



**WORLD
HEART
FEDERATION**



INFLUENZA VACCINATION AND HEART HEALTH

A WHF PATIENT COMMUNICATION TOOLKIT

COPYRIGHT STATEMENT DISCLAIMER

WHF has taken all reasonable precautions to verify the information presented in this publication. This material is being distributed without any warranty, either expressed or implied. WHF shall not remain liable for any misuse or damage arising from the use of this toolkit. The responsibility of interpreting the information contained within this publication shall remain with the reader.

AUTHOR SUPPORT AND ACKNOWLEDGEMENTS

AUTHORS

This toolkit was developed by Lisa Owens, BSc, Hons.

REVIEWERS

Larry Sperling, M.D.
Amitava Banerjee, M.D.
Alexander C Razavi, M.D.

EDITOR

Shreya Shrikhande, PhD.

THIS TOOLKIT HAS BEEN DEVELOPED BY WHF
WITH SUPPORT FROM SANOFI.

sanofi



CONTENTS

AUTHOR SUPPORT AND ACKNOWLEDGEMENTS	2
1. ABOUT THIS TOOLKIT	4
2. FLU FACTS	5-6
3. PATIENT COMMUNICATION RESOURCES	7
3.1 COMMUNICATION MATERIALS	7
3.2 PATIENT COMMUNICATION TIPS	8
4. QUICK PITCH AND DISCUSSION ALGORITHM - FLOW DIAGRAM	15
5. ADDITIONAL RESOURCES	16
6. REFERENCES	17



1. ABOUT THIS TOOLKIT

WHY HAVE WE CREATED THIS TOOLKIT?

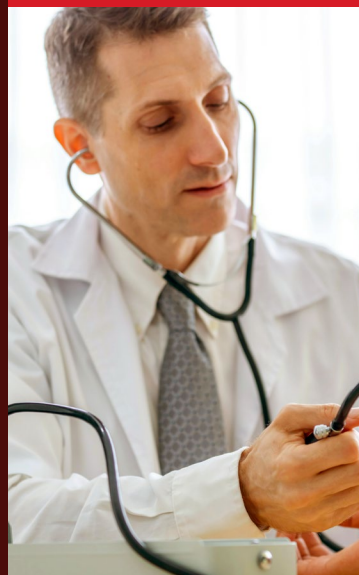
This toolkit has been created to:

- (i.) Increase awareness among all healthcare providers about the risks the influenza virus can pose for people living with cardiovascular diseases (CVDs).
- (ii.) Increase awareness about the importance of the seasonal flu vaccine as part of the secondary CVD prevention strategy.
- (iii.) Be used as a communication aid when explaining the importance of the seasonal flu vaccine and its protective effects to their patients with CVDs.

WHO IS THIS TOOLKIT FOR?

This toolkit is designed for healthcare professionals, mainly primary care physicians and cardiologists.

It is to be used as an aid to facilitate patient communication about seasonal flu vaccines.



WHAT IS IN THIS TOOLKIT?

The toolkit consists of a set of handy facts about influenza and CVDs along with several communication tips and aids focusing on patient interaction.

There are also:

- Patient communication tips – to be found in the 5As roleplay section
- Quick pitch and discussion algorithm (flow diagram)
- A guide to adapting to your context, for example taking into consideration the differences in patient attitude to vaccination, the country, age, demographic, education level, socioeconomic status and so on.

HOW CAN THIS TOOLKIT HELP?

According to the World Health Organization (WHO), a lack of vaccine confidence is one of the factors contributing to vaccine hesitancy. “**Vaccine hesitancy** is complex and context specific, varying across time, place and vaccines. It is influenced by factors such as complacency, convenience and confidence.”¹

This toolkit can help by breaking down communication barriers and giving concrete examples for healthcare professionals to follow during concise appointment times.

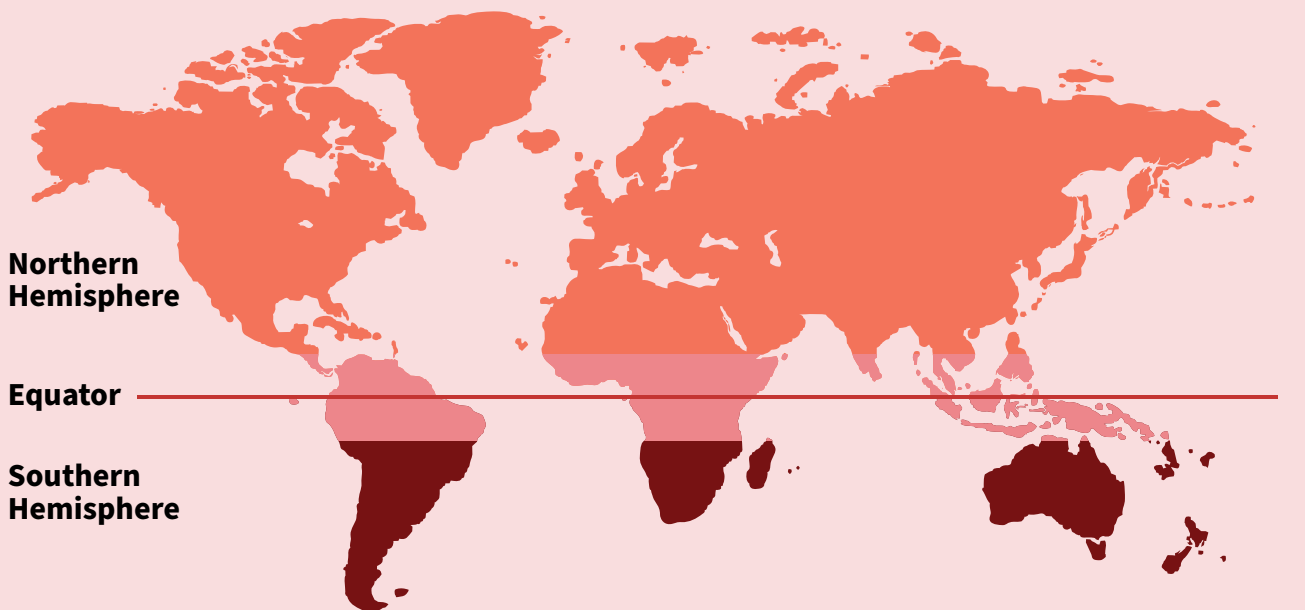
2. FLU FACTS

SEASONAL FLU KILLS HUNDREDS OF THOUSANDS OF PEOPLE WORLDWIDE EACH YEAR.

The European Centre for Disease Prevention and control have estimated that up to 20% of the population are infected with seasonal influenza each year.²

THE FLU SEASON VARIES BETWEEN COUNTRIES, USUALLY STARTING AT THE ONSET OF WINTER, ALONGSIDE SOME OTHER RESPIRATORY INFECTIONS.

This is due to lower temperatures, humidity and when most human social interaction occurs indoors creating the optimum environment in which the influenza virus is transmitted.³



In equatorial countries there tends to not be an observable flu season, but peaks and troughs throughout the year. This is possibly due to the rainy season driving social interaction indoors.⁴

CONTRACTING THE INFLUENZA VIRUS CAN ACUTELY WORSEN CHRONIC MEDICAL CONDITIONS

such as asthma, diabetes and heart conditions, even if these conditions are normally well managed.

THE INFLUENZA VIRUS INCREASES THE RISK OF CARDIAC EVENT OR STROKE VIA MULTIPLE MECHANISMS.

People who are living with CVDs are at a higher risk of developing serious complications after the flu.

THE RISK OF HAVING A HEART ATTACK IS AS MUCH AS 6X HIGHER

within a week following an influenza infection.⁵



VULNERABLE GROUPS

Vulnerable groups include those over the age of 65, people living with chronic conditions, people with a BMI of over 40 as well as children under the age of 5 and individuals with weakened immune systems.⁶

It has also been suggested that pregnant women, especially during the third trimester, are at increased risk of morbidity and mortality from influenza infection. The infection can also have detrimental effects on the foetus and has been associated with perinatal mortality, preterm labour, and low infant birth weight.⁷

FLU VACCINE IMPORTANCE IN PREVENTION AND PROTECTION AGAINST SECONDARY CARDIAC EVENTS FOLLOWING FLU INFECTION

The flu vaccine can reduce the risk of secondary cardiac events among people living with CVDs. Having the flu vaccination as a once-yearly administered therapeutic approach reduces the risk of heart attack by up to 45%, which is greater than the reduction in risk of stopping smoking (up to 43%), taking cholesterol reducing medication (up to 30%) or even taking blood pressure reducing medications (up to 25%).

Whereas patients who are not protected by having the flu vaccine are 10 times more at risk to experience a heart attack either during the time being symptomatic or immediately after the symptoms have ended.

The flu vaccine is safe and effective after an acute myocardial infarction (AMI). It is an opportune moment to offer influenza vaccination to AMI patients in the hospital, prior to discharge, if they have not already been vaccinated that flu season.

3. PATIENT COMMUNICATION RESOURCES

3.1 COMMUNICATION MATERIALS

Infographic

The WHF infographic highlights the health implications of contracting the influenza virus and discusses the supporting evidence of the protection the vaccine provides.

INFLUENZA VACCINATION CAN HELP PREVENT HEART ATTACKS



Influenza increases the risk of heart attack more than **10X** immediately after influenza infection.^{8,1}



Vaccination can reduce the risk of secondary cardiac events up to **-45%**^{8,2}

This appears to have a similar range of effectiveness as traditional cardiovascular intervention in prevention of influenza triggered heart attacks: ←



High cholesterol medication. Risk reduction up to

-30%^{8,2}



High blood pressure medication. Risk reduction up to

-25%^{8,2}



Smoking cessation. Risk reduction up to

-43%^{8,2}

Video Resources

Here are 3 short videos (12 mins) curated by the International Pharmaceutical Federation (FIP) to give training and practical advice on the conversation.

[Dr Katie O'Brien \(WHO\)](#)

[Dr Samantha Marsh \(University of Auckland\)](#)

[Dr Gonçalo Sousa Pinto \(FIP\)](#)



3.2 PATIENT COMMUNICATION TIPS

The 5As are among the most widely used delivery models to support patient understanding of a health topic. When modified they may be of use in imparting knowledge of influenza risk and increasing the uptake of vaccine.

The 5As (Ask, Advise, Assess, Assist, Arrange) summarize many questions and answers a health professional may be confronted with, within three to five minutes in a primary care setting.

In the next section are recommended actions and strategies for implementing each of the 5As.

ASK

Systematically identify patients who are both eligible and require the influenza vaccine.

ADVISE

Advise all who are eligible who have not had the vaccine, to have it.

ASSESS

Does the patient understand the risk to themselves and others if they contract the influenza virus?

ASSIST

Support the patient's understanding of the increased risks of contracting influenza.

ARRANGE

Administer the vaccine or arrange a future appointment, if necessary.



ASK

Identify patients who are both eligible and require the influenza vaccine at each visit.



ACTION

- Ask ALL of your patients at every encounter if they have had the influenza vaccine, and document it.
- Make it part of your routine.

IMPORTANT

Ask if the patient is allergic to:

- Eggs – or whether they are vegan – trace of egg proteins are found in flu vaccines which means severe allergic reaction is highly unlikely – egg-free vaccines are also available.
- The flu vaccine - ask if the patient has previously had a reaction to the flu vaccine.

Ask if the patient has religious constraints about ingredients such as:

- Pork - for religious reasons, the injectable flu vaccine can be pork-free in some countries.

Strategies for Implementation:

Influenza vaccine adherence should be asked about in a friendly way – not in an accusatory way.

Keep it simple.
Some examples may include:

“Have you already had the flu vaccine?”

“Do you know about the flu vaccine?”

Influenza vaccine status should be included in all medical notes either on physical medical copies or electronically.

ADVISE

As well as having cardiovascular disease, other conditions or circumstances may mean people are more at risk due to influenza infection, and therefore it is recommended they get vaccinated.

These groups include people who are:

- over the age of 65 or
- under 65 living with chronic conditions
- individuals with weakened immune systems
- people with a BMI over 40



ADVICE SHOULD BE GIVEN IN A CLEAR, STRONG AND PERSONALIZED MANNER

Clear – “It is important that you have the influenza vaccine to protect yourself (and or others) from catching the influenza virus.”

Strong – “As your health care provider I can help you make that decision by answering any questions you may have about the vaccine.”

Personalized – give information regarding influenza vaccination that is relevant to people's demographics, health status or social situation.

DEMOGRAPHICS

Older people are more vulnerable to secondary CVD complications following a flu infection. Make sure you discuss taking the vaccine with them.

“The flu vaccine can help to protect you from a serious cardiac complication if you catch the virus. It's safe to be taken at any age.”

“The flu vaccine can help to reduce your risk of developing severe complications or needing to be admitted to hospital.”

“People older than 65 years of age are at a much higher risk of developing serious complications, partly because their immunity is not as strong. The flu vaccine can help protect you from these complications.”

People of childbearing age may be more interested in any effects of the vaccine regarding fertility or unborn children.

“The flu vaccine is safe to be given at any stage of pregnancy, from conception onwards.”

“The flu vaccine helps reduce the risk of serious complications from influenza, especially in the later stages of pregnancy. Having the vaccine will also help protect the baby from flu in the first months of its life.”

HEALTH CONCERNS

“Flu can affect anyone but if you have a long-term health condition such as a heart condition, the effects of flu can make it worse, even if the condition is normally well managed by you.”

SOCIAL FACTORS

People with young children or carers for elderly relatives or friends may be motivated by information on the effects of influenza, while a person struggling with money may want to consider that in many cases the influenza vaccine is freely available or may reduce working hours lost to sickness. Especially if they are self-employed or do not have sickness cover where they work. Others may be motivated by the fact that vaccination can help protect the community and health system as a whole by reducing the circulation of the virus.

“People sometimes think flu is ‘just’ a bad cold, but having flu can be MUCH worse than a cold and may mean you have to stay in bed for a few days. Some people have had to stay in a hospital because of complications from the flu, and in the worst cases, flu may even cause death.”



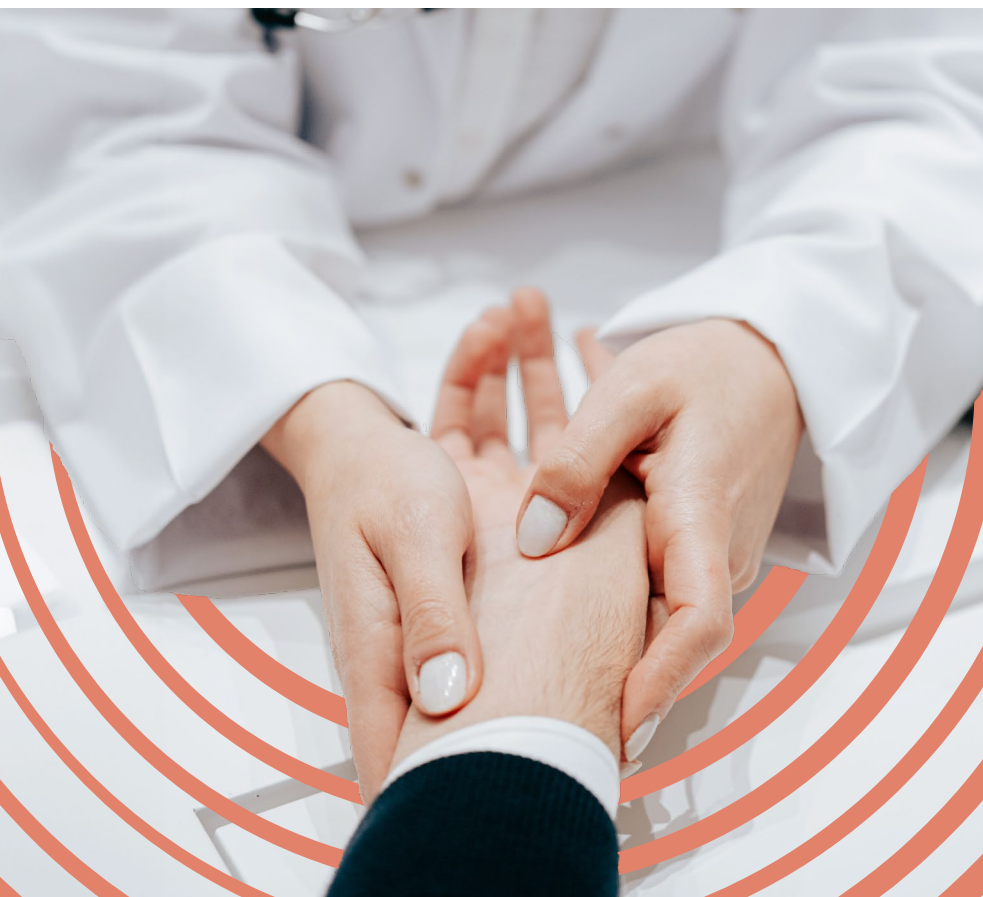
“The flu vaccine not only stops individuals catching the disease, but also stops them spreading it to others in the community. This means that by getting vaccinated you protect yourself, and also vulnerable people who maybe cannot get vaccinated, such as babies and older people.”

Don't miss anyone!

People who have never had the flu before or are generally healthy might think they do not need to take the vaccine - but that is not the case, especially if they have pre-existing CVDs.

DON'T UNDERESTIMATE YOUR INFLUENCE

As a healthcare professional, you are among the most trusted source of information. People who have been advised by their healthcare team to take the flu vaccine are much more likely to do so than those who have not been advised.



ASSESS

Discuss and determine what is stopping your patient from getting the flu vaccine.



ACTION

“What is stopping you from having the flu vaccine?”

You can build upon the patient’s answer to this question with more detailed information on the issue raised.

Common demotivators or barriers include:

- Difficulty accessing vaccines through regular healthcare professionals.
- Vaccines not covered by insurance or too expensive.
- Beliefs about the efficacy and effectiveness of vaccines.
- Beliefs about vaccines being ‘dangerous.’
- Concerns about side effects.
- Lack of time.
- Never having had the flu/false perceptions about immunity.



ASSIST

Explain to your patients about how the influenza virus is transmitted, how it can be particularly harmful to people with pre-existing CVