

30 May 2023



TABLE OF CONTENT

No.	Section
1.	Research Background
2.	Self-Care Practices & Knowledge of Flu
3.	Perception & Attitudes Towards Vaccination & Flu Vaccination
4.	Consumer Journey
5.	Management Highlights
6.	Media Coverage & Published Statistics & Recommendation On Flu Vaccination







Background & Objectives

Despite WHO recommendations, Vaccine Coverage Rate (VCR) for Influenza remains low in Malaysia.

The study aims to provide input to develop policy recommendations for Influenza vaccination, especially amongst the elderly. It serves as an engagement tool for external stakeholders which include the Ministry of Health, Malaysian Influenza Working Group (MIWG) and the media.

The study objectives include:

- To understand the preventive measures taken against infectious diseases
- To measure the level of awareness and perception towards flu
- To understand the perception/stigma of vaccination in general
- To measure the awareness level of vaccination and its uptake in general
- To understand perception towards flu vaccination and its uptake
- To measure the level of willingness for annual flu vaccination
- To understand the motivation and barriers to flu vaccination including acceptance towards medical professionals' recommendation
- To understand the sources of news/information through research





Quantitative Phase - Overview

Methodology		 Computer-Aided Personal Interview (CAPI) using a tablet Combination of door-to-door and street intercept A structured questionnaire was administered (30-min length of interview) 					
Target audience		 Two main target groups: Elderly aged 65 or above Adults aged 18 to 64, with at least one medical condition (Hypertension, Diabetes, Cardiovascular/heart disease, Respiratory diseases such as asthma and COPD) Quotas were applied to the geographical area, gender, ethnicity, vaccination behaviour and monthly household income Definition of vaccination behaviour: Early adopter: Get vaccinated against Influenza (flu) every year, for at least 5 years Neutral: Got vaccinated against Influenza (flu) before in my lifetime, but not annually Laggard: Have never been vaccinated against Influenza (flu) before 					
Geographical coverage		 Klang Valley Penang Johor Bahru Ipoh Kuantan Kuching Kota Kinabalu 					
Sample size	999	• n=1049					
Fieldwork period	*************************************	 Pilot (15 – 18 December 2022) Main (22 December 2022 – 3 February 2023) 					

Quantitative Phase - Respondent Profile (1)

		Total			Elderly 65+				Adults with medical condition(s)				
		Total	Early Adopter	Neutral	Laggard	Total	Early Adopter	Neutral	Laggard	Total	Early Adopter	Neutral	Laggard
	TOTAL ACHIEVEMENT	1049	159	441	449	616	94	268	254	433	65	173	195
	Klang Valley	32%	16%	25%	44%	31%	15%	23%	44%	33%	17%	28%	44%
	Penang	13%	14%	13%	12%	13%	16%	13%	12%	12%	12%	13%	11%
	Johor Bahru	16%	15%	16%	15%	16%	16%	16%	15%	15%	14%	16%	15%
Geographical Coverage	lpoh	10%	9%	12%	8%	10%	11%	11%	10%	9%	8%	13%	7%
0010.ug0	Kuantan	7%	6%	8%	6%	7%	6%	7%	6%	7%	5%	8%	7%
	Kuching	9%	12%	13%	5%	12%	13%	18%	5%	6%	11%	6%	5%
	Kota Kinabalu	14%	28%	13%	10%	12%	23%	11%	7%	17%	34%	15%	12%
Condor	Male	48%	53%	49%	46%	49%	46%	51%	46%	48%	63%	46%	45%
Gender	Female	52%	47%	51%	54%	51%	54%	49%	54%	52%	37%	54%	55%
	Malay / Bumiputera	71%	56%	72%	74%	69%	52%	74%	70%	73%	62%	70%	79%
Ethnicity	Chinese	24%	38%	23%	19%	25%	41%	21%	24%	21%	32%	25%	13%
	India / Others	6%	6%	5%	7%	6%	6%	5%	6%	6%	6%	5%	7%
Monthly	B40 (Below RM4,000)	38%	21%	24%	57%	37%	23%	24%	55%	39%	18%	24%	59%
Household	M40 (RM4,000 - RM9,999)	44%	40%	57%	33%	45%	36%	57%	35%	44%	46%	57%	32%
Income	T20 (RM10,000 or above)	18%	38%	19%	10%	19%	40%	18%	11%	17%	35%	19%	9%



Quantitative Phase - Respondent Profile (2)

			То	tal			Elderl	y 65+		Adults with medical condition(s)			
		Total	Early Adopter	Neutral	Laggard	Total	Early Adopter	Neutral	Laggard	Total	Early Adopter	Neutral	Laggard
	TOTAL ACHIEVEMENT	1049	159	441	449	616	94	268	254	433	65	173	195
	None	2%	2%	2%	2%	3%	3%	2%	3%	1%	-	1%	1%
	Primary school	18%	11%	17%	22%	27%	17%	26%	31%	6%	3%	1%	12%
	Secondary school	64%	66%	63%	65%	62%	66%	62%	60%	68%	66%	66%	71%
Education	Vocational school	2%	3%	2%	2%	1%	2%	2%	*	3%	3%	3%	4%
Level	Pre-university / A-Level	2%	3%	2%	2%	2%	3%	1%	2%	3%	3%	3%	3%
LOVOI	Diploma	8%	12%	9%	6%	4%	6%	4%	4%	14%	20%	17%	9%
	Bachelor's Degree	3%	3%	5%	1%	1%	1%	2%	1%	4%	5%	9%	1%
	Master's Degree, Doctorate, Post-Doctorate Degree	0% (4)	0% (1)	0% (3)	-	0% (2)	1%	0%	-	0% (2)	-	1%	-
	Self-Employed	18%	18%	15%	20%	14%	13%	11%	17%	24%	26%	21%	25%
	Employed full time	22%	23%	24%	20%	6%	4%	7%	5%	46%	51%	52%	40%
	Employed part time	4%	1%	4%	5%	4%	-	5%	4%	4%	3%	3%	6%
Employment	Unemployed looking for work	0%	1%	-	1%	0% (1)	-	-	0% (1)	1%	2%	-	1%
Status	Unemployed not looking for work	1%	1%	1%	1%	1%	2%	1%	1%	0%	-	-	1%
	Domestic homemaker	26%	21%	24%	30%	31%	29%	28%	34%	19%	11%	17%	24%
	Retired	28%	34%	32%	23%	45%	52%	49%	37%	5%	8%	5%	4%
	Single	6%	4%	7%	6%	1%	2%	-	2%	14%	8%	18%	13%
Marital	Married	83%	87%	85%	79%	84%	85%	89%	78%	81%	89%	77%	81%
Status	Divorced / Separated / Widowed	11%	9%	8%	14%	15%	13%	11%	20%	5%	3%	4%	7%



Quantitative Phase - Respondent Profile (3)

			Klang	Valley	
		Total	Early Adopter	Neutral	Laggard
	TOTAL ACHIEVEMENT	333	25	111	197
Gender	Male	44%	40%	41%	46%
Gender	Female	56%	60%	59%	54%
	Malay / Bumiputera	72%	52%	69%	77%
Ethnicity	Chinese	23%	44%	26%	18%
	India / Others	5%	4%	5%	6%
	B40 (Below RM4,000)	42%	16%	26%	54%
Monthly Household Income	M40 (RM4,000 - RM9,999)	43%	56%	54%	36%
	T20 (RM10,000 or above)	15%	28%	20%	10%



Qualitative Phase - Overview

Focus Group Discussions (FGD)



- Sample size: FGD=14
- Length of discussion:90 minutes per group
- Fieldwork period: 7-10, 16 March 2023

FGD Structure

FGD	Language	Race	Gender	Vaccination Behaviour	Segment	# of respondents	Other criteria																															
1			Male	Neutral	Mix	4																																
2	Mandarin	Chinese	iviale	Laggard	Mix	6																																
3	Manuann	Crimese	Female	Neutral	Mix	6																																
4			Гептане	Laggard	Mix	5	Physical FGDs																															
5		Malay	Male	Neutral	Mix	6	(FGD 1-12) and																															
6	Malay		Malav	Malay	iviale	Laggard	Mix	6	Online FGDs (FGD 13-14) at Klang																													
7	ivialay		Female	Neutral	Mix	5	Valley																															
8				Laggard	Mix	4																																
9		Mixed race (Malay / Other	(Malay / Other	Male / Female	Laggard	Elderly	6	Mix of B40, M40 and T20 per group																														
10	English			(Malay / Other	(Malay / Other	(Malay / Other	(Malay / Other	(Malay / Other	(Malay / Other	(Malay / Other	(Malay / Other	(Malay / Other	(Malay / Other	(Malay / Other	(Malay /	(Malay / Other						Male	Early Adopter	Adults with medical condition	5	Mix of those who have contracted flu												
11	English																												Male / Female	Early Adopter	Elderly	5	vs those who have					
12		Chinese / Indian)	Female	Early Adopter	Adults with medical condition	4																																
13	English /		Male /	Neutral/	Elderly	4																																
14	Malay		Female	Laggard	Liderry	6																																

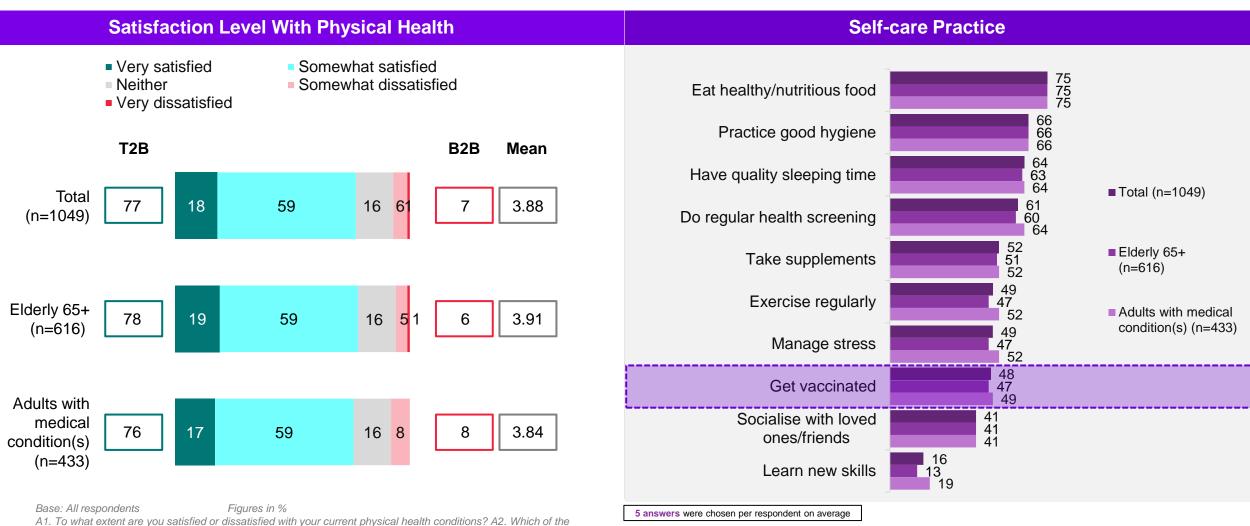


SELF-CARE PRACTICES & KNOWLEDGE OF FLU

- Satisfaction with physical health
- Self-care practices
- Health-related attitudinal measures
- Understanding of flu (self-proclaimed, general knowledge,
- further understanding, flu complications)
- Source of information



A majority maintain health conditions through natural diets. Slightly less than half consider vaccination as a practice to maintain/improve health conditions generally.





following do you practice to maintain/improve your physical health conditions?

Satisfaction Level With Physical Health & Self-care Practice (2)

Early Adopter and Neutral groups have more self-care practices in general.

Laggards are less likely to consider vaccination as one of the self-care practices.

		Vaccination Behaviour				
Figures in %	Total	Early Adopter	Neutral	Laggard		
n=	1049	159	441	449		
Satisfaction Level With Physical Health (T2B %)	77	82	77	75		
Self-care Practice						
Eat healthy/nutritious food	75	79	74	74		
Practice good hygiene	66	68	66	65		
Have quality sleeping time	64	72	66	59		
Do regular health screening	61	70	62	57		
Take supplements	52	52	55	48		
Exercise regularly	49	52	50	47		
Manage stress	49	58	51	45		
Get vaccinated	48	81	55	29		
Socialise with loved ones/friends	41	46	42	38		
Learn new skills	16	21	16	14		

Base: All respondents

A1. To what extent are you satisfied or dissatisfied with your current physical health conditions? A2. Which of the following do you practice to maintain/improve your physical health conditions?



Generally, health-conscious trends could be observed. About two-thirds are willing to pay for health purposes. More adults consider themselves early adopters in terms of exploring new things.

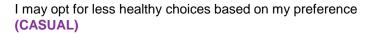
Health-related Attitudinal Measures

I maintain a healthy lifestyle generally (REGULAR)

I search for/look at health-related information actively (RESEARCH)

I am willing to pay for things/services that are deemed good for my health
(WILLING TO PAY)

I am always curious to explore new things that are deemed good for my health (EARLY ADOPTER)



I do not search for/look at health-related information, others will tell me (PASSIVE)

If there is no health issue, I prefer to not pay for anything although it is deemed good for my health (PREFER FREE)

I will search/wait for feedback from others before I try new things that are deemed good for my health (FOLLOWER)

	Total (n=1049)			Elder l (n=6	y 65+ 616)		Adults with medical condition(s) (n=433)			
REGULAR	91 9	CASUAL	REGULAR	91	9	CASUAL	REGULAR	91 9	CASUAL	
RESEARCH	66 34	PASSIVE	RESEARCH	64	36	PASSIVE	RESEARCH	67 33	PASSIVE	
WILLING TO PAY	64 36	PREFER FREE	WILLING TO PAY	64	36	PREFER FREE	WILLING TO PAY	64 36	PREFER FREE	
EARLY ADOPTER	67 33	FOLLOWER	EARLY ADOPTER	64	36	FOLLOWER	EARLY ADOPTER	70 30	FOLLOWER	

Base: All respondents Figures in %
A3. For each pair of statements, which one suits you the most?



Early Adopters are more proactive in terms of searching for information, more willing to pay and explore new things, less so for Neutral and Laggards.

