tdap, then tetanus and diphtheria toxoid (Td) ≥ 4 weeks later, 3rd Td at 6–12 months later.</p> <p>Booster: Td every 10 years.</p>	Keep refrigerated. Between 2°C to 8°C. Do not freeze. Protect from light.	Hypersensitivity to active ingredient or any of the excipients.
Hepatitis A	<ul style="list-style-type: none"> Avaxim (Hepatitis A) Havrix (Hepatitis A) Twinrix (Hepatitis A + B) 	Inactivated Hepatitis A virus (or with Hepatitis B surface antigen)	<p>2 doses at 6 to 12 months intervals</p> <p>For combined hepatitis A and B vaccine, a 3-dose series is required at 0, 1 and 6 months.</p>	Keep refrigerated. Between 2°C to 8°C. Do not freeze. Protect from light.	Hypersensitivity to the active substance or any of the excipients.

UNDERSTANDING EACH VACCINE PREVENTABLE DISEASE

	 Brands available in Malaysia	 Vaccine Type	 Dosing schedule	 Storage	 Contraindication
Hepatitis B	<ul style="list-style-type: none"> Euvax-B Engerix-B SII Hepatitis-B Twinrix (Hepatitis A + B) 	Recombinant vaccine using hepatitis B surface antigen	20mg per dose, administer as 3-dose series at 0, 1 and 6 months.	Keep refrigerated. Between 2°C to 8°C. Do not freeze. Protect from light.	Hypersensitivity to the active substance or any of the excipients.
Herpes zoster (shingles)	Shingrix	Recombinant, adjuvanted	2 doses, with 2nd dose administered 2 to 6 months after the first dose	Keep refrigerated. Between 2°C to 8°C. Do not freeze. Protect from light.	Hypersensitivity to the active substance or any of the excipients.
Influenza A&B	<ul style="list-style-type: none"> Fluarix Tetra Influvac Vaxigrip Tetra SKYCellFlu Trivalent/ Quadrivalent 	Inactivated, whole viral or fractional (protein-based)	Single dose repeated annually with the most updated vaccine	Keep refrigerated. Between 2°C to 8°C. Do not freeze. Protect from light.	Hypersensitivity to the active substance or any of the excipients (The vaccine contains egg or chicken protein).
Meningococcal	<ul style="list-style-type: none"> Menactra Menveo Nimenrix MenQuadfi 	Polysaccharides conjugate vaccine	Single dose; booster every 5 years if risk persists. For asplenia, complement deficiencies, or HIV: 2 doses 2 months apart as primary series.	Keep refrigerated. Between 2°C to 8°C. Do not freeze. Protect from light.	Hypersensitivity to the active substance or any of the excipients.
Respiratory Syncytial Virus (RSV)	<ul style="list-style-type: none"> Arexyv Abrysvo 	Arexyv - Recombinant, adjuvanted Abrysvo - Recombinant, non-adjuvanted	Single dose	Keep refrigerated. Between 2°C to 8°C. Do not freeze. Protect from light.	Hypersensitivity to the active substance or any of the excipients.
Streptococcus Pneumonia	<ul style="list-style-type: none"> Prevenar 13 (PCV-13) Vaxneuvance (PCV-15) Prevenar 20 (PCV-20) Pneumovax (PPSV-23) 	Inactivated, fractional (polysaccharide or conjugate)	No prior vaccine: <ul style="list-style-type: none"> Preferred : 1 dose of PCV 20 (revaccination with PCV-20 has not been established) 1 dose PCV-13/PCV-15, then PPSV 23 after > 1 year (unless immunocompromised group - 8 weeks) Prior PPSV-23 only: 1 dose PCV-13 or PCV-15 ≥ 1 year after last PPSV-23.	Keep refrigerated. Between 2°C to 8°C. Do not freeze. Protect from light.	Hypersensitivity to the active substance or any of the excipients.

References



VACCINE PREVENTABLE DISEASES - ALL YOU NEED TO KNOW

ALL YOU NEED TO KNOW: COVID-19



Disease Overview





Burden of Disease

Total Cumulative Cases & Mortality Cases



Global:

Cumulative Cases¹: 778 million cases
Mortality Cases²: 7.1 million cases

Asia:

Cumulative Cases³: 202.35 million cases
Mortality Cases⁴: 1.64 million cases

Southeast Asia:

Cumulative Cases¹: 61.5 million cases
Mortality Cases²: 809,000 cases

Malaysia :

Cumulative Cases¹: 5.3 million cases
Mortality Cases⁵: 37,000 cases



About the Vaccine

Types of SARS-CoV-2 vaccines for COVID-19

Genetic vaccines
(nucleic acid vaccines)

British Society for Immunology
www.immunology.org

Contain a segment of SARS-CoV-2 virus genetic material that codes for a specific protein. Can be DNA or RNA.

Our cells use the genetic material to make the SARS-CoV-2 protein, which is recognised by the immune system to trigger a response.

This response builds immune memory, so your body can fight off SARS-CoV-2 in future.

Considerations

Low cost and fast to develop.
May need to be stored at specific low temperatures.

Used in the UK for COVID-19

Pfizer/BioNTech & Moderna

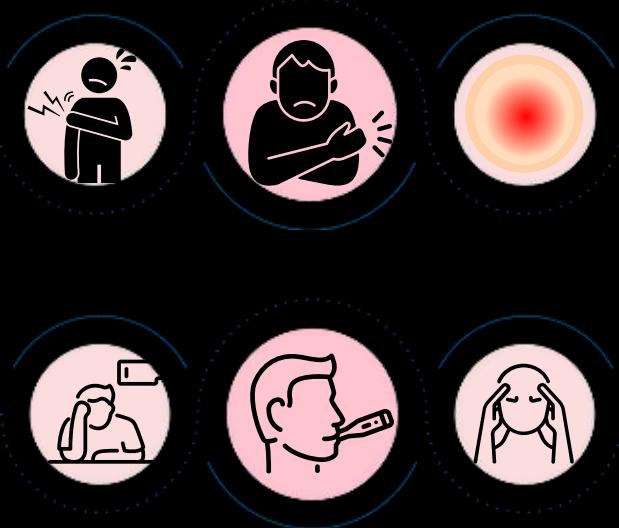


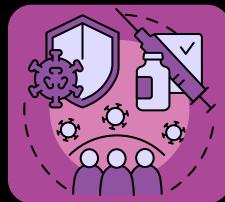
Vaccine Efficacy

Population Group	Outcome	Vaccine Effectiveness (VE)
Adults aged ≥ 18 years	ED or urgent care (UC) visits	33%
Immunocompetent adults aged ≥ 65 years	Hospitalizations	45%–46%
Immunocompromised adults aged ≥ 65 years	Hospitalizations	40%



Safety of Vaccine





Benefits of vaccination in older adults

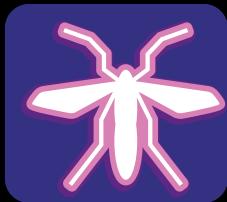


Recommendations

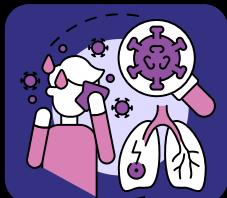
Age Group	Vaccination Status	Recommended Schedule*
50–64 years old**	Unvaccinated	1 dose of the latest formulation* of the year of Pfizer-BioNTech
	Previously vaccinated	1 dose of the latest formulation* of the year of Pfizer-BioNTech (at least 8 weeks after the most recent dose)
65 years and older	Unvaccinated	1 dose of the latest formulation* of the year of Pfizer-BioNTech, then 2nd dose 6 months later (minimum interval 2 months)
	Previously vaccinated	1 dose of the latest formulation* of the year of Pfizer-BioNTech, then 2nd dose 6 months later (minimum interval 2 months)

References

ALL YOU NEED TO KNOW: DENGUE



Disease Overview



Burden of Disease Age-Adjusted Mortality Rates



Global ¹:

2021: 376.50 deaths / 100,000 persons-year

Asia-Pacific:

No data available

Southeast Asia ¹:

2021: 10 -20 deaths / 100,000 persons-year

Malaysia ²:

Aged over 74 years: 1.64 deaths / 100,000 persons-year

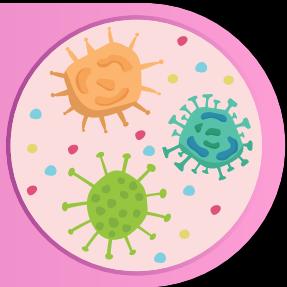


About the Vaccine Qdenga



References

ALL YOU NEED TO KNOW: DIPHTHERIA, TETANUS, PERTUSSIS



Disease Overview Diphtheria



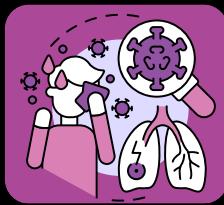
Disease Overview Tetanus





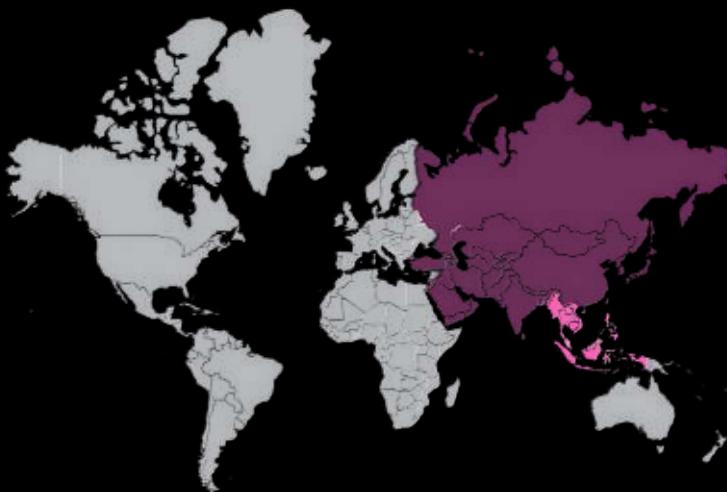
Disease Overview

Pertussis



Burden of Disease

Incidence Rate among Older Adults



Global:

Diphtheria¹: No global data available
Tetanus²: 3 cases / 100,000 person-years
Pertussis³: No global data available

East Asia:

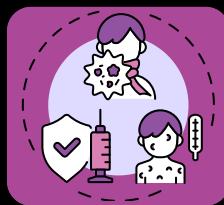
Diphtheria¹: No regional data available
Tetanus²: 0.5 cases / 100,000 person-years
Pertussis³: No regional data available

Southeast Asia:

Diphtheria¹: No regional data available
Tetanus²: 1.5 cases / 100,000 person-years
Pertussis³: No regional data available

Malaysia:

Diphtheria⁴: 0.05 cases / 100,000 person-years
Tetanus²: 0.2 - 0.5 cases / 100,000 person-years
Pertussis⁴: 0.94 to 3.08 cases / 100,000 person-years

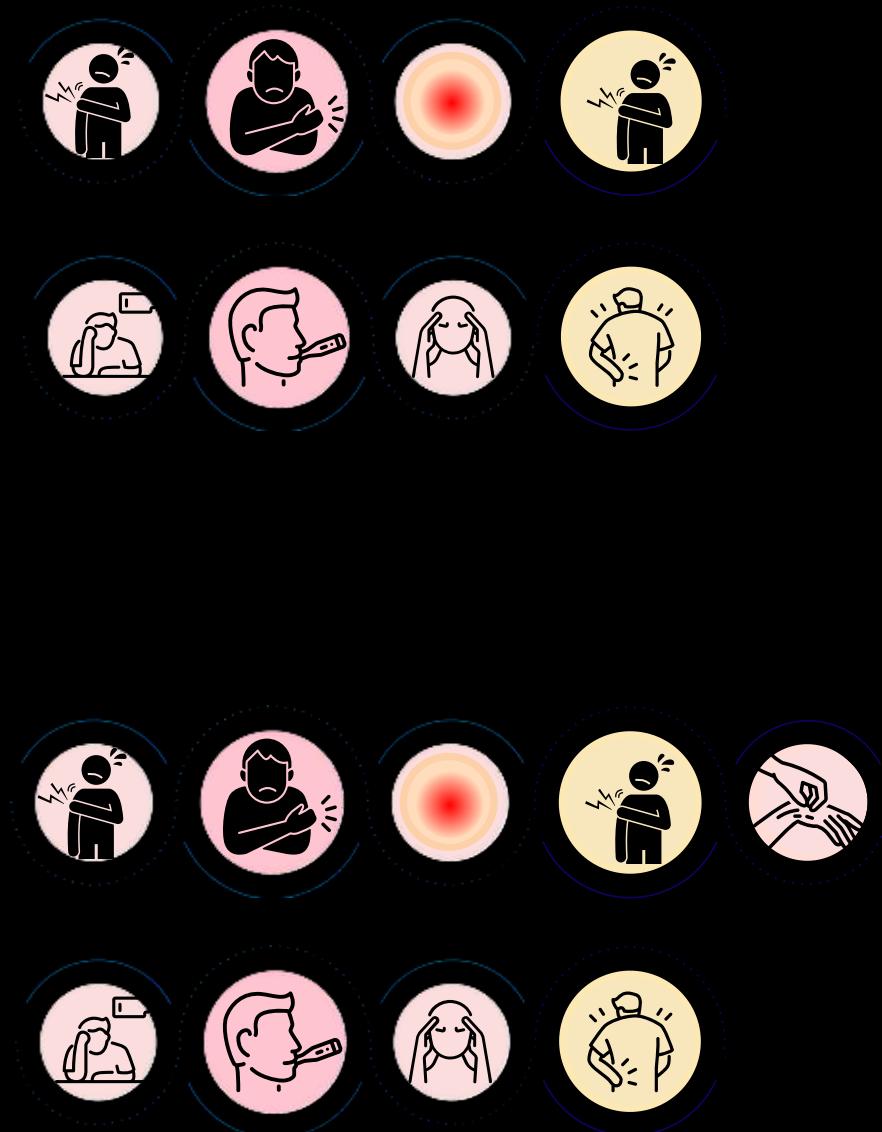


About the Vaccine

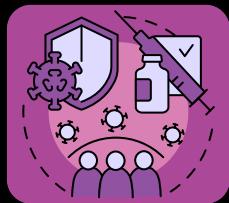
Feature	Diphtheria Vaccine	Tetanus Vaccine	Pertussis Vaccine
Type	Toxoid (modified diphtheria toxin)	Toxoid (inactivated tetanus toxin)	Acellular (purified bacterial components)
Adjuvant	Aluminium salt ⁴	Aluminium phosphate	Varies by formulation
Common Combinations	DT, Td, DTaP/Tdap, DTaP-HepB-Hib-IPV		DTaP/Tdap, DTaP-HepB-Hib-IPV
Dose & Route	0.5 mL intramuscular injection		
Main Antibody Response	IgG antibodies against diphtheria toxin	IgG antibodies to neutralize tetanus toxin	IgG antibodies to multiple pertussis components
Effectiveness Evidence	Strong real-world support (e.g., outbreaks) ⁵	Strong real-world support (post-WWII decline) ⁶	Supported by real-world and component studies
Immunity Duration	Wanes by middle age (>50% have low immunity)	Wanes over time in adults	Waning antibodies, but clinical protection ~10 years ⁴
Booster Needed?	Single booster restores protection within 6 weeks ⁴		Yes – Tdap booster enhances immunity
Protection Threshold	>0.1 IU/mL for long-term protection	Protective levels maintained post-booster	Clinical protection despite declining antibodies
Special Notes	First developed early 1900s	Does not prevent bacterial growth, only toxin	Multicomponent vaccines offer best protection



Safety of Vaccine



Do **NOT** administer DTaP to adults as the higher doses of the diphtheria and pertussis components may result in greater adverse effects. The reduced antigen content of the adult formulations of Tdap vaccines are safe and well tolerated in adults. Booster doses of Tdap given within 10 years are safe, well tolerated in adults and limb swelling reactions following booster doses rarely occur.



Benefits of vaccination in older adults



Recommendations

Category 1:	Previously unvaccinated, unknown vaccination status or incomplete primary series of Tdap vaccination
Category 2:	Booster vaccination if their last vaccination (including primary series or previous booster dose) was at least 10 years ago
Category 3:	Older adults in close contact with an infant aged less than 12 months
Category 4:	Older adults who have recovered from diphtheria
Category 5:	Older adults who have recovered from tetanus

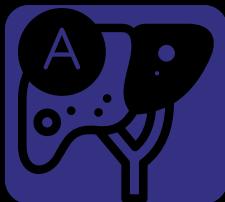


Recommendations

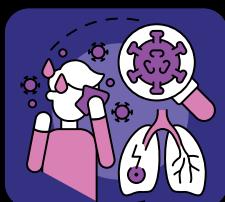
History of tetanus vaccination	Time since last dose	Type of wound	Tdap or Td ^Y	Tetanus immunoglobulin (TIG)
>3 doses	< 5 years	Minor clean wound	No	No
		All other wounds [^]	No	No *
>3 doses	5-10 years	Minor clean wound	No	No
		All other wounds [^]	Yes	No *
>3 doses	>10 years	Minor clean wound	Yes	No
		All other wounds [^]	Yes	No *
<3 doses or uncertain [#]	Uncertain	Minor clean wound	Yes	No
		All other wounds [^]	Yes	Yes

References

ALL YOU NEED TO KNOW: HEPATITIS A



Disease Overview



Burden of Disease Incidence Rate



Global:

General¹: 2,272.08 cases / 100,000 person-years
Older adults: No incidence data available

East Asia:

General¹: 1,955.43 cases / 100,000 person-years
Older adults: No incidence data available

Southeast Asia:

General²: < 1 cases / 1,000 person-years
Older adults: No incidence data available

Malaysia:

General³: 0.46 cases / 100,000 person-years
Older adults: No incidence data available



About the Vaccine



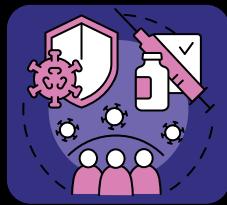
Safety of Vaccine



56%
53%



14 - 16%



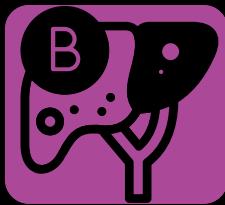
Benefits of vaccination in older adults



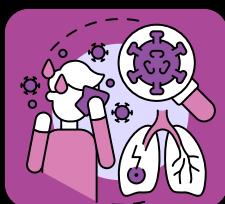
Recommendations

References

ALL YOU NEED TO KNOW: HEPATITIS B



Disease Overview



Burden of Disease Incidence Rate among Older Adults



Global:

General¹: 65 cases / 100,000 person-years
Older adults: No incidence data available

East Asia:

General¹: 15 cases / 100,000 person-years
Older adults: No incidence data available

Southeast Asia:

General¹: 42 cases / 1,000 person-years
Older adults: No incidence data available

Malaysia:

General²: 22.47 cases / 100,000 person-years
Older adults: No incidence data available



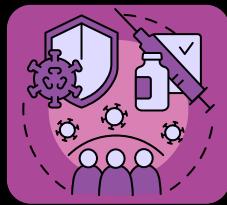
About the Vaccine

Category	Details
Vaccine Availability	Safe and effective vaccines used since 1982; recombinant vaccines since 1986
Dosing Schedule	Three-dose regimen: <ul style="list-style-type: none"> 2nd dose: 1 month after 1st 3rd dose: 6 months after 1st
Serological Marker	Anti-HBs >10 mIU/mL (1–2 months after final dose) indicates long-term protection
Post-Vaccination Testing	Routine anti-HBs testing is not recommended



Safety of Vaccine





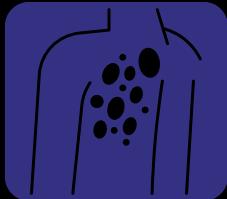
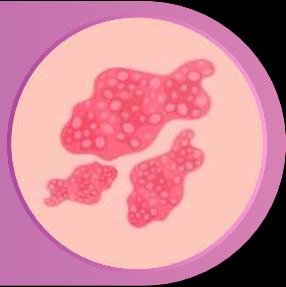
Benefits of vaccination in older adults



Recommendations

References

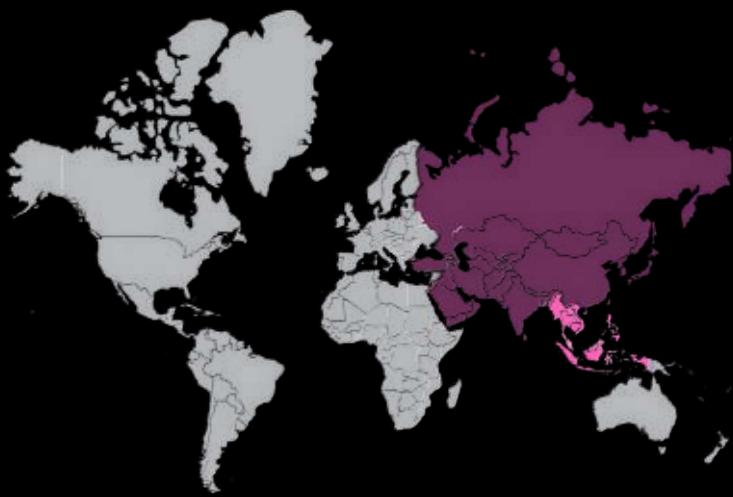
ALL YOU NEED TO KNOW: HERPES ZOSTER



Disease Overview



Burden of Disease Incidence Rate



Global⁷ :

General: 4.3 - 12.8 cases / 1,000 person-years

Older adults: 6.05 - 12.8 cases / 1,000 person-years

Asia-Pacific⁸ :

General: 3 - 10 cases / 1,000 person-years

Older adults: 4 - 9.7 cases / 1,000 person-years

Southeast Asia⁹ :

General: 3 - 10 cases / 1,000 person-years

Older adults: 10–12 cases / 1000 person-years

Malaysia :

General: No incidence data available

Older adults: No incidence data available



About the Vaccine Shingrix

Vial 1 of 2
AS01_® Adjuvant
Suspension
Component (liquid)



Vial 2 of 2
Lyophilized
gE Antigen
Component
(powder)





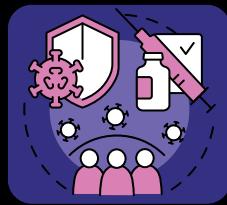
Vaccine Efficacy

Study	Population	Vaccine Efficacy (HZ)	Vaccine Efficacy (PHN)
ZOE-50	Adults \geq 50 years old	97.2%	91.2%
ZOE-70	Adults \geq 70 years old	89.8	88.8%



Safety of Vaccine

Reaction Type	Reported Symptoms
Injection site	Pain, redness and swelling
Systemic	Fatigue, fever, gastrointestinal symptoms, headache, myalgia, shivering



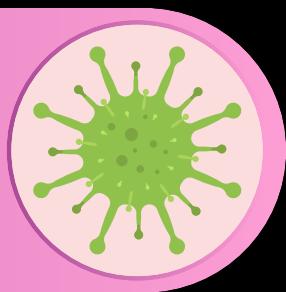
Benefits of vaccination in older adults



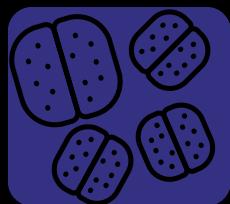
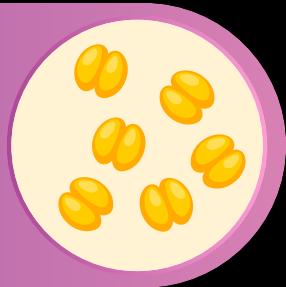
Recommendations

References

ALL YOU NEED TO KNOW: INFLUENZA A & B



ALL YOU NEED TO KNOW: MENINGOCOCCAL



Disease Overview





About the Vaccine Quadrivalent



Safety of Vaccine



Benefits of vaccination in older adults

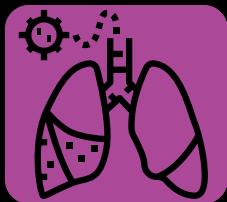
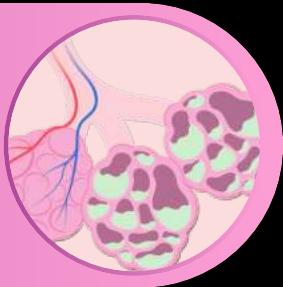


Recommendations

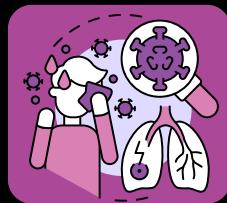
Category	Vaccine Schedule	Additional Notes
High-risk individuals (e.g., asplenia, HIV, complement deficiency, on C5 inhibitors)	<ul style="list-style-type: none"> 2-dose primary series, 8 weeks apart Booster every 5 years 	Use conjugate vaccine (MenACWY)
Individuals at risk of exposure (e.g., lab personnel, travellers, Hajj/Umrah pilgrims)	<ul style="list-style-type: none"> Single dose of MenACWY Repeat every 5 years if risk remains 	MenACWY certificate required for Hajj/Umrah
Interchangeability	Different MenACWY vaccines can be used interchangeably	Applies to both primary and booster doses

References

ALL YOU NEED TO KNOW: RESPIRATORY SYNCYTIAL VIRUS

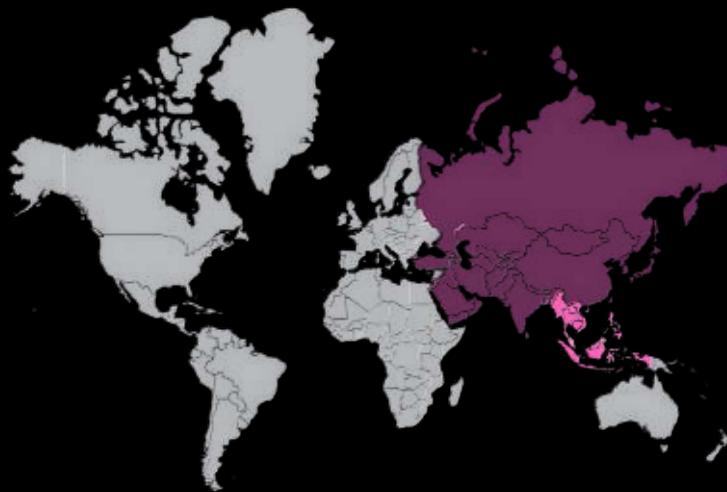


Disease Overview



Burden of Disease

Hospitalization Rate in Older Adults



Global⁴:

RSV-ARI: 336,000 hospitalizations annually; range of 186,000 - 614,000 hospitalizations

Asia-Pacific⁵:

approximately 778,000 cases in **2023**; overall rate of 1 in 500 cases in older adults

Southeast Asia:

No local data available

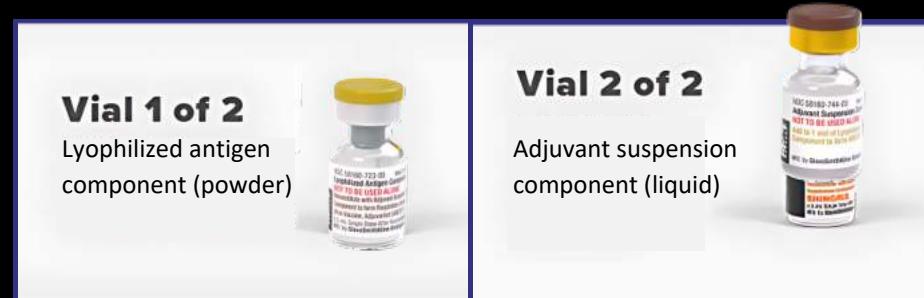
Malaysia :

No local data available



About the Vaccine

Arexvy





Vaccine Efficacy Arexvy

Vaccine Efficacy, % (CI)		
RSV-LRTD	Season 1 <i>Median Follow-up: 6.7 months</i>	Season 2 <i>Median follow-up: 18 months</i>
RSV-LRTD	82.6 (96.95% CI: 57.9, 94.1)	67.2 (97.5% CI: 48.2, 80.0)
Severe RSV-LRTD	94.1 (95% CI: 62.4, 99.9)	78.8 (95% CI: 52.6, 92.0)
RSV-LRTD in patients with ≥ 1 comorbidity of interest	94.6 (95% CI: 65.9, 99.9)	66.7 (95% CI: 41.8, 82.0)

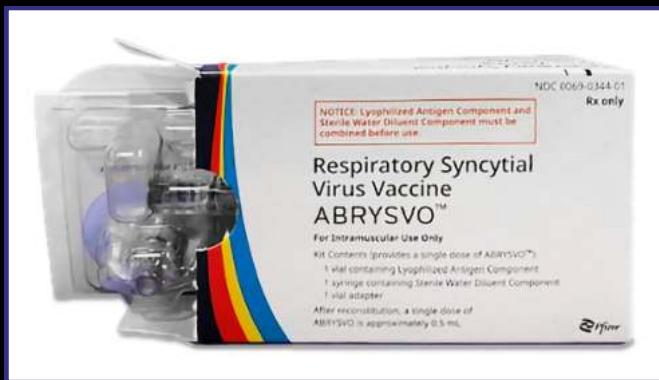
Vaccine Efficacy, % (CI)	
RSV-ARI	
RSV-ARI in patients with ≥ 1 comorbidity of interest	81.0%
RSV-ARI in patients with ≥ 2 comorbidity of interest	88.0%
RSV-ARI in patients with cardiorespiratory conditions	88.1%
RSV-ARI in patients with endocrine/metabolic conditions	79.4%



Safety of Vaccine Arexvy



About the Vaccine Abrysvo



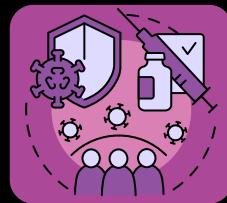


Vaccine Efficacy Abrysvo

Ages	Vaccine Efficacy through 1st season (years), %	Vaccine Efficacy through 2 seasons (years), %
Overall	88.9(53.6, 98.7)	77.8(51.4, 91.1)
60-69 years old	81.8(16.7,98.0)	81.5(51.2,94.4)
70-79 years old	100(-51.1,100)	57.1(-81.7-92.8)
≥80 years old	100(-142,100)	100(-433,100)
Without high risk conditions	100(30.6,100)	92.3(48.8,99.8)
With≥1 high risk conditions	81.8(16.7,98)	69.6(26.7,89.0)



Safety of Vaccine Abrysvo



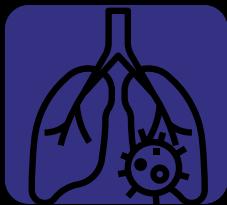
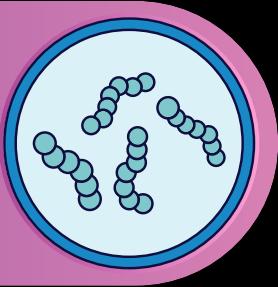
Benefits of vaccination in older adults



Recommendations

References

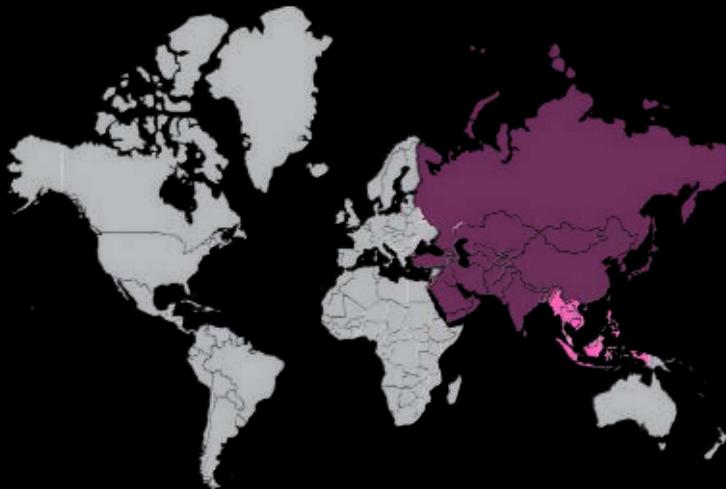
ALL YOU NEED TO KNOW: **STREPTOCOCCUS PNEUMONIAE**



Disease Overview



Burden of Disease Hospitalization Rate among Older Adults due to Pneumonia



Global ⁹:

2015: approximately 6.8 episodes / 1000 persons-year

Asia-Pacific ⁹:

approximately 4.9 episodes / 1000 persons-year

Southeast Asia:

No local data available

Malaysia ¹⁰:

2013 - 2015:

13.6 episodes / 100,000 persons-year

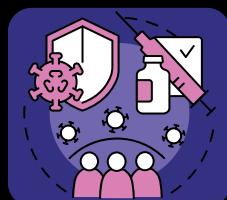
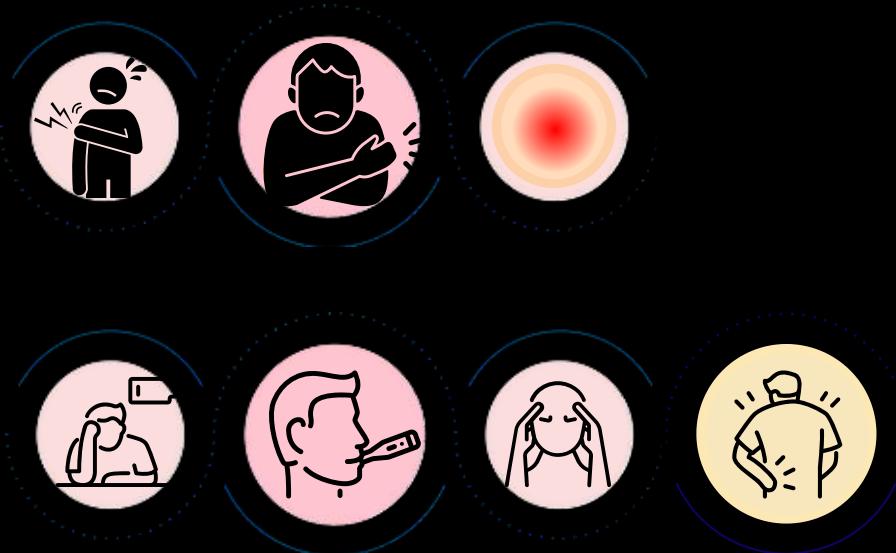


About the Vaccine PPSV-23, PCV 20, PCV-15 & PCV-13

Polysaccharide Vaccine (PPSV)	Characteristics	Conjugate Vaccine (PCV)
Contains only polysaccharide antigens.	Antigen type	Polysaccharide antigens are covalently linked to a protein carrier.
Induces a B-cell dependent immune response.	Immune response type	Induces both B-cell and T-cell dependent immune responses.
Does not produce a strong memory response or booster effect.	Booster effect	Leads to: <ul style="list-style-type: none"> Memory B cell production Longer-lasting immunity Booster effect upon revaccination
Covers most common PD-related serotypes	Serotype Coverage	Covers most common serotypes causing IPD and some non-IPD
PPSV23	Examples	PCV 13, PCV 15 and PCV 20



Safety of Vaccine



Benefits of vaccination in older adults

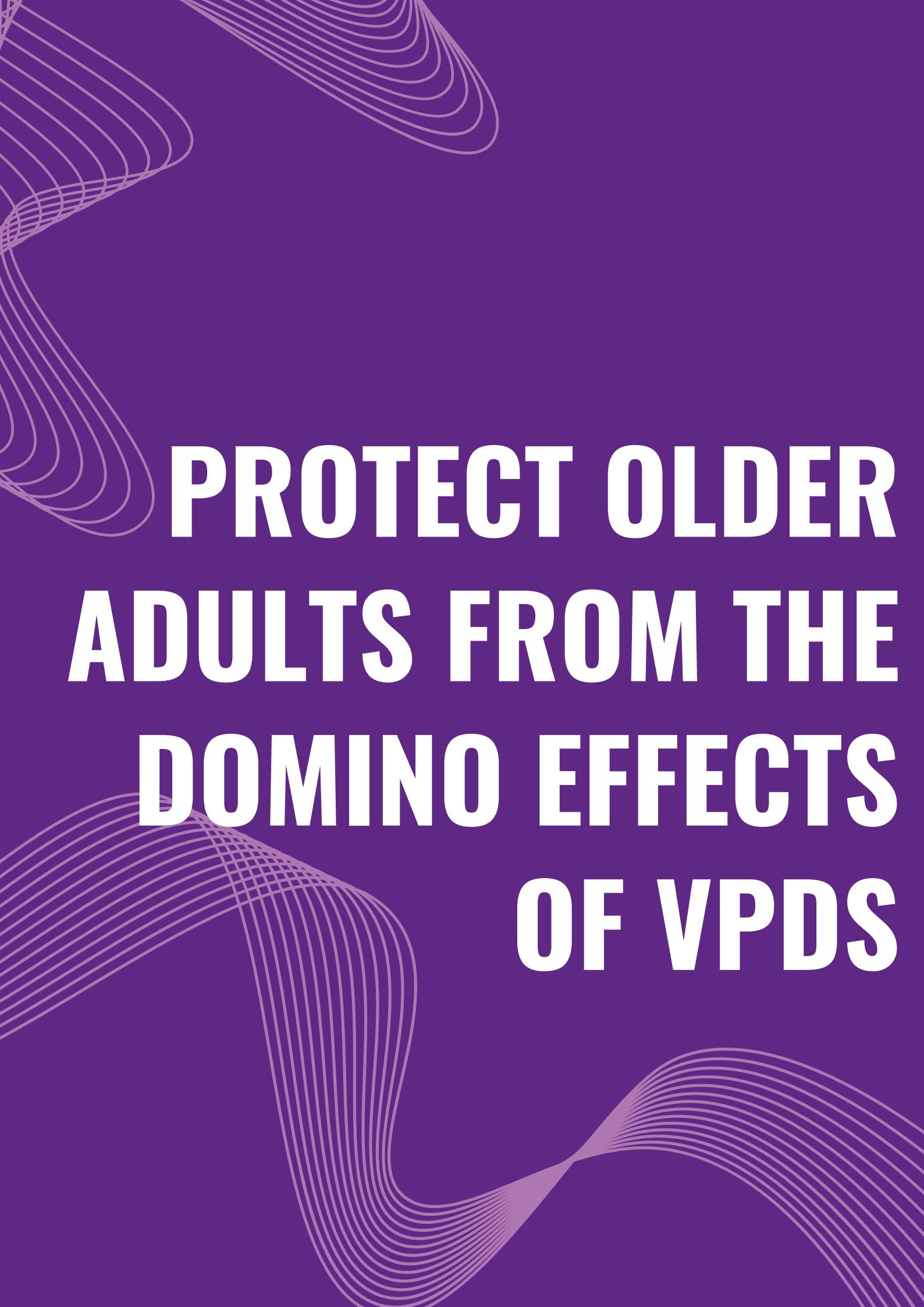


Recommendations

Preferred vaccine regime	PCV 20 1 dose – with no further doses needed
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Age Group	Vaccine received previously	Options for vaccination
Older Adults aged ≥ 60 years	None / unsure	<p>A single dose of PCV20 or PCV15 or PCV13.</p> <p>If PCV15/13 is administered, a single dose of PPSV23* should be administered ≥ 1 year after the PCV15/13 dose. A minimum interval of 8 weeks can be considered if PCV15/13 is used in older adults with an immunocompromising condition, † cochlear implant, or CSF leak.</p>
	PPSV23 only	A single dose of PCV20 or PCV15 or PCV 13 ≥ 1 year after the last PPSV23 dose.
	PCV13 only	A single dose of PCV20 ≥ 1 year after the PCV13 dose.
	PCV13 at any age and PPSV23 at age 65 years	A single dose of PCV20 ≥ 5 years after the last pneumococcal vaccine dose.
	PCV13 at any age and PPSV23 at age ≥ 65 years	<p>Shared clinical decision-making is recommended regarding administration of either a single dose of PCV20 for any adult aged ≥ 65 years who has completed the recommended vaccination series with both PCV13 and PPSV23 (i.e., PPSV23 administered at age ≥ 65 years) but PCV20, or PCV15 not yet received.</p> <p>If a decision to administer PCV21 or PCV20 is made, a single dose is recommended ≥ 5 years after the last pneumococcal vaccine dose.</p>

References



**PROTECT OLDER
ADULTS FROM THE
DOMINO EFFECTS
OF VPDS**

**HZ(Z)
Influenza(I)
Pneumococcal(P)
RSV(R)**

**COVID(C)
DTAP(D)
Meningococcal(M)
Hepatitis(H)**

I, P, R, Z, D

All

H

All

Respiratory Complications

Pneumonia

Asthma Exacerbations

COPD Exacerbations

Secondary Bacterial Pneumonia

I, P, C, R

Diabetic Complications

Impaired blood glucose

Diabetic Emergencies (DKA/HHS/hypoglycemia)

All

Hepatic Complications

Acute hepatitis

Fulminant hepatitis

Liver failure

Risk of hepatocellular carcinoma

Renal Complications

Acute kidney injury

Neurological Complications

Z

Pain

M

Seizures

M

Encephalopathy

Z

Ocular/Ramsay Hunt Syndrome

Stroke

Guillain-Barre Syndrome

Cardiovascular Complications

Arrhythmias

Acute MI

Myocarditis/Pericarditis

Heart Failure

Venous Thromboembolism

All

Unseen Geriatric Syndromes

Deconditioning

Delirium

Pressure Sores

Frailty

Weight loss

Muscle loss (sarcopenia)

Poor QOL & Mood disorders

Increased Dependence in ADLs

Risk of Institutionalisation

VACCINE RECORD

Vaccine Record

Personal Information

Name: _____

Date of Birth: _____ Age: _____ Sex: _____

Medical Conditions: _____

Known Allergies: _____

Vaccination Type	Dose	Date	Vaccine Batch No.	Vaccinator
RSV				
Shingles				
PCV				
Hepatitis A				
Hepatitis B				
Meningococcal				
Influenza				
COVID-19				

ARE YOU OVER 60 YEARS OLD?



Did you know that vaccines can...



Speak to your doctor today about:

- Reactivation of latent varicella zoster virus (VZV).
- Common symptoms: Fever, headache, body ache, feeling tired.
- Painful rash with blisters on one side of the body.

Shingles



- A virus that spreads easily and affects the lungs.
- It causes fever, cough, sore throat, and body aches.
- Can lead to serious problems like pneumonia, heart attack, or stroke—especially in older adults.



Influenza

- Caused by Streptococcus pneumoniae bacteria.
- Can lead to ear, sinus, lung, brain, or blood infections.
- Pneumonia is the most serious, especially in older adults.



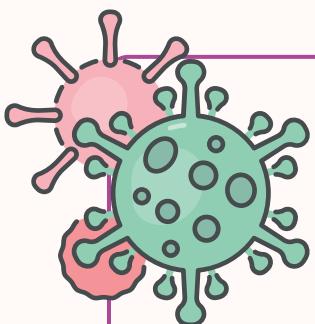
Pneumococcal

- Respiratory syncytial virus (RSV)
- Mild, cold-like symptoms, to severe lower respiratory tract disease
- Can lead to hospitalization, ICU admission, and long-term functional decline



Respiratory Syncytial Virus

COVID-19



- COVID-19 is caused by a new coronavirus found in Dec 2019.
- Common symptoms: fever, cough, tiredness, breathlessness.
- In older adults, it can cause confusion, severe lung infection, and even death.

DO YOU HAVE AN OLDER FAMILY MEMBER RESIDING IN A LONG-TERM CARE FACILITY (LTCF)?



DID YOU KNOW ?

LTCF residents are among the most vulnerable to severe complications from vaccine-preventable diseases.

Vaccinations play a critical role in protecting the health and well-being of the community at the LTCFs.



WHAT CAN YOU DO?

Ensure your loved ones are staying up-to-date on vaccinations



Wash your hands regularly before and after meeting them



Unwell? Avoid visits or wear a mask



WHICH VACCINES TO CONSIDER?

1 Influenza

2 Pneumococcal

3 COVID-19

4 Shingles

5 Respiratory Syncytial Virus

DISCUSS WITH YOUR DOCTORS TODAY!



"Other vaccines may be recommended through shared clinical decision-making, depending on your risk factors and existing health conditions."