Health-related Attitudinal Measures (2)

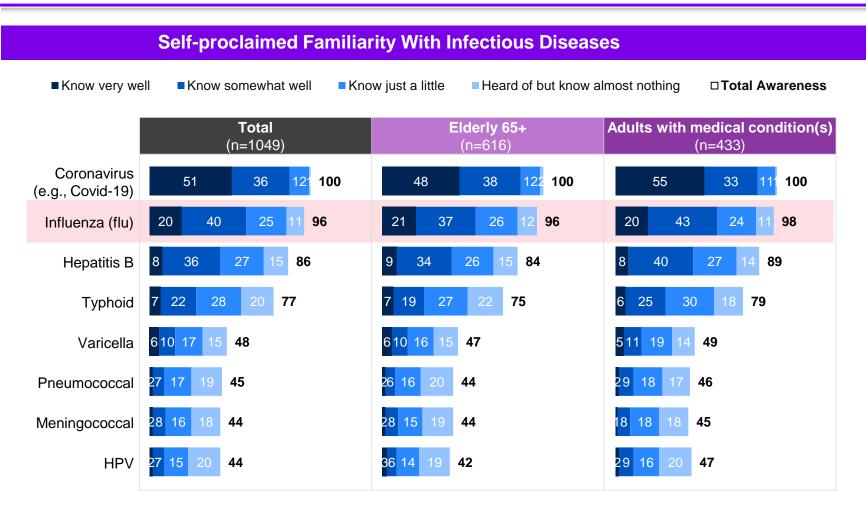
			Vaccination Behaviour	
Figures in %	Total	Early Adopter	Neutral	Laggard
n=	1049	159	441	449
Maintaining healthy lifestyle				
REGULAR	91	93	90	91
CASUAL	9	7	10	9
Searching for information				
RESEARCH	66	78	69	58
PASSIVE	34	22	31	42
Willingness to pay				
WILLING TO PAY	64	80	65	58
PREFER FREE	36	20	35	42
Exploring new things				
EARLY ADOPTER	67	74	64	67
FOLLOWER	33	26	36	33

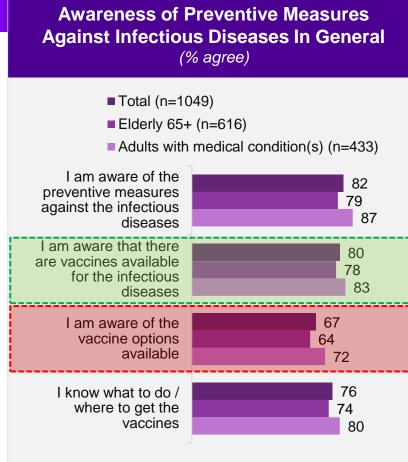
Base: All respondents

A3. For each pair of statements, which one suits you the most?



Many claim that they are aware of the flu, but only one-fifth claim that they are very familiar with the flu. Also, many seem to be aware of the existence of vaccines for infectious diseases but there is some vagueness about the vaccine options.





Base: All respondents

Figures in %

B1. For each of the following infectious diseases, please indicate how well you feel you know each one. B2. When we talk about infectious diseases in general, please indicate whether you agree or disagree with each of the statements below.



Lesser Laggard claim that they are familiar with the flu.

Self-proclaimed Familiarity With Infectious Diseases (2)

		(% Top box - K	now very well)	(% Top 2 box - Know very well + Know somewhat well)				
Figures in %		Vac	cination Behav	iour		Vaccination Behaviour			
	Total	Early Adopter	Neutral	Laggard	Total	Early Adopter	Neutral	Laggard	
n=	1049	159	441	449	1049	159	441	449	
Coronavirus (e.g., Covid-19)	51	45	50	53	87	90	85	86	
Influenza (flu)	20	29	26	12	60	80	71	42	
Hepatitis B	8	8	7	9	44	59	46	38	
Typhoid	7	8	7	6	29	31	28	28	
Varicella	6	9	6	4	16	21	19	11	
Pneumococcal	2	3	2	1	9	11	10	8	
Meningococcal	2	2	1	2	10	11	11	7	
HPV	2	3	2	2	9	15	9	8	

Base: All respondents

B1. For each of the following infectious diseases, please indicate how well you feel you know each one.



Laggards are less aware of the preventive measures, the existence of vaccines, the relevant options and where to get them.

Awareness of Preventive Measures Against Infectious Diseases In General (2)

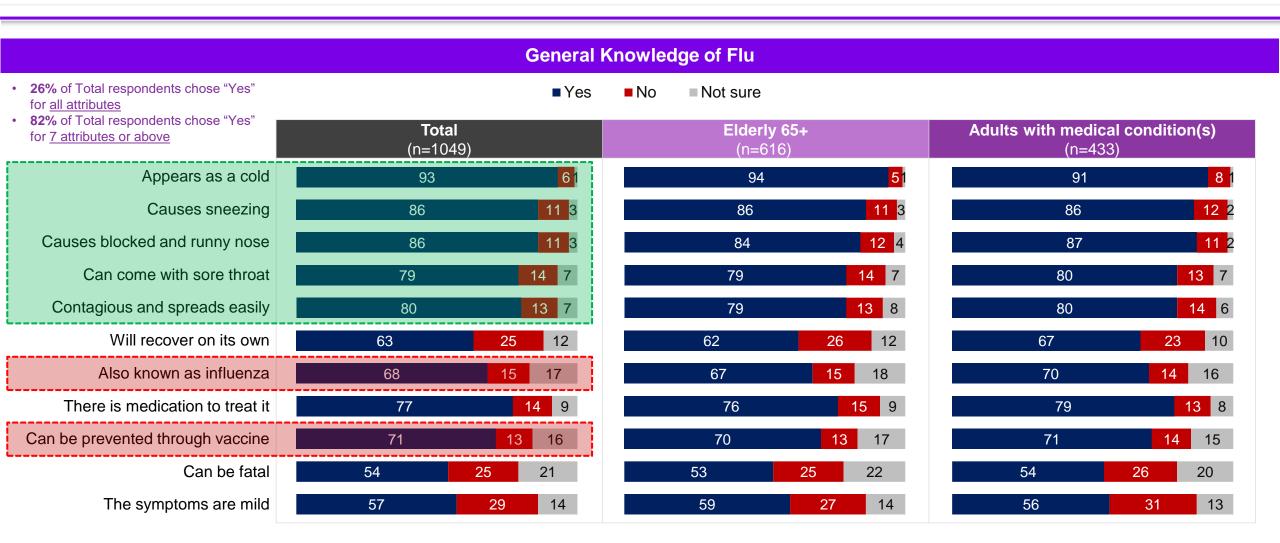
Figures in %			Vaccination Behaviour	
(% Agree)	Total	Early Adopter	Neutral	Laggard
n=	1049	159	441	449
I am aware of the preventive measures against the infectious diseases	82	87	84	79
I am aware that there are vaccines available for the infectious diseases	80	86	83	75
I am aware of the vaccine options available	67	79	71	59
I know what to do / where to get the vaccines	76	89	79	69

Base: All respondents

B2. When we talk about infectious diseases in general, please indicate whether you agree or disagree with each of the statements below.



Slightly more than two-thirds are aware that flu is also known as Influenza, and it can be prevented through vaccination, respectively, indicating that there is still room for improvement to reduce the 'unaware' base.



Base: All respondents Figures in %

S8. Please select one answer based on your understanding of the flu.



The awareness level is marginally lower among Laggards.

General Knowledge of Flu (2)

Figures in %		Vaccination Behaviour				
(% Yes)	Total	Early Adopter	Neutral	Laggard		
n=	1049	159	441	449		
Appears as a cold	92	92	95	90		
Causes sneezing	86	88	88	83		
Causes blocked and runny nose	85	82	87	85		
Can come with sore throat	79	81	80	78		
Contagious and spreads easily	80	84	80	78		
Will recover on its own	64	62	61	67		
Also known as influenza	68	72	70	64		
There is medication to treat it	77	75	80	75		
Can be prevented through vaccine	71	79	77	61		
Can be fatal	54	60	55	50		
The symptoms are mild	58	54	59	58		

Base: All respondents

S8. Please select one answer based on your understanding of the flu.



The elderly in the Neutral and Laggard groups appear to have slightly less familiarity with the flu.

General Knowledge of Flu (3)

F '	Total		Early Adopter		Neutral		Laggard	
Figures in % (% Yes)	Elderly 65+	Adults with medical condition(s)	Elderly 65+	Adults with medical condition(s)	Elderly 65+	Adults with medical condition(s)	Elderly 65+	Adults with medical condition(s)
n=	616	433	94	65	268	173	254	195
Appears as a cold	94	91	95	89	96	94	91	88
Causes sneezing	86	86	89	86	88	89	83	84
Causes blocked and runny nose	84	87	83	80	86	88	82	89
Can come with sore throat	79	80	83	78	79	81	77	78
Contagious and spreads easily	79	80	86	80	79	82	77	78
Will recover on its own	62	67	66	57	59	64	63	72
Also known as influenza	67	70	71	72	68	73	63	65
There is medication to treat it	76	79	72	78	79	83	74	76
Can be prevented through vaccine	70	71	77	82	76	79	61	61
Can be fatal	53	54	62	58	54	55	49	51
The symptoms are mild	59	56	60	46	59	58	59	57

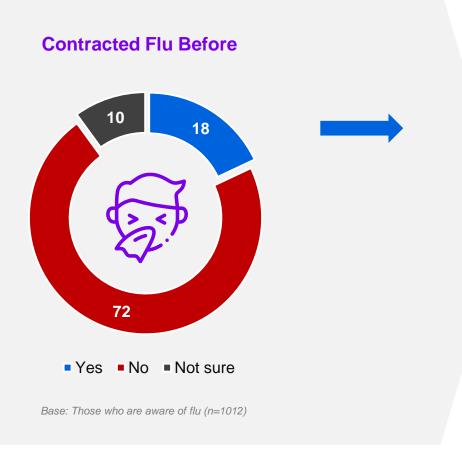
Base: All respondents

S8. Please select one answer based on your understanding of the flu.

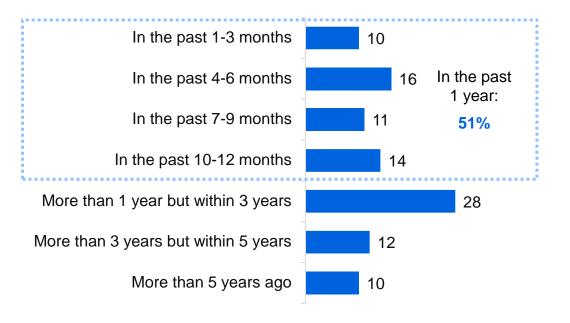


About one-fifth mentioned contracting the flu before and about half of them contracted the flu in the past 1 year.

Past Experience With Flu



Last Time of Contracting Flu



Base: Those who gotten flu before (n=185)





There is a higher proportion of individuals who contracted the flu in the Early Adopters and Neutral groups.

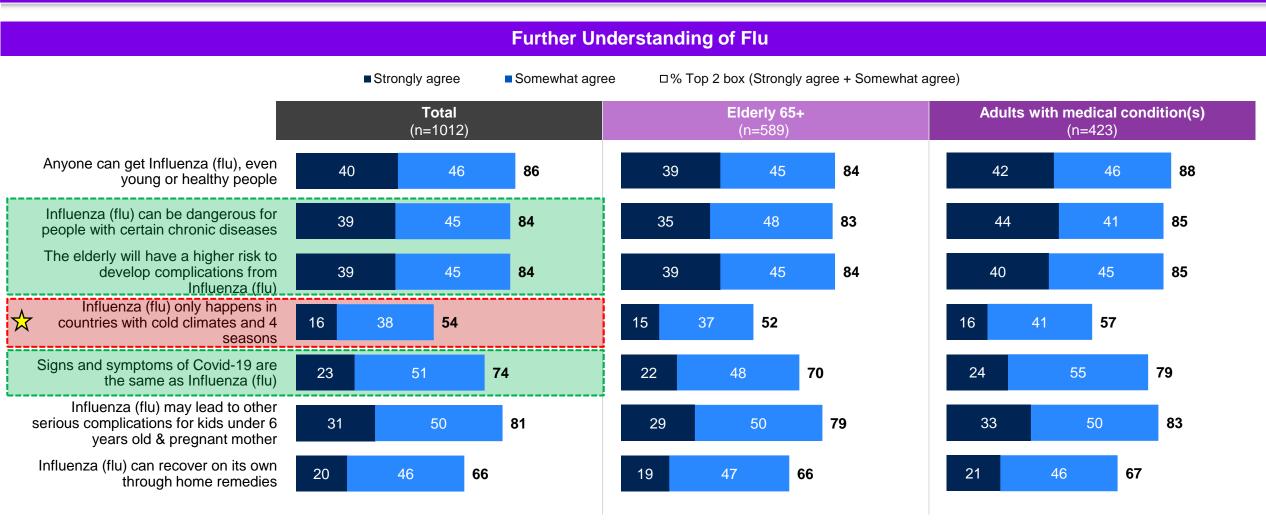
Past Experience With Flu (2)

		Segment		Vaccination Behaviour		
Figures in %	Total	Elderly	Adults	Early Adopter	Neutral	Laggard
Contracted flu Before	n=1012	589	423	159	441	412
Yes	18	18	19	28	24	9
No	72	71	72	62	67	81
Not sure	10	11	9	11	10	10
Last Time of Contracting flu	n=185	106	79	44	105	36
In the past 1 year	51	48	53	36	50	69
In the past 1-3 months	10	8	11	7	8	19
In the past 4-6 months	16	15	18	9	13	33
In the past 7-9 months	11	12	10	9	14	6
In the past 10-12 months	14	13	14	11	15	11
More than 1 year but within 3 years	28	26	29	36	29	14
More than 3 years but within 5 years	12	13	10	11	13	8
More than 5 years ago	10	11	8	16	8	8

Base: Those who are aware of flu / Those who gotten flu before C5. Have you gotten/contracted Influenza (flu) before? C6. When was the last time you got/contracted Influenza (flu)?



Many agree that the flu can be dangerous for certain groups of people such as people with chronic diseases and the elderly. Many are also seeing a resemblance between the flu and Covid-19. However, there is a need to address the misconception in which half of the respondents think that the flu only happens in countries with cold climates and 4 seasons.



Base: Those who are aware of flu Figures in %



C1. When it comes to Influenza (flu), please select the answer that best applies to each statement.

The association between the flu and increased risks for individuals with chronic diseases and the elderly can be observed.

Further Understanding of Flu (2)

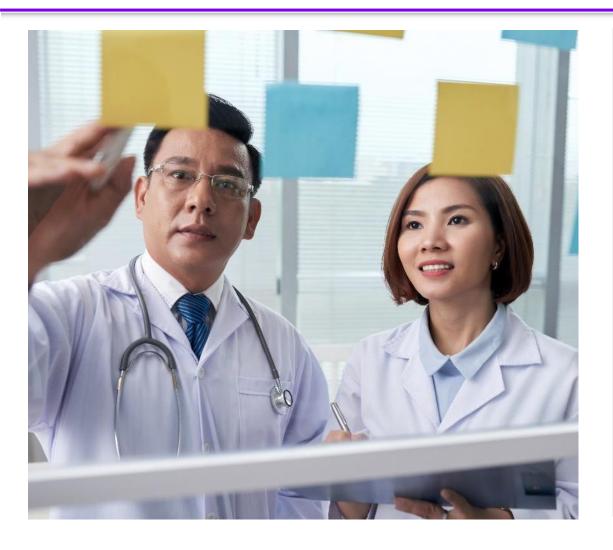
	(% Strongly agree)				(% Top 2 box – Strongly agree + Somewhat agree)			
Figures in %		Vaccination Behaviour				Vaccination Behaviour		
	Total	Early Adopter	Neutral	Laggard	Total	Early Adopter	Neutral	Laggard
n=	1012	159	441	412	1012	159	441	412
Anyone can get Influenza (flu), even young or healthy people	40	38	45	35	86	89	88	82
Influenza (flu) can be dangerous for people with certain chronic diseases	39	36	41	37	84	86	86	81
The elderly will have a higher risk to develop complications from Influenza (flu)	39	37	41	38	84	85	86	83
Influenza (flu) only happens in countries with cold climates and 4 seasons	16	13	16	16	54	53	54	54
Signs and symptoms of Covid-19 are the same as Influenza (flu)	23	21	25	21	74	76	78	69
Influenza (flu) may lead to other serious complications for kids under 6 years old & pregnant mother	31	30	33	29	81	81	84	78
Influenza (flu) can recover on its own through home remedies	20	22	21	17	66	69	67	65

Base: Those who are aware of flu

C1. When it comes to Influenza (flu), please select the answer that best applies to each statement.



Further investigation reveals varying levels of understanding and familiarity with the flu.



Elderly vs. Adults with medical conditions

- Generally, there is a lower level of familiarity among the elderly, except those who contracted flu before
- More adults are able to identify its symptoms and severity

"The severity depends on our immunity, usually just need to drink coconut water and rest at home." – Malay, Neutral, Female, Elderly

"The symptoms are like the common cold, but more severe ones, you will get a prolonged fever, severe sore throat, headache and body ache." – Malay, Neutral, Male

Early Adopter vs. Neutral vs. Laggard

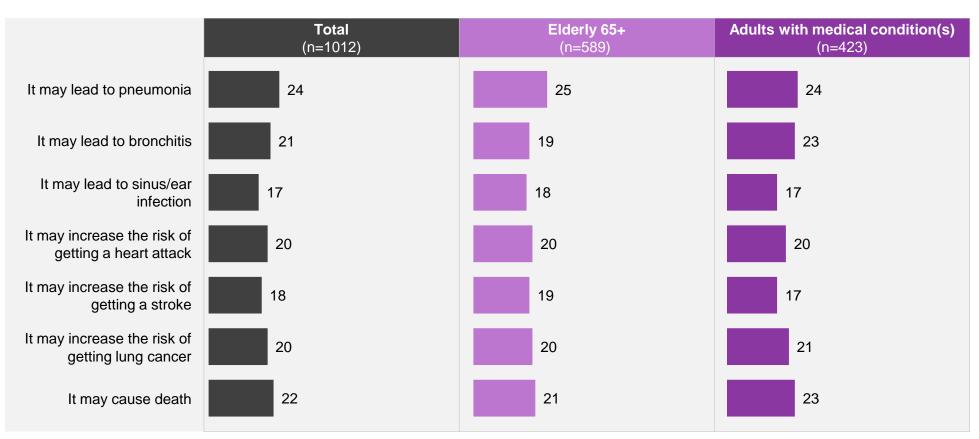
 Higher level of familiarity among the Early Adopter and Neutral, likely due to their personal experiences (contracted flu before) or experiences from their family/friends

Source: Qualitative FGDs



Low association with complications associated with the flu can be observed generally. A slightly higher association with pneumonia can be observed.

Perceived Association Between Flu And Complications



Early Adopter vs Neutral & Laggard

	 More aware of the complications of the flu, especially among Adults
Early Adopter	 Without prompting, some were able to name complications, particularly lung-related ones such as bronchitis. Others were unable to identify specific complications, though they did acknowledge that flu can be dangerous.
Neutral & Laggard	 Without prompting, many were unaware of the complications associated with the flu. However, a few asthma patients noted that the flu exacerbated

Source: Qualitative FGDs

Base: Those who are aware of flu

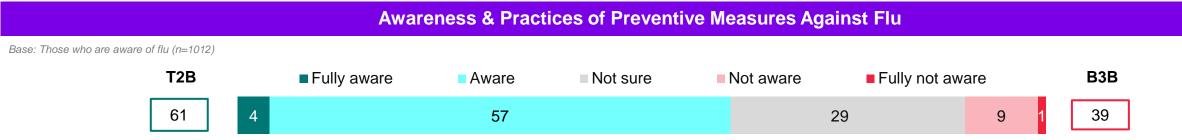
Figures in Top box %

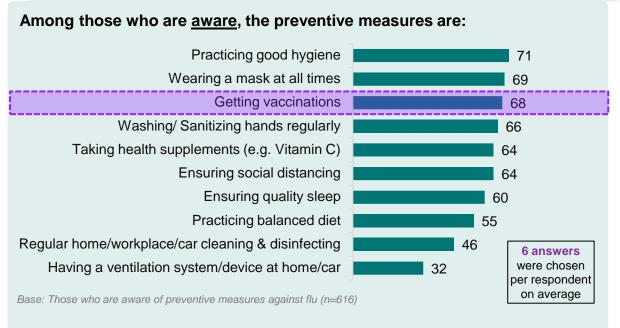
C2. When it comes to Influenza (flu), please indicate whether each of the statements below is true or false based on your understanding.

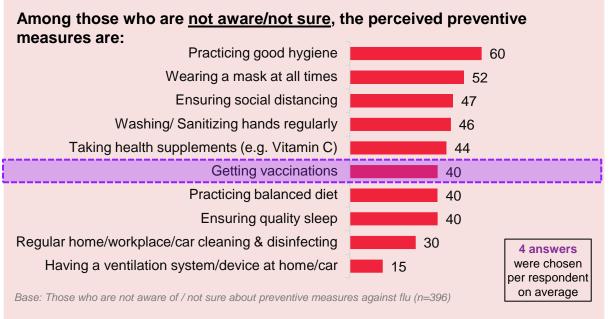


their condition when they contracted the flu.

There are still opportunities to further increase awareness of vaccination being a preventive measure against the flu.







Figures in %



C3. Please indicate how well you are aware of the preventive measures against Influenza (flu).

C4. Which of the following is being practiced/used by you to prevent Influenza (flu)? / What do you think we can do to prevent Influenza (flu)?

Laggards show lower awareness of vaccination as a preventive measure.

Awareness & Practices of Preventive Measures Against Flu (2)

		Seg	ment	Vaccination Behaviour		
Figures in %	Total	Elderly	Adults	Early Adopter	Neutral	Laggard
	n=1012	589	423	159	441	412
Awareness of Preventive Measures (% T2B)	61	59	63	82	70	43
Among those who are <u>aware</u> , the preventive measures are:	n=616	348	268	131	309	176
Practicing good hygiene	71	70	72	73	70	72
Wearing a mask at all times	69	68	69	70	69	66
Getting vaccinations	68	68	68	98	70	40
Washing/ Sanitizing hands regularly	66	65	67	66	66	66
Taking health supplements (e.g. Vitamin C)	64	64	65	63	65	64
Ensuring social distancing	64	63	66	65	65	64
Ensuring quality sleep	60	58	63	63	57	64
Practicing balanced diet	55	56	55	62	52	57
Regular home/workplace/car cleaning & disinfecting	46	44	49	47	44	48
Having a ventilation system/device at home/car	32	30	35	37	29	35

Base: Those who are aware of flu / Those who are aware of preventive measures against flu

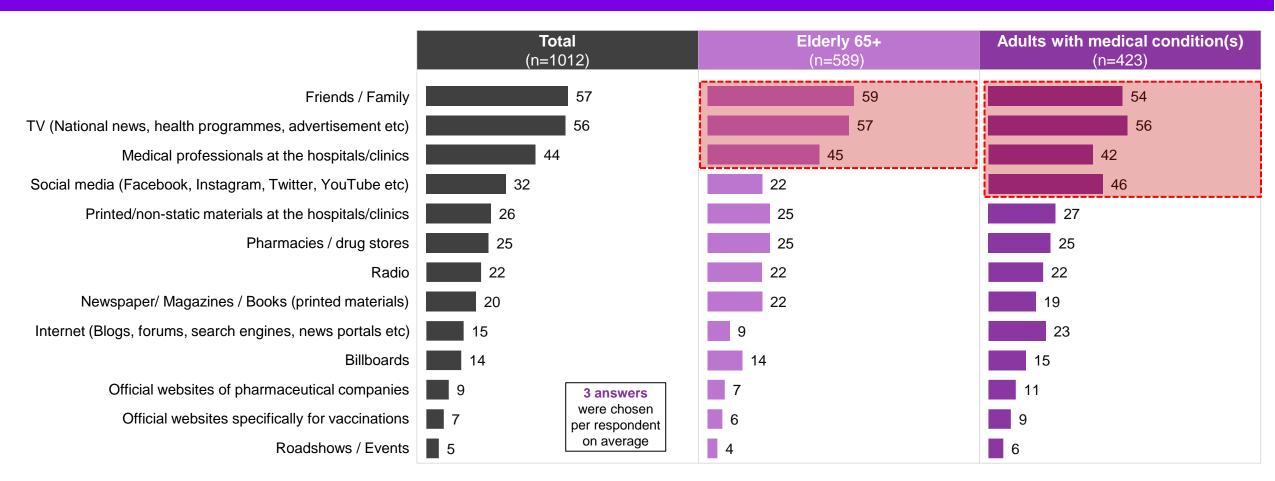


C3. Please indicate how well you are aware of the preventive measures against Influenza (flu).

C4. Which of the following is being practiced/used by you to prevent Influenza (flu)? / What do you think we can do to prevent Influenza (flu)?

Friends/Family and TV appear to be the main sources of information about the flu, followed by medical professionals. Social media is also seen as key among Adults.

Source of Information About Flu



Base: Those who are aware of flu Figures in %
C7. Where have you seen, heard or read anything about Influenza (flu)?



Medical professionals are deemed as one of the main sources among Early Adopters and Neutral.

Source of Information About Flu (2)

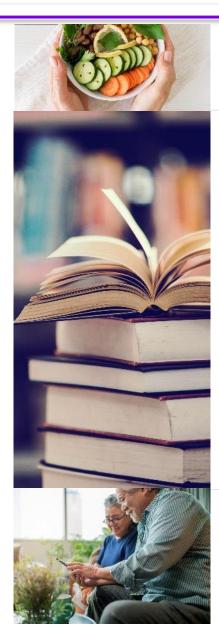
		Vaccination Behaviour			
Figures in %	Total	Early Adopter	Neutral	Laggard	
n=	1012	159	441	412	
Friends / Family	57	62	62	50	
TV (National news, health programmes, advertisement etc)	56	62	57	54	
Medical professionals at the hospitals/clinics	44	62	54	27	
Social media (Facebook, Instagram, Twitter, YouTube etc)	32	30	36	28	
Printed/non-static materials at the hospitals/clinics	26	42	28	18	
Pharmacies / drug stores	25	28	29	18	
Radio	22	28	23	19	
Newspaper/ Magazines / Books (printed materials)	20	26	18	21	
Internet (Blogs, forums, search engines, news portals etc)	15	19	18	11	
Billboards	14	17	16	12	
Official websites of pharmaceutical companies	9	8	10	7	
Official websites specifically for vaccinations	7	11	7	5	
Roadshows / Events	5	8	5	4	

Base: Those who are aware of flu

C7. Where have you seen, heard or read anything about Influenza (flu)?



Section Recap (1)



- A majority maintain health conditions through **natural diets** (75%)
- Early Adopters are more health-conscious and more willing to pay for health purposes
- Laggard are less likely to consider vaccination as one of the self-care practices
- When it comes to the general knowledge about flu:
 - Marginally lower among Laggard
 - Elderly among the Neutral and Laggards are less familiar
- When we <u>further gauged the understanding</u> of flu:
 - Many agree that flu can be dangerous for certain groups of people such as people with chronic diseases (84%) and the elderly (84%)
 - > 74% are seeing some similarities between the flu and Covid-19
 - There is a **need to address the misconception**: 54% think flu only happens in countries with cold climates and 4 seasons
- Early Adopters and Neutral show a higher level of understanding, likely due to their personal experiences
 - There is a higher proportion of those who contracted flu among the Early Adopters (28%) and Neutral (24%) as compared to Laggard (9%)
- There is a certain level of awareness when it comes to complications with the flu. However, when it comes to <u>types of flu complications</u>, a low level of understanding can be observed generally
 - Early Adopters Adults show some awareness, particularly lung-related complications; News articles and friends' experiences are the sources of awareness
 - Neutral and Laggards are generally unaware without prompting
 - With prompting, people are more likely to associate flu with lung-related complications, such as pneumonia and bronchitis
- Friends/Family (57%), TV (56%) and medical professionals (44%) are the main sources of information about the flu
 - Social media is also seen as key among Adults (46%)
- Medical professionals are deemed as one of the main sources among Early Adopters (62%) and Neutral (54%)
 - Less so for Laggard (27%)

Section Recap (2)

Adults with Medical Conditions are more familiar with flu disease and complications risk compared to the elderly

More adults consider themselves early adopters in exploring new things related to health (70% adults vs 64% elderly).

When it comes to the awareness of preventive measures against infectious diseases in general, awareness is somewhat higher among adults.

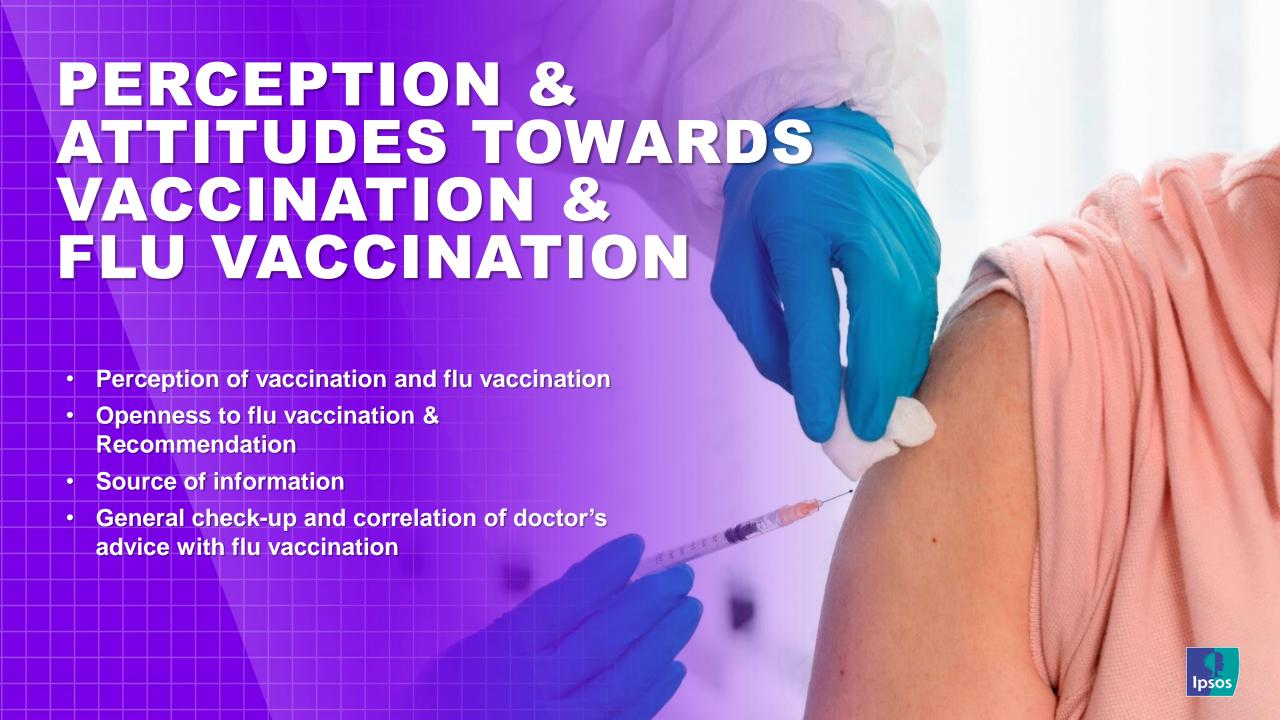
More adults claim that they are aware of the preventative measures against infectious diseases (87% adults vs 79% elderly), the existence of vaccines for infectious diseases (83% adults vs 78% elderly), the vaccine options available (72% adults vs 64% elderly), and know what to do / where to get the vaccine (80% adults vs 74% elderly) Comparison between Elderly and Adults

When it comes to familiarity with the flu, there is a lower familiarity among the elderly generally, particularly among elderly of the Neutral and Laggard groups.

- Adult respondents among Early Adopters show a higher awareness of complications associated with the flu generally, particularly on bronchitis
- The misconception of "flu only happens in countries with cold climates and 4 seasons" is high among all, marginally higher among Adults (57% adults vs 52% elderly)

When it comes to sources of information, friends/family, TV, and medical professionals are among the top 3 for both the elderly and adults; Social media (46%) and the internet (23%) are higher among adults.





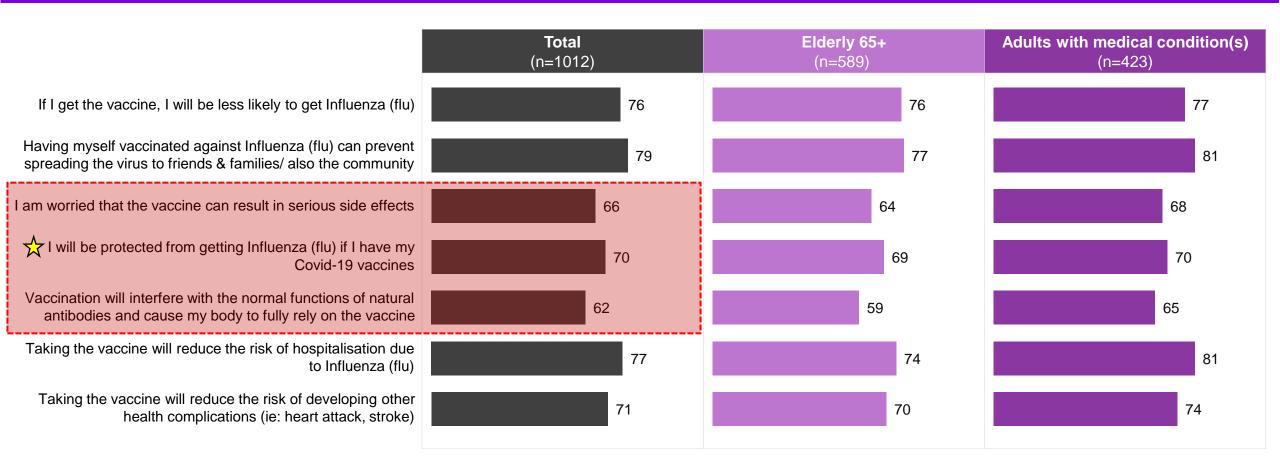
Generally, Early Adopters are more receptive towards vaccination. Neutral and Laggard share some similarities (lack of relevant knowledge, greater negative sentiments towards vaccination).

Early Adopters		Neutral	Laggard		
		Perception of Vaccination In General			
<i>> ></i>	Higher level of awareness Generally positive about vaccination and recognise its importance "It helps to improve our immune system." – Malay, Male "Vaccination is needed for disease prevention." – Chinese, Male	 While many recognise the benefits of getting the vaccination, many believe that vaccinations should be taken only when necessary "I think it should be taken when needed only, for example, when it becomes a pandemic like Covid-19 or when we need to travel to a third-world country." – Chinese, Male The elderly are not particularly familiar with vaccination and vaccination is perceived negatively in their community Some caution against taking too many vaccinations in the recent years, will may lead to potential side effects 	 Some are open to it, some are not It is deemed as an optional measure as many diseases can be prevented through other ways, and they only consider vaccinations when there is a life-threatening situation "I think it's optional, not every disease needs to be prevented through vaccination. We can practice social distancing, wear masks etc." – Malay, Female Some have negative sentiments towards vaccination due to the experiences and reviews based on Covid-19 vaccination "Different people may react differently to the vaccines. I can feel the difference after taking the third Covid-19 shot, I feel my body becomes weaker, so I asked my parents not to take it." – Chinese, Female 		
		Perception of <u>Flu</u> Vaccination			
>	Recognise the importance - helps alleviate the severity of flu symptoms and reduce the number of flu cases "My family and I have been on this flu vaccine for some time, I think the shots have been protecting us from contracting flu." – Indian, Male Some do not feel the need to get an annual flu vaccine, but they take it because it is required by their employers "I take the annual vaccination because of the job requirement. If there is no requirement in the future, I may stop taking it." – Chinese, Male	 Many are receptive, but not all are fully aware of the importance of having annual shots "I am not aware that it needs to be taken annually, I thought our body will have immunity once vaccinated, just like the Hepatitis B vaccination." – Chinese, Male Some are sceptical about getting annual shots, particularly due to the safety and effectiveness "I will only take it when being forced. We need to be careful with all the vaccines because many are weakened viruses. People may approve it for hidden agenda." – Malay, Male "I am not sure if I should take it again, I feel vaccines sometimes work, sometimes don't, it depends on individuals." – Malay, Male 	 It is deemed as something optional as they lack awareness of the health risks associated with the flu "I haven't heard of any death cases due to flu, so I don't think we need to go for annual vaccination." – Chinese, Male It is associated with certain groups of people, and only needed in specific circumstances "I think it's needed for those who are prone to getting colds easily or those who are quite weak in health." – Chinese, Female "We only need it when we need to travel to countries with poor sanitisation." – Chinese, Female 		

34 - © Ipsos Source: Qualitative FGDs

There are concerns about the possible side effects and disruption to the normal functions of natural antibodies. Another misconception to be addressed: I will be protected from getting the flu if I have my Covid-19 vaccines.

Perception of Flu Vaccination (% Agree)

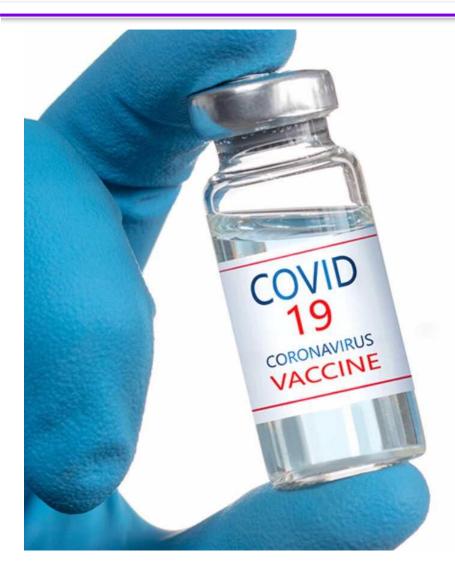


Base: Those who are aware of flu Figures in %

E1. Now, we would like to know your personal beliefs regarding the perceived positive/negative effects of being vaccinated against Influenza (flu).



There is a significant need to address this misconception.



"I will be protected from getting Influenza (flu) if I have my Covid-19 vaccines" captured higher scores among

Early Adopters (71%), Neutral (73%), Laggard (66%)

Those who agree mentioned that

 Covid-19 and flu share some similarities, including the fact that they both have many different variants

"Maybe yes for me, because Covid-19 has many variants like flu, so maybe the Covid-19 vaccines could work against certain flu variants." – Malay, Neutral, Male

There is a reduction in flu cases after receiving Covid-19 shots "I feel that maybe certain ingredients in the Covid-19 vaccines do help. I somehow feel that Covid-19 vaccines help to reduce the frequency of getting flu or common cold." – Chinese, Laggard, Female, Elderly

Source: Qualitative FGDs



Higher concern about the possible side effects could also be observed among Neutral and Laggard respondents.

Lesser Laggards are aware that taking the vaccine will reduce the risk of developing other health complications, particularly heart attack and stroke.

Perception of Flu Vaccination (2)

Figures in %		Vaccination Behaviour			
(% Agree)			Neutral	Laggard	
n=	1012	159	441	412	
If I get the vaccine, I will be less likely to get Influenza (flu)	76	84	81	67	
Having myself vaccinated against Influenza (flu) can prevent spreading the virus to friends & families/ also the community	79	84	82	74	
I am worried that the vaccine can result in serious side effects	66	58	67	67	
I will be protected from getting Influenza (flu) if I have my Covid-19 vaccines	70	71	73	66	
Vaccination will interfere with the normal functions of natural antibodies and cause my body to fully rely on the vaccine	62	58	61	64	
Taking the vaccine will reduce the risk of hospitalisation due to Influenza (flu)	77	82	81	72	
Taking the vaccine will reduce the risk of developing other health complications (ie: heart attack, stroke)	71	81	77	61	

Base: Those who are aware of flu

E1. Now, we would like to know your personal beliefs regarding the perceived positive/negative effects of being vaccinated against Influenza (flu).



Although the Covid-19 pandemic has led to increased awareness and confidence towards the efficacy of vaccines, there is a need to address vaccine hesitancy and misinformation.

Positive Impacts

Increased awareness

 Has brought about increased awareness of vaccination-related knowledge and the importance of vaccination

"Covid-19 helped me understand the vaccination better. We were exposed to information all over the Internet, we read about how vaccine works etc. Previously, we didn't care about all these and we just took all the vaccines since small whenever we were asked to." - Chinese, Early Adopter, Female

Increased confidence

 Has brought about increased confidence towards the efficacy of vaccines

"We can see how Covid-19 vaccines work. Now we can remove our mask, the symptoms are milder if we contracted Covid-19." – Malay, Early Adopter, Male

Negative Impacts

Vaccine Hesitancy

Has led to the increased concerns about the safety of vaccines

Misinformation

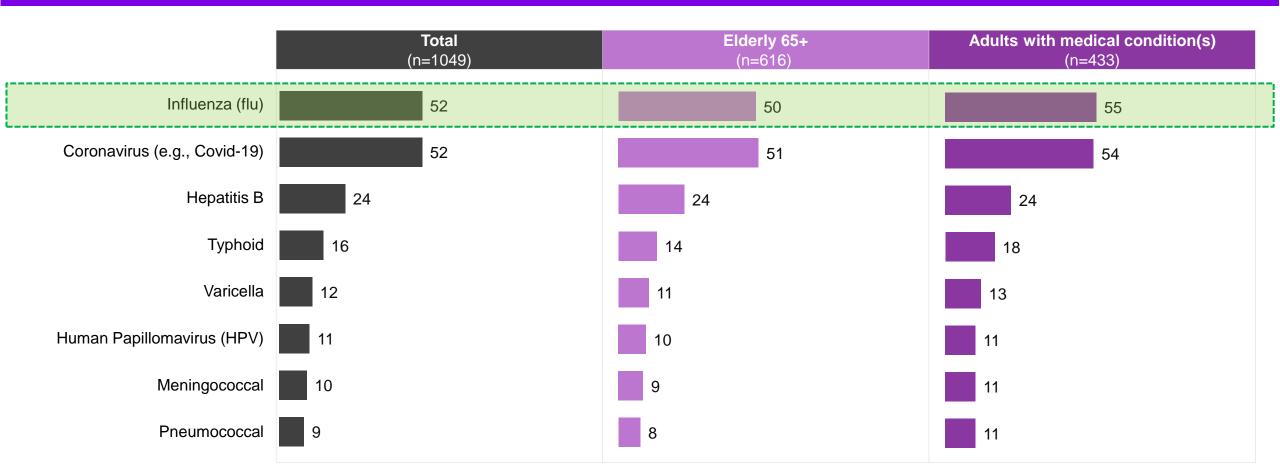
- Has led to the spread of misinformation, i.e., Covid-19 vaccines offer protection against the flu
- Overall, several issues related to Covid-19 vaccination require attention, including concerns about potential side effects, worries about receiving too many vaccines and potentially experiencing 'vaccine dependence' or 'immune overload', and the misconception that Covid-19 vaccines offer protection against the flu.



Source: Qualitative FGDs

Slightly more than half are considering flu vaccination in the next 1 year.

Openness To Any Vaccination In the Next 12 Months (% likely)



Base: All respondents Figures in %

D5. How likely are you to get yourself vaccinated against the diseases below in the next 12 months?



Most of the Early Adopters are open to the flu vaccination in the next 12 months and about three-fifths for Neutral.

Openness To Any Vaccination In the Next 12 Months (2)

Figures in %		Vaccination Behaviour			
(% likely)	Total	Early Adopter	Neutral	Laggard	
n=	1049	159	441	449	
Influenza (flu)	52	84	62	30	
Coronavirus (e.g., Covid-19)	52	57	60	43	
Hepatitis B	24	33	27	18	
Typhoid	16	18	17	13	
Varicella	12	14	13	10	
Human Papillomavirus (HPV)	11	14	13	7	
Meningococcal	10	15	10	8	
Pneumococcal	9	10	10	8	

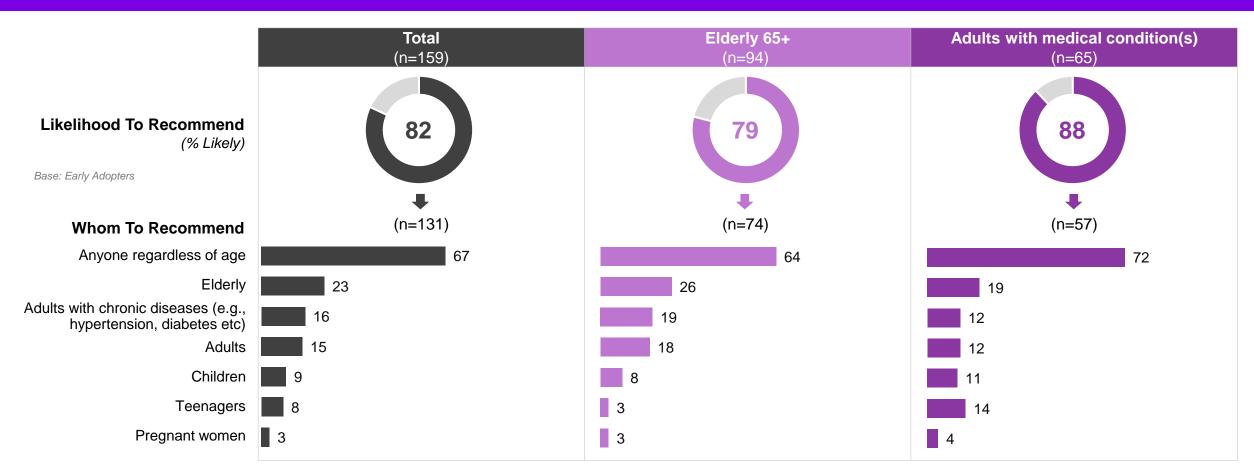
Base: All respondents

D5. How likely are you to get yourself vaccinated against the diseases below in the next 12 months?



Keenness to recommend flu vaccination is high among Early Adopters, and many Early Adopters deem it suitable for anyone regardless of age.

Recommendation of Flu Vaccination To Others



Base: Early Adopters who are likely to recommnend

Figures in %

F6. How likely are you to recommend someone to get vaccinated against Influenza (flu) annually?
F7. To whom you would recommend getting vaccinated against Influenza (flu) annually?



When it comes to vaccination, friends/family, TV and medical professionals are the top sources of information, and they are also likely to have a greater influence on decisions.

Source of Information About Vaccination (In General) Elderly 65+ Adults with medical condition(s) Total (n=1049)(n=616)(n=433)% influential % influential % seen/heard/read % influential % seen/heard/read % seen/heard/read Friends / Family 83 82 85 50 TV (National news, health programmes, advertisement etc) 76 55 79 54 Medical professionals at the hospitals/clinics 80 77 83 Social media (Facebook, Instagram, Twitter, YouTube etc) 57 69 49 Printed/non-static materials at the hospitals/clinics 69 74 71 Pharmacies / drug stores 69 67 73 Radio 63 64 Newspaper/ Magazines / Books (printed materials) Billboards 15 57 58 57 19 Internet (Blogs, forums, search engines, news portals etc) 9 63 Official websites specifically for vaccinations 7 6 9 3 answers Official websites of pharmaceutical companies 7 10 were chosen per respondent Roadshows / Events 5 6 on average

Base: All respondents Figures in %



D3. Where have you seen, heard or read anything about vaccination, except the Covid-19 vaccination? D4. If you were to make decisions for vaccination, how influential are the sources below in helping you to make decisions?

Many Laggards mentioned not receiving any information from medical professionals. Printed materials at hospitals/clinics are more influential among Early Adopters.

Source of Information About Vaccination (In General) (2)

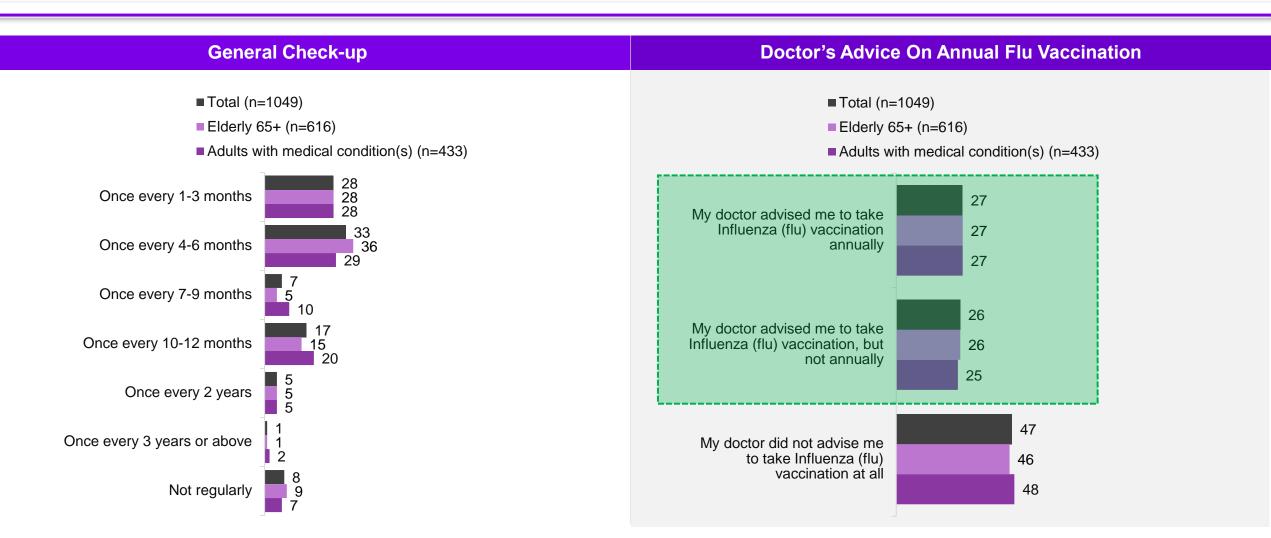
	(% seen/heard/read)			(% influential)				
Figures in %		Vaccination Behaviour			Vac	Vaccination Behaviour		
	Total	Early Adopter	Neutral	Laggard	Total	Early Adopter	Neutral	Laggard
n=	1049	159	441	449	1049	159	441	449
Friends / Family	54	57	59	48	83	84	87	79
TV (National news, health programmes, advertisement etc)	54	58	56	51	77	76	80	75
Medical professionals at the hospitals/clinics	44	67	50	29	80	80	85	74
Social media (Facebook, Instagram, Twitter, YouTube etc)	28	27	33	23	57	60	59	54
Printed/non-static materials at the hospitals/clinics	25	38	28	17	71	84	72	65
Pharmacies / drug stores	24	32	30	16	69	74	72	65
Radio	22	31	24	18	64	65	64	63
Newspaper/ Magazines / Books (printed materials)	20	23	21	18	61	64	62	59
Billboards	15	18	18	12	57	60	58	55
Internet (Blogs, forums, search engines, news portals etc)	14	18	16	11	50	58	51	47
Official websites specifically for vaccinations	7	8	7	7	49	52	51	46
Official websites of pharmaceutical companies	7	6	9	6	48	50	49	47
Roadshows / Events	5	3	6	4	48	52	50	45

Base: All respondents

D3. Where have you seen, heard or read anything about vaccination, except the Covid-19 vaccination? D4. If you were to make decisions for vaccination, how influential are the sources below in helping you to make decisions?



About three-fifths have a general check-up every 6 months.
Slightly more than half mentioned that there was advice from the doctor on getting the flu vaccination.



Base: All respondents Figures in %



Y1. How often do you visit your doctor for a general check-up? Y2. Did your doctor advise you to take Influenza (flu) vaccination annually?

More Early Adopters tend to have general check-ups every 6 months.

Many Early Adopters mentioned that there was advice from the doctor to get an annual vaccination indicating there is a correlation between the doctor's advice and the annual flu vaccination.

General Check-up & Doctor's Advice On Annual Flu Vaccination (2)

		Vaccination Behaviour			
Figures in %	Total	Early Adopter	Neutral	Laggard	
n=	1049	159	441	449	
General Check-up					
Every 6 months	61	70	57	63	
Once every 1-3 months	28	30	26	30	
Once every 4-6 months	33	40	31	33	
Once every 7-9 months	7	6	9	6	
Once every 10-12 months	17	19	17	16	
Once every 2 years	5	4	8	2	
Once every 3 years or above	1	-	1	2	
Not regularly	8	1	7	12	
Doctor's Advice On Annual Flu Vaccination					
My doctor advised me to take Influenza (flu) vaccination annually	27	79	25	11	
My doctor advised me to take Influenza (flu) vaccination, but not annually	26	10	43	14	
My doctor did not advise me to take Influenza (flu) vaccination at all	47	11	32	75	

Base: All respondents

Y1. How often do you visit your doctor for a general check-up? Y2. Did your doctor advise you to take Influenza (flu) vaccination annually?



Section Recap (1)



- When it comes to <u>perception of vaccination / flu vaccination:</u>
 - I. Early Adopters tend to have a higher level of awareness; They are generally more receptive towards vaccination, but not all are in favour of annual vaccination (some take the flu vaccination annually due to job requirement)
 - II. Neutral are generally receptive too, but some are not aware of the need for annual vaccination. They generally feel that vaccination is only needed when necessary. There is also **scepticism** about the safety and effectiveness.
 - III. Laggards hold mixed opinions. Some are open to vaccination, but it is seen as an optional measure generally. There is a lack of awareness of the health risks associated with the flu, and it is associated with certain target groups. There are also negative sentiments towards the vaccination.
 - IV. Another misconception to be addressed: 70% think they will be protected from getting flu if they have their Covid-19 vaccines
- When it comes to <u>openness to flu vaccination</u>,
 - I. 52% are considering it in the next 12 months.
 - II. Most of the Early Adopters (84%) show openness, and about three-fifths for Neutral (62%)
- When it comes to <u>sources of information about vaccination</u>,
 - I. Friends/family (54%), TV (54%) and medical professionals (44%) are the top sources of information, and they are also likely to have a greater influence on decisions
 - II. Lesser Laggards (29%) mentioned receiving any information from the medical professionals
 - III. Printed materials at the hospitals/clinics are more influential among Early Adopters (84%)
- When it comes to the general check-up,
 - I. About three-fifths have a general check-up every 6 months
 - II. More Early Adopters (70%) tend to have general check-ups every 6 months, as compared to Neutral and Laggard
 - III. 53% mentioned that there was advice from the doctor on getting the flu vaccination, but only 27% for an annual basis
 - IV. 79% of Early Adopters mentioned that there was advice from the doctor to get an annual vaccination indicating there is a **correlation between the doctor's** advice and the annual flu vaccination

Section Recap (2)

Elderly has a lower understanding on Flu-related complications, Medical Professional's advice on Annual Flu Vaccination is influential to the patients

There are greater positive sentiments among adults generally.

- Slightly higher percentage of adults have the belief that taking flu vaccination can prevent spreading the virus to friends / family / community (81% adults vs 77% elderly)
- More adults believe that taking the vaccine will reduce the risk of hospitalisation (81% adults vs 74% elderly)
- Slightly higher percentage of adults think that taking the vaccine will reduce the risk of developing other health complications (74% adults vs 70% elderly)
- Adults are slightly more open towards flu vaccination (55% adults vs 50% elderly)

However, while there is a greater familiarity/exposure among adults, there is also greater scepticism about the effects of the flu vaccine on the body.

- Flu vaccine can result in serious side effects (68% adults vs 64% elderly)
- Flu vaccine will interfere with the normal functions of natural antibodies and cause the body to fully rely on the vaccine (65% adults vs 59% elderly)

Comparison between Elderly and Adults

In terms of sources of information, friends/family, TV and medical professionals are the top 3 sources for both adults and the elderly; They are also deemed more influential.

- Social media plays a more important part among adults (41%) as compared to the elderly (19%)
- The same goes for the internet (21% adults vs 9% elderly)
- Social media and the internet are also more influential among the adults

When it comes to general check-ups, more elderly visit a doctor for a general check-up every 6 months (64% elderly vs 57% adults).



CONSUMER JOURNEY

Early Adopters:

Decision-making, Past venue, Motivation, Factors of consideration, Reasons for attitude change

- Summary of Early Adopter Vaccination Journey
- Neutral:

Barriers, Motivation, Likelihood of getting the fluvaccination annually if it is fully subsidised,
Preferred venue

- Summary of Neutral Vaccination Journey
- Laggard:

Barriers, Motivation, Likelihood of getting the flu vaccination annually if it is fully subsidised, Preferred venue

Summary of Laggard Vaccination Outlook

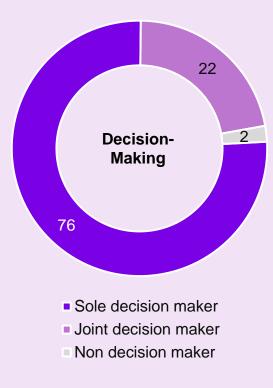


Among the Early Adopters, doctors play an important part in the decision-making process among those who are not sole decision-makers, followed by children and spouses.

Early Adopters: Decision-Making On Flu Vaccination

Higher proportion of sole decision-makers among adults could be observed

	Elderly (n=94)	Adults (n=65)
Sole decision maker	70	85
Joint decision maker	27	15
Non decision maker	3	-



Influence In Decision-Making Doctors 68 Children 58 Spouse 53 Siblings 26 **Parents** 16 Friends 13 Nurses **Pharmacists** Colleagues

Base: Those who are not sole decision makers (n=38)

Base: Early Adopters (n=159)

Figures in %

F1. When it comes to Influenza (flu) vaccination specifically, which of the below best describes you? F1b. Who would influence/participate in the decision-making process for Influenza (flu) vaccination?

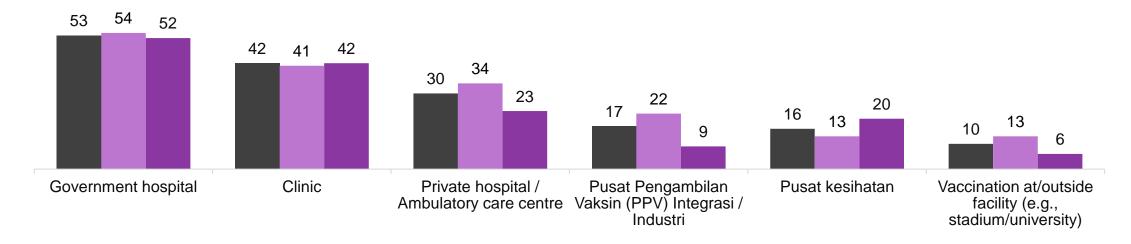


The government hospital is the most common venue.

More Elderly people went to private hospitals / ambulatory care centre and PPV as compared to Adults.

Early Adopters: Past Venue For Flu Vaccination



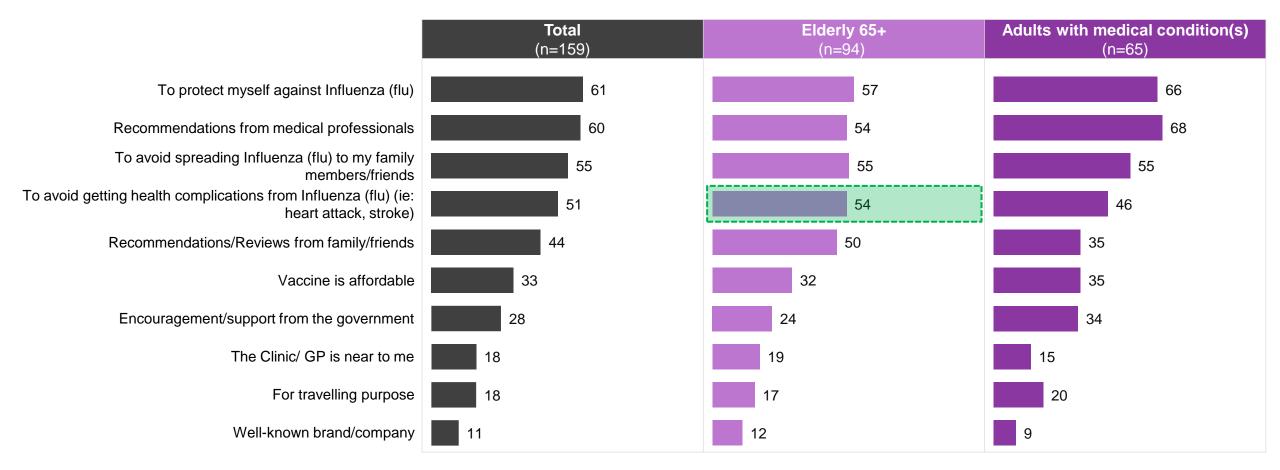


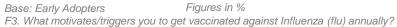
Base: Early Adopters Figures in % F2. What were the venues you have gone to for Influenza (flu) vaccination before?



Other than getting protection, the recommendation from medical professionals is also seen as one of the biggest motivations. More Elderly people get annual vaccination to avoid getting health complications.

Early Adopters: Motivation For Annual Flu Vaccination



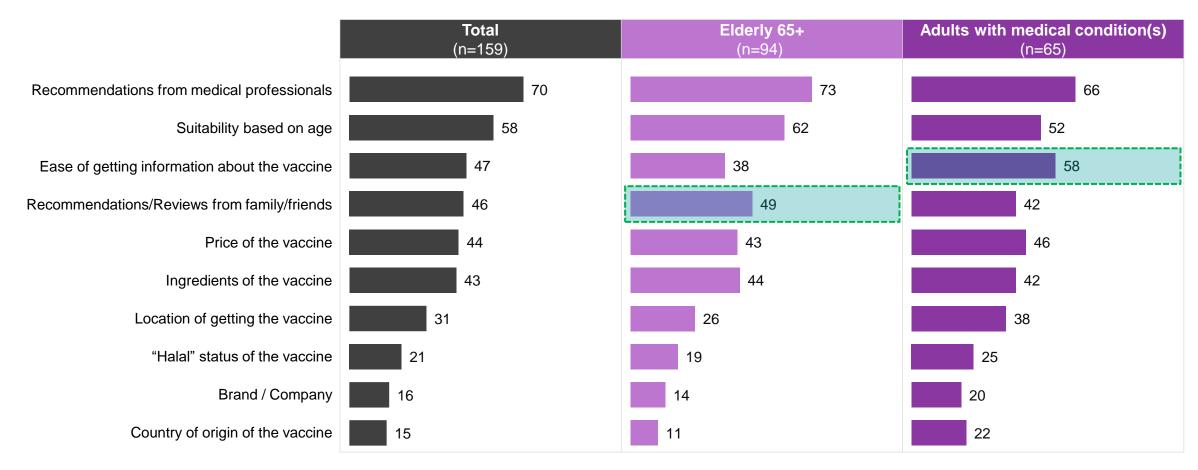




Recommendations from medical professionals are most considered.

Recommendations from family/friends play a bigger role among the Elderly, while more Adults care about the ease of getting vaccination-related information.

Early Adopters: Factors of Consideration When Deciding on Flu Vaccination



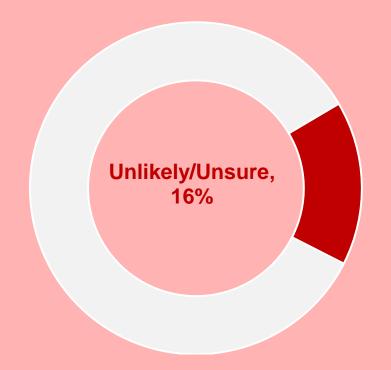
Base: Early Adopters Figures in %
F4. What would you consider when deciding on Influenza (flu) vaccine?



Among those who show attitude changes, the concern about getting too many vaccines appears to be the main stumbling block.

Early Adopters: Reasons For Attitude Change From Likely To Unlikely/Unsure On Flu Vaccination

Openness To Vaccination In the Next 12 Months



Reasons For Attitude Change From Likely To Unlikely/Unsure On flu Vaccination	n=26*
I am concerned about getting too many vaccines, including Covid-19 vaccines	27
The vaccine may cause negative / side effects	19
It is not suitable for someone of my age	19
I do not see the need as I am healthy	12
I will consult a doctor if necessary	8
The vaccine is not / may not be effective	4
The price of the vaccine is higher	4
Do not know about the ingredients of the vaccine	4
I am concerned about my own health issue / I am weak	4

Base: Those who are unlikely / not sure whether to get vaccinated against flu in P12M Figures in %
F5. You mentioned that you are not sure about getting / are unlikely to get vaccinated against Influenza (flu) in the next 12 months. Please explain why there is a change in your attitude/decision.



Early Adopter's Vaccination Journey

Some Early Adopters do not necessarily feel the need for annual vaccination, so it is crucial to provide more exposure to the importance of having annual vaccination.

When was it done?

- First vaccination was done before Covid-19; A few younger respondents mentioned university / college time
- No specific timing of the year

How did they feel?

- Minor effects, such as fever, headache, and nauseous (perceived as normal reactions to vaccination)
- Felt secure and protected

Triggers to have 1st vaccination

- Personally contracted flu and was advised by the doctor to take it
- Family members contracted flu, and the whole family was advised by the doctor to take it
- Witnessed the experience from family/friends and developed a fear
- Felt the need to get it due to the job nature (frequent travelling, facing a lot of people)
- Umrah
- Required by the employers

Factors of consideration

- Recommendations from medical professionals (70%)
 - "I usually visit my panel doctor, I feel comfortable with him already. He advised me to do that so I just followed. He asked me to try with one jab first, and there's no issue. After I become more financially stable, he asked me to get the jab annually." Malay, Female
- Suitability based on age (58%)
- Ease of getting information (47%)
- Recommendation from family/friends (46%)
- Price (44%)
- Ingredients (43%) (must be approved by WHO, natural ingredients, must be halal for Muslims)

Note: Recommendations from medical professionals and price were the top 2 factors for 1st vaccination.

Where was it done?

- Most mentioned: Government hospitals (53%), private/panel clinics (42%)
- Government hospitals are preferred because they provide a sense of security with more departments, it implies that it is endorsed by the government, and they charge a cheaper cost usually
- Clinics are preferred because they are more convenient (due to shorter queues) and the respondents feel more comfortable with their own family doctor
- Some have no specific preference as the venue is decided by the company, or as long as the venue is convenient and in close proximity

Influencers of 1st vaccination

In terms of research

- Obtained more information from the doctor when the doctor advised them
- Searched online to see reviews (mainly to see whether there is any side effect)
- Obtained feedback from family/friends

In terms of decision-making

- Most of them made the final decision themselves (76%)
- Among non-sole decision-makers, some were advised by the doctor (68%) / children (58%) / spouse (53%)

Motivation for getting annual vaccination

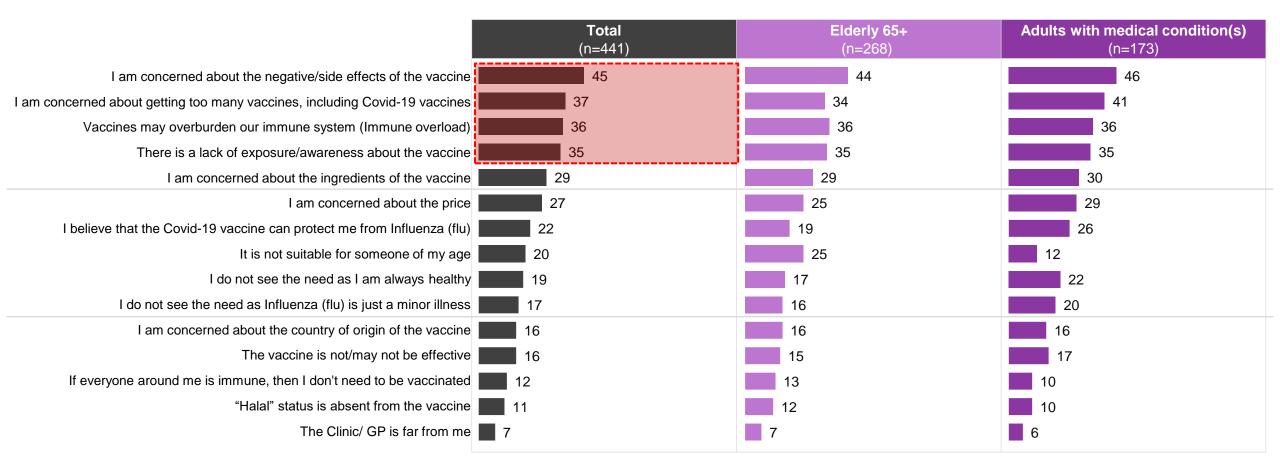
- Protection Feel that it does protect them from the flu (61%)
- Recommendations from medical professionals (60%)
- Avoid spreading flu to family/friends (55%)
- Avoid getting health complications (51%), particularly among the Elderly
- Recommendations from family/friends (44%)

Potential barriers to annual vaccination

- Concerned about getting too many vaccines
 "Covid-19 has become the focus since a few years ago so I think the
 focus should be given to Covid-19 vaccination. Who knows we may
 need 4th or 5th shots." Malay, Male, Elderly
- Side effects
 - "I got bad side effects like rashes and breathing problems from Covid-19 vaccines, so I may stop taking vaccination for a while, my body maybe could not take it."— Malay, Male
- It may not be suitable for someone of my age
- The body has become healthy and fit
 "I could feel that my body has become healthy and fit, so I think it's
 unnecessary to continue the annual vaccination." Malay, Male,
 Elderly

Among the Neutral group, worrying about side effects is seen as the biggest barrier, which is also attributed to lack of exposure. Covid-19 vaccinations have also triggered some worries about getting too many vaccines and there is also concern about immune overload.

Neutral: Barriers To Annual Flu Vaccination



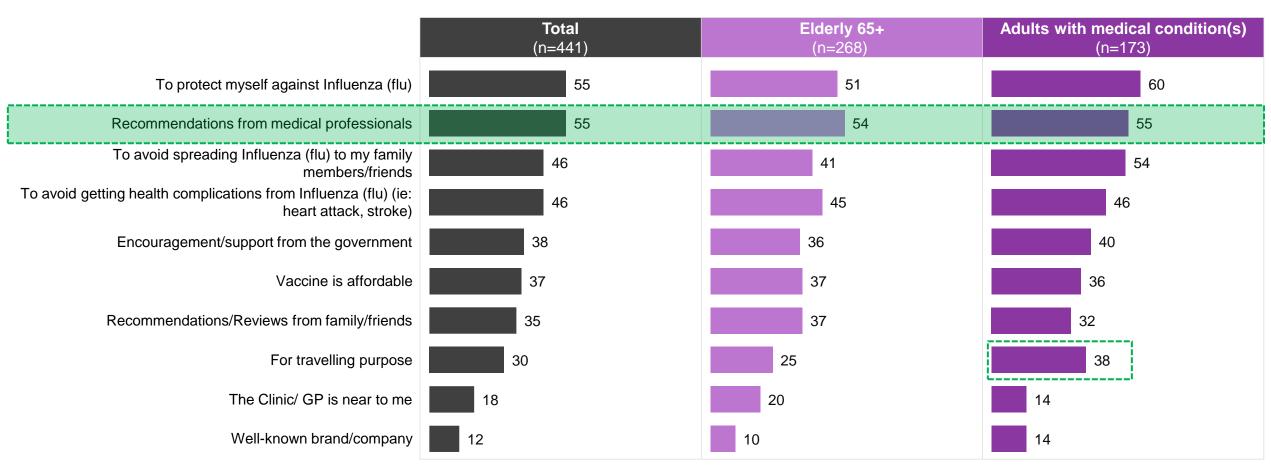
Base: Those who are 'Neutral' Figures in %

G1. What is/are the reason(s) for not getting vaccinated against Influenza (flu) annually?



Recommendation from medical professionals is one of the top factors that may motivate annual vaccination. Adults are more driven by travelling purposes.

Neutral: Motivation For Annual Flu Vaccination

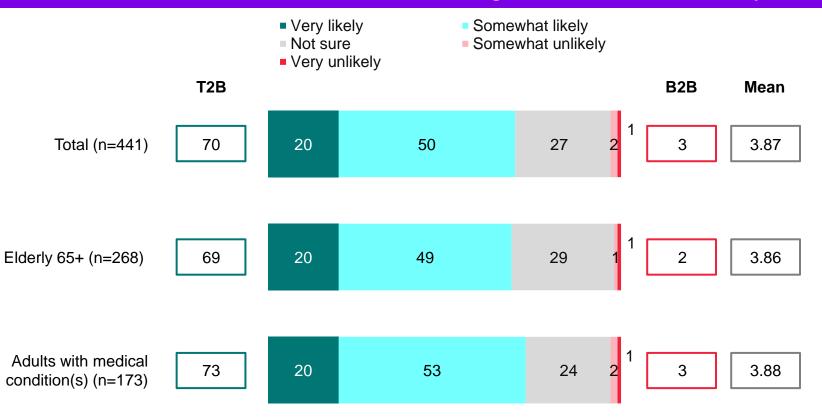


Base: Those who are 'Neutral' Figures in %
G2. What would motivate/trigger you to get vaccinated against Influenza (flu) annually?



More than two-thirds are likely to consider the flu vaccination if it's fully subsidised. Among those who are not willing, possible side effects are the top barriers.

Neutral: Likelihood of Getting The Flu Vaccination Annually If It Is Fully Subsidised



Reasons For Not Willing To Take The flu Vaccine Even If It Is Fully Subsidised	n=11*
I am concerned about the negative/side effects of the vaccine	55
It is not suitable for someone of my age	9
I am concerned about the price	9
The Clinic/ GP is far from me	9
I believe that the Covid-19 vaccine can protect me from Influenza (flu)	9
I do not see the need as I am always healthy	9

Base: Those who are 'Neutral' / Those who are unlikely to take the flu vaccine even if it's fully subsidised G5. If Influenza (flu) vaccine is fully subsidised, how likely are you to be willing to take the vaccine annually? G6. Why are you not willing to take Influenza (flu) vaccine even if it is fully subsidised?

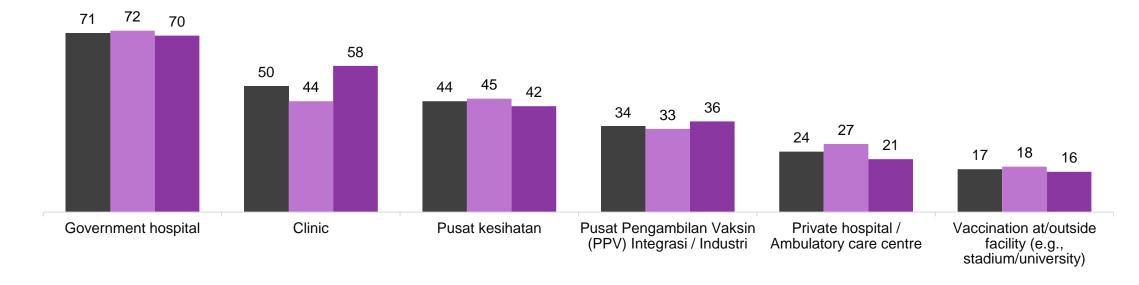
*Caution: Small base size Figures in %



The elderly also opt for both Pusat Kesihatan and Clinic while Adults prefer Clinic more.

Neutral: Preferred Venue For Flu Vaccination





Base: Those who are 'Neutral' Figures in %
G4. If you were to decide on Influenza (flu) vaccine one day, where would you prefer to get Influenza (flu) vaccine?



Neutral's Vaccination Journey

There are concerns about the potential side effects, possible issues due to Covid-19 vaccination, pricing issue, and lack of awareness of the need for annual vaccination. There is a need for education/publicity, and support from medical professionals and the government.

When was it done?

 First vaccination varied, but many mentioned a few years back (possibly the flu outbreak)

How did they feel?

 Minor effects on the body, such as fever, hand numbness and headache (perceived as normal reactions to vaccination)

Triggers to have 1st vaccination

- Took it after contracting flu (some were advised by the doctor)
- Developed fear after witnessing friend becoming seriously ill due to flu
- Took it due to job nature/requirement (Felt the need as the driver job exposes him to different strangers everyday / Recommended by Grab)
- Read the news about increased flu cases
- Took it for travelling purposes
- Advised by a family doctor to take it due to diabetes condition
- Aimed to protect family members (as the father is prone to getting flu)
- Subsidised by the school, and felt uncomfortable if I didn't it alone (peer influence)
- Subsidised by the sister's company

Motivation for annual vaccination

 To get protection (55%) (when it is needed / there is an outbreak)

"I will take it for protection if it turns out to be an outbreak." – Chinese, Female

- Strong recommendation from medical professionals (55%)
- Avoid spreading flu to family/friends (46%)
- Avoid getting health complications (46%), particularly among the Elderly
- Encouragement/support from the government (38%)
- If it is offered at a very low price (37%)

Factors of consideration

- Side effects (across all demographics)
- Ingredients (must be halal among Malays)
- Price

Where was it done?

- Most mentioned: government hospitals (71%), clinics (50%) and pusat kesihatan (44%)
- Government hospitals are preferred because they are deemed more convenient (nearer to the respondents' houses) and they charge a cheaper cost usually
- Clinics are preferred because they are deemed more convenient (shorter queue, all the medical records are being kept there); particularly among Adults
- Pusat kesihatan is preferred because it is near the respondent's house

Influencers of 1st vaccination

In terms of research

- Asked friends
- Online search about side effects
- Checked with a few clinics regarding the flu package

In terms of decision making

- Most of them made the final decision themselves
- Some were advised by the doctor, and they took it without asking further

Barriers / Reasons for not taking annual vaccination

- Potential side effects (45%) (due to flu / Covid-19 vaccination)
 - "I heard of eczema issue due to flu vaccination." Chinese. Female

"Because we saw from Facebook that there were people who became paralysed or passed away due to vaccination, Covid-19 ones, so I'm scared." – Malay, Female

- Other reasons arose from Covid 19 vaccination
- Afraid of "vaccine overdose" (37%)
- Afraid of "immune overload" (36%)
- Thought Covid-19 vaccine can protect us from flu as well (22%)
- Lack of exposure/awareness Not aware of the need for annual vaccination (35%)

"I am not aware that it needs to be taken annually, I thought our body will have immunity once vaccinated, just like the Hepatitis B vaccination." – Chinese, Male

- Concerned about ingredients (29%)
- Cost concern (27%)

"It is not cheap, so it's a burden for a big family." - Chinese, Female

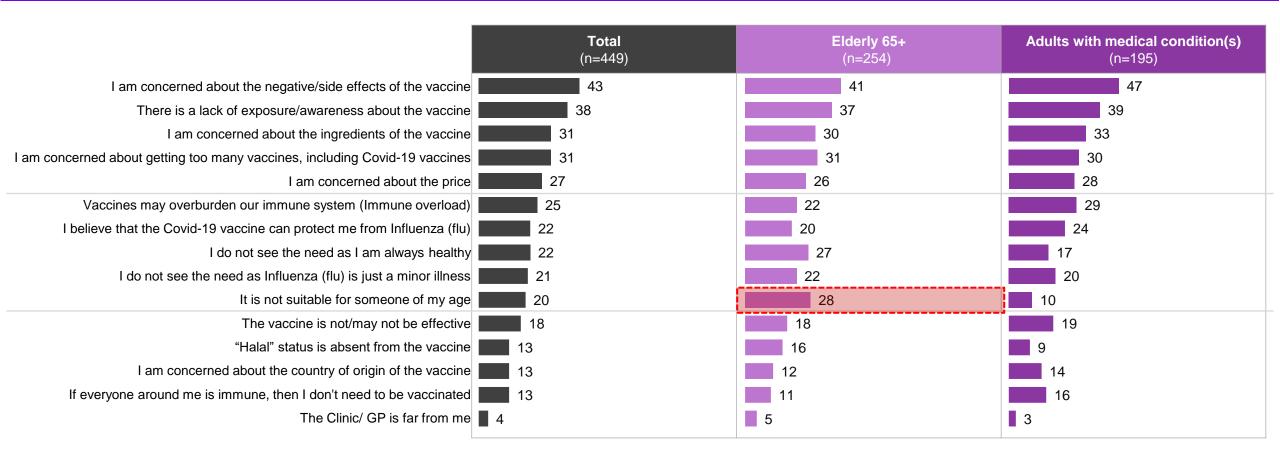
Do not see the need because flu is just a minor illness (17%) or seasonal

"I don't think annual vaccination is needed. Flu does not lead to death. If we contract flu, we can just drink more coconut water and sleep more at home." – Malay, Female

"Flu is seasonal, so it's needed during certain periods only. We don't need it annually." - Chinese, Female

Worrying about side effects and lack of exposure/awareness are seen as the biggest barriers among the Laggard group. There are concerns about the age suitability among the older group.

Laggard: Barriers To Annual Flu Vaccination

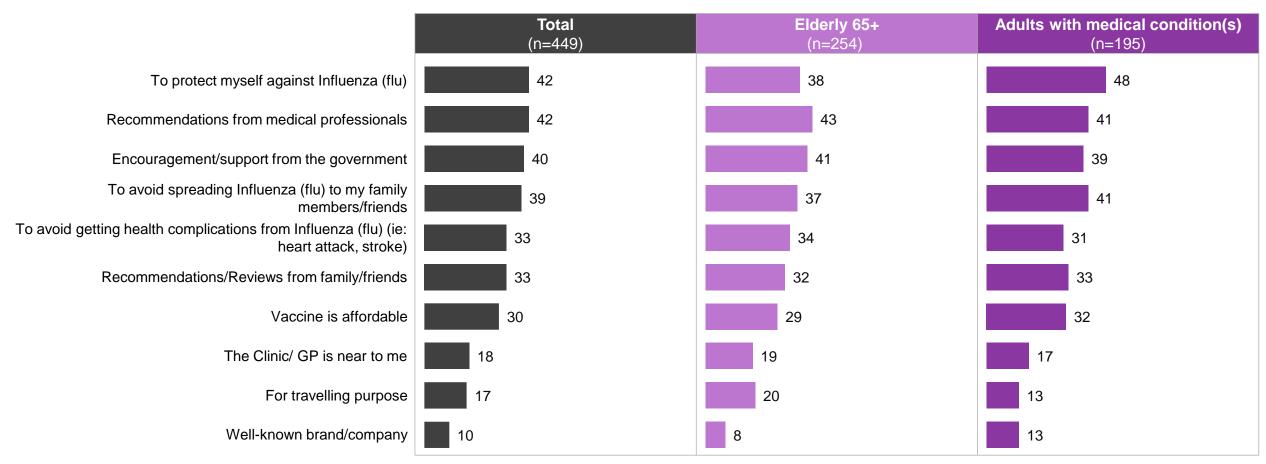


Base: Those who are 'Laggard' Figures in %
G1. What is/are the reason(s) for not getting vaccinated against Influenza (flu) annually?



Other than protection and recommendations from medical professionals, encouragement/support from the government is also seen as key among the Laggard group.

Laggard: Motivation For Annual Flu Vaccination

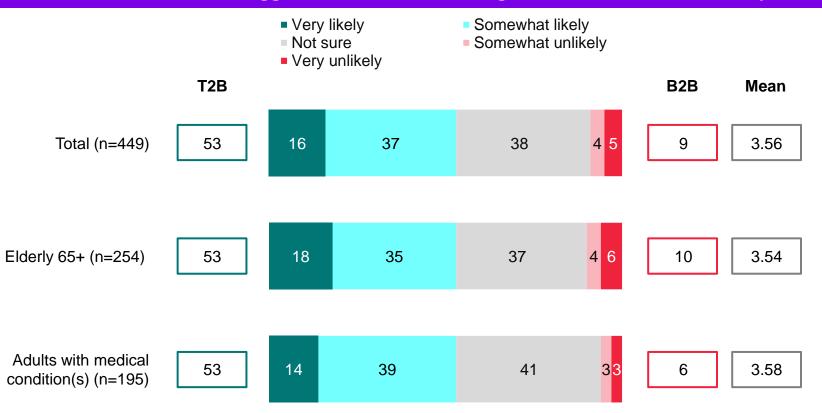


Base: Those who are 'Laggard' Figures in %
G2. What would motivate/trigger you to get vaccinated against Influenza (flu) annually?



Slightly more than half are willing to consider flu vaccination if it is fully subsidised, and about one-third are indecisive. Among those who are unwilling, concerns about the side effect, immune overload and association with other illnesses are the top reasons.

Laggard: Likelihood of Getting The Flu Vaccination Annually If It Is Fully Subsidised



Reasons For Not Willing To Take The flu Vaccine Even If It Is Fully Subsidised	n=38*
I am concerned about the negative/side effects of the vaccine	29
Vaccines may overburden our immune system (Immune overload) / cause other illnesses	24
There is a lack of exposure/awareness about the vaccine	13
The vaccine is not/may not be effective	11
I do not see the need as I am always healthy	8
It is not suitable for someone of my age	5
I am concerned about getting too many vaccines, including Covid-19 vaccines	5
The Clinic/ GP is far from me	3
I do not see the need as Influenza (flu) is just a minor illness	3

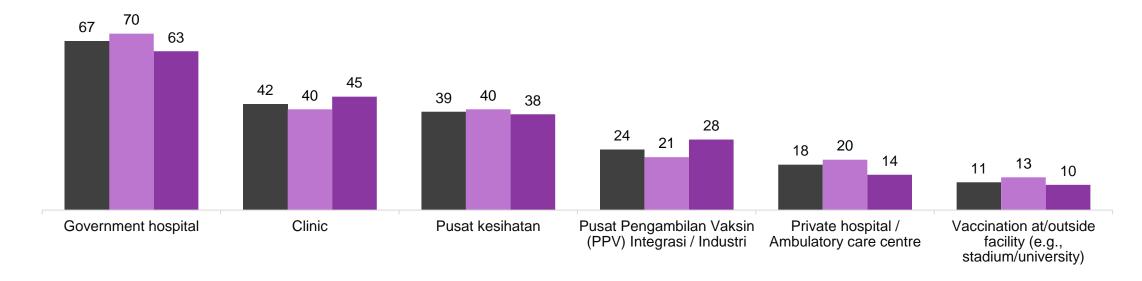
Base: Those who are 'Laggard' / Those who are unlikely to take flu vaccine even if it's fully subsidised *Caution: Small base size Figures in %

G5. If Influenza (flu) vaccine is fully subsidised, how likely are you to be willing to take the vaccine annually? G6. Why are you not willing to take Influenza (flu) vaccine even if it is fully subsidised?



Laggard: Preferred Venue For Flu Vaccination





Base: Those who are 'Laggard' Figures in %
G4. If you were to decide on Influenza (flu) vaccine one day, where would you prefer to get Influenza (flu) vaccine?



Laggard's Vaccination Outlook

There are concerns about the potential side effects and lack of awareness of the need for flu vaccination. There is a need for more exposure through education/publicity, and support from medical professionals and the government.

Barriers / Reasons for not taking flu vaccination

- Worried about potential side effects (43%) (mainly the fear of Covid-19 vaccination)
 - "I heard that vaccination could cause adverse effects on our kidneys or trigger some health problems, such as hair falling, as what has happened to some people after Covid-19 vaccination." Chinese, Female "My sister experienced serious side effects after getting Covid-19 vaccination, she got fever for a few months. I also heard that Covid-19 vaccination can lead to bronchitis and pneumonia." Chinese, Female
- Lack of exposure (38%)
 - "For me, flu is just like a normal cold, we can just let our body recover on its own." Chinese, Male
 - "I think there is a lack of awareness about the severity of flu, many people just think that it is a common cold so there is no urgency of getting the vaccination." Malay, Male
- Concerned about the ingredients (31%)
- Concerned about taking too many vaccines (31%)
- Cost concern (27%)
 - "It is about RM200+ at a private hospital. It will be costly if I have to bring my whole family to get vaccinated. It is nearly RM1000 for 4 people in the household." Chinese, Female
- [Qual] Phobia of going to the medical care centre

Preferred venue for vaccination

- Most mentioned: Government hospitals (67%), clinics (42%)
- Government hospitals are deemed more trustworthy

"Government hospitals are more trustworthy than clinics. Clinics are more commercialised so there may be hidden agenda if they keep pushing for it." — Chinese, Female

Motivation for getting the flu vaccination

- Protection against flu (42%)
- Recommendation/Advice from medical professionals (42%)
 - "I would consider it if my family doctor advises me to do so, they need to tell us what is Influenza, then we can be aware of the need of having the flu vaccination." Chinese, Female
- There are initiatives from the government (40%)
 - "The government needs to make us understand what's the importance of getting the flu vaccination. They need to start first by creating awareness, need to let people know what's the percentage etc." Malay, Male, Elderly
 - "The government should make it free like Covid-19 vaccines but should not make it mandatory." Malay, Male, Elderly
- Avoid spreading flu to family/friends (39%)
- Avoid getting health complications (33%)
- Recommendations from family/friends (33%)
- Affordable (30%)
- Convenient location (18%)
- For travelling purposes (17%)
 - "I would consider taking it if I need to travel to those countries with poor sanitation such as India and Sri Lanka." Chinese, Male
- [Qual] Flu vaccination is covered in the insurance policy

Factors of consideration

- Potential side-effects (across all demographics)
- Doctor's recommendation
- Price
- Ingredient

"It is important to be halal for Muslims." – Malay, Male "Ingredients are important. It is important to know what is administered to our body when we are old." – Malay, Male, Elderly

Effectiveness

"It is also important to know whether the vaccines are effective or not. Need to let us know the percentage etc." – Malay, Male, Elderly

Influencers of health-related decisions

In terms of research

 Would search for information online (mainly search engines) if needed

In terms of decision making

- Many made the final decision themselves
- Doctors, spouses and children also play a part, especially among the elderly

Section Recap



- When it comes to the Early Adopter vaccination journey,
 - I. More Early Adopters got the first shot due to the advice from the medical professionals; Recommendations from medical professionals play an important role (rated top 1 in factors of consideration: 70%)
 - II. A majority made the decision themselves; Many did the research before proceeding
 - III. 53% opt for government hospitals, followed by clinics (42%)
 - IV. The top two motivations for annual flu vaccination are the sense of protection (61%) and recommendation from medical professionals (60%).
 - V. 16% of Early Adopters show unwillingness to continue annual vaccination in the next 12 months, with worries about getting too many vaccines (27%), negative/side effects (19%) and suitability based on age (19%) being the top reasons.



When it comes to the **Neutral vaccination journey**,

- Many Neutral took the first shot because of **personal or family/friends' flu experiences**, but many did not continue having it due to the **concerns about side effects** (45%), the negative influence of Covid-19 vaccination such as concerns about **vaccine overdose** (37%) and **immune overload** (36%), **lack of awareness about the need for annual vaccination** (35%), **scepticism about the ingredients** (safety concerns) (29%) and **cost concerns** (27%)
- II. Most of them made the decisions themselves, some mentioned there was advice from the doctors; Some did the research before taking the vaccination
- III. Government hospitals are preferred (71%), followed by clinics (50%)
- IV. The top motivations/triggers points for annual vaccinations are to **get protection** when it is needed (55%), a strong **recommendation from medical professionals** (55%), **support from the government** (38%) and **low cost** (37%)
- V. 70% of Neutral respondents are likely to consider annual flu vaccination if it is fully subsidised



- I. The main reasons why Laggard do not take the flu vaccinations are that they **do not have enough awareness/exposure** (38%) and they **are concerned about the side effects** due to the reviews/speculations from Covid-19 vaccination (43%)
- II. Many would make the decision themselves; but doctors, spouses and children also play an important part, especially among the elderly
- III. Lesser people would do the research actively; Recommendations from medical professionals (42%) and initiatives from the government (40%) are the strong drivers that may motivate them to consider vaccination
- IV. 53% of Laggard respondents are likely to consider annual flu vaccination if it is fully subsidised
- V. Government hospitals are preferred (67%), followed by clinics (42%)





Summary Highlights (1)

Key Area	Key Highlights
Knowledge of Flu	 When compared between segments: Lower among the Elderly Lower among Laggard Many agree that flu can be dangerous for certain groups of people such as people with chronic diseases (84%) and the elderly (84%), but there is a lack of deeper knowledge Generally, there is a low level of understanding when it comes to complications associated with the flu Slightly higher understanding among Adults (especially among Early Adopters), particularly lung-related complications Neutral and Laggards (regardless of age groups) are generally unaware without prompting 54% think flu only happens in countries with cold climates and 4 seasons



Summary Highlights (2)

Key Area	Key Highlights
	> When compared between Early Adopters, Neutral and Laggard,
	Early Adopters have higher awareness and are more receptive, but not all advocate annual vaccination. In the qualitative part, a few Early Adopter respondents mentioned taking annual vaccination due to the company's requirement, but not due to the belief in its necessity.
	• Neutral are less aware as compared to Early Adopters, but many are receptive. Many are not aware of the need for annual flu vaccination, and there is also scepticism about its safety and effectiveness.
	Laggard are least aware as compared to Early Adopters and Neutral, and not all are receptive. This is particularly due to the lack of awareness of the flu and the benefits of flu vaccination, and there are also negative sentiments towards the vaccination.
	 When it comes to openness to flu vaccination in the next 12 months, most of the Early Adopters (84%) show openness, and about three-fifths for Neutral (62%).
Perception & Attitudes	When compared between the Elderly and Adults,
Towards Vaccination &	 Adults have greater positive sentiments compared to the elderly generally
Flu Vaccination	 More adults feel taking flu vaccination can prevent spreading the virus to friends / family / community (81% adults vs 77% elderly)
	 More adults believe that taking the vaccine will reduce the risk of hospitalisation (81% adults vs 74% elderly)
	 Slightly more adults think that taking the vaccine will reduce the risk of developing other health complications (74% adults vs 70% elderly)
	 Adults are slightly more open towards flu vaccination (55% adults vs 50% elderly)
	While there is a greater familiarity/exposure among adults, there is also greater scepticism about the effects of the flu vaccine on the body among adults.
	 Flu vaccine can result in serious side effects (68% adults vs 64% elderly)
	 Flu vaccine will interfere with the normal functions of natural antibodies and cause the body to fully rely on the vaccine (65% adults vs 59% elderly)
68 – © lpsos	> 70% think they will be protected from getting the flu if they have their Covid-19 vaccines (and it is high regardless of segment)

Summary Highlights (3)

Key Area	Key Highlights	
	When it comes to decision-making,	
	 More Early Adopters and Neutral are sole decision makers as compared to the Laggard 	
	 More adults are sole decision makers as compared to the elderly (Early Adopters: 85% aduqualitative findings) 	ults vs 70% elderly, also supported by
	When it comes to venue preference,	
	 Both elderly and adults prefer government hospitals the most, followed by clinics 	
	 The percentage of clinics is higher among the adults in the Neutral and Laggard segments, as 	s compared to the elderly
Consumer Journey	When it comes to barriers, other than concerns/doubt/lack of awareness highlighted in the previous	s section/slide,
Condumor Courney	 Another major barrier for the Neutral group is cost concerns (27%); 70% of Neutral responses vaccination if it is fully subsidised 	ondents are likely to consider annual flu
	• The elderly are more likely to be hindered by age concerns (Neutral: 25% elderly vs 12%	adults; Laggard: 28% elderly vs 10% adults)
	When it comes to motivation,	
	 Recommendations from medical professionals are among the top motivation across all the for Neutral, 42% for Laggard) 	e segments (60% for Early Adopters, 55%
	 Support from the government is also important, especially among Neutral (38%) and Lagga 	ard (40%)
	 More adult respondents get motivated to avoid spreading the virus to family/friends and for tra 	avelling purposes





Influenza (Flu) cases are prevalent in Malaysia as reported on mass media

Cases often under reported and low awareness on influenza vaccination as preventive measure





SITUASI SEMASA INFLUENZA DI MALAYSIA

Kementerian Kesihatan Malaysia (KKM) telah melaporkan penurunan bilangan sampel positif influenza pada ME 23/2023 iaitu 12.1% berbanding 13.7% pada ME 22/2023. Peredaran virus influenza semasa adalah meliputi influenza B (2), influenza A(H3) (40) dan influenza A(H1N1) (49).

Jumlah kumulatif kluster yang dilaporkan sehingga ME 23/2023 adalah 93 berbanding 30 bagi tempoh yang sama tahun 2022, iaitu peningkatan sebanyak 63 (210.0%).

- 5 kluster mengikut kategori premis yang tertinggi adalah seperti berikut:
- 1. Sekolah 47 kluster
- 2. Tadika 19 kluster
- 3. Institusi/Kolej 9 kluster
- 4. Rumah persendirian 8 kluster
- 5. Tempat kerja 7 kluster









Older persons aged ≥ 65 years old suffer the most severe health effects from Influenza infection

Global Disease Burden

In 2017, the World Health Organization (WHO) indicated that **290,000 to 650,000 annual global deaths** were associated with influenza¹.

Older persons typically suffer the most severe health effects of influenza as they have an **ageing immune system** (immunosenescence) and more medical comorbidities²

According to the US Centers for Disease Control and Prevention (CDC), approximately **90% of influenza-related deaths** and up to **70% of influenza-related hospitalisations** have occurred among older persons aged \geq 65 years, therefore, the prevention of influenza in this high-risk group is of great importance³

References:

- 1. https://www.who.int/news-room/fact-sheets/detail/influenza-(seasonal)
- Czaja CA, Miller L, Alden N, Wald HL, Cummings CN, Rolfes MA, et al. Agerelated differences in hospitalisation rates, clinical presentation, and outcomes among older adults hospitalised with influenza -U.S. Influenza Hospitalisation Surveillance Network (FluSurv-NET). Open Forum Infect Dis. 2019;6:1–8
- 3. https://www.cdc.gov/flu/pdf/freeresources/seniors/65-and-older-matte.pdf

Burden of influenza in Asian Countries



 It has been reported that older persons in Hong Kong, specifically those aged ≥ 65 years, are about 14 times more likely to die from influenza compared with adults in the 40–65 years age group⁸.



- In Singapore, influenza-related deaths were 11.3 times higher among older persons than in the general population⁹.
- From 2010 to 2017, 16.3% of all pneumonia and influenza hospitalisations in Singapore were estimated to be attributed to influenza, with a higher excess rate estimated for individuals aged ≥ 65 years (338.0 per 100,000 person-years)¹⁰.



- In Malaysia, influenza has a disproportionately higher impact on older persons, with 28.3% of patients aged ≥ 65 years experiencing hospitalisation, intensive care unit admission, or death within a year owing to influenza-related illnesses or complications compared with 9.6% of patients in the 25–64 years age group¹¹.
- In 2020, there were 2.2 million (6.8%) people in Malaysia aged ≥ 65 years and this number is projected to reach six million by 2040^{12,13}.

Guidelines for the prevention of Influenza in Older Persons Source: http://www.msidc.com.my/



A Deadly Combination: Advancing Age, Existing Chronic Conditions & The Influenza

Annual Influenza Vaccination is protection beyond Influenza

The connection between Influenza and Cardiovascular event

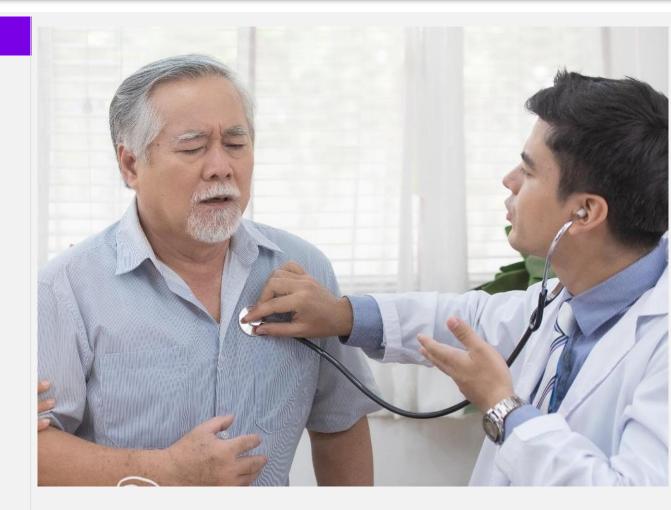
In a recent study, among adults aged over 40+ without any history of heart attack or stroke, influenza **may increase**:

- up to 10x the risk of heart attack.1
- up to 8x the risk of stroke.1

Influenza increases the risk of cardiovascular events with poor outcomes², as older persons age, they may not be able to tolerate the influenza infection due to the weakened heart condition

The Influenza Vaccine has been around for over 70 years³, therefore it is safe, effective and may **help to reduce**:

- Severity of Influenza symptoms ⁴
- Risk of Hospitalization by 45% 5
- Risk of major cardiovascular events by 36%⁵
- Risk of Death by 42% 1



References

- 1. Warren-Gash C, Blackburn R, Whitaker H, McMenamin J, Hayward AC. Laboratory-confirmed respiratory infections as triggers for acute myocardial infarction and stroke: a self-controlled case series analysis of national linked datasets from Scotland. Eur Respir J. 2018 Mar 29;51(3):1701794. doi: 10.1183/13993003.01794-2017. PMID: 29563170; PMCID: PMC5898931. Available from: https://pubmed.ncbi.nlm.nih.gov/29563170/
- 2. Dave, Tarun et al. "Plaque regression and plaque stabilisation in cardiovascular diseases." Indian journal of endocrinology and metabolism vol. 17,6 (2013): 983-9. doi:10.4103/2230-8210.122604
- $3. \quad \text{https://www.who.int/news-room/spotlight/history-of-vaccination/history-of-influenza-vaccination} \\$
- 4. Lang PO, Mendes A, Socquet J, et al. Effectiveness of influenza vaccine in aging and older adults: comprehensive analysis of the evidence. Clinical Interventions in Aging. 2012;7:55-64. DOI: 10.2147/cia.s25215. PMID: 22393283; PMCID: PMC3292388. Available from: https://europepmc.org/article/PMC/3292388
- 5. Udell, Jacob A et al. "Association between influenza vaccination and cardiovascular outcomes in high-risk patients: a meta-analysis." JAMA vol. 310,16 (2013): 1711-20. doi:10.1001/jama.2013.279206

Influenza FAQs from Ministry of Health (MOH)/ My Health Portal & Malaysian Influenza Working Group (MIWG) guidelines for Influenza Prevention among Older Persons aged 60 years old

Influenza FAQs from MOH/ My Health Portal

Malaysian Influenza Working Group (MIWG) Recommendation



Jangkitan Influenza boleh dicegah dengan mendapatkan vaksinasi secara tahunan. Individu berumur 6 bulan ke atas layak untuk mendapat vaksinasi ini. Pada masa ini, vaksin Influenza ditawarkan di fasiliti kesihatan swasta.

Selain daripada mendapatkan vaksin Influenza, lain-lain langkah pencegahan yang boleh diamalkan adalah seperti berikut:

- Amalkan tahap kebersihan diri yang tinggi seperti kerap membasuh tangan dengan menggunakan air dan sabun atau hand sanitizer.
- Amalkan adab batuk yang baik dengan menutup mulut dan hidung apabila batuk atau bersin, sama ada dengan menggunakan tisu atau pelitup muka,
- Buang tisu atau pelitup muka ke dalam tong sampah bertutup sejurus selepas ia digunakan,
- Jarakkan diri daripada individu yang bergejala sekurang-kurangnya dalam jarak 1 meter,
- Rehat di rumah dan elakkan mengunjungi tempat tumpuan ramai jika bergejala. Sekiranya perlu ke tempat awam, gunakan pelitup muka.





All persons aged 60 years and above who do not have contraindications should receive an influenza vaccine annually.

Older persons with comorbidities should be prioritised for annual influenza vaccination.





Source:

Dikemaskini: Julai 2022

- 1. https://www.facebook.com/photo/?fbid=374292214852754&set=a.172616091687035
- 2. https://www.facebook.com/photo/?fbid=374419498173359&set=a.172616091687035



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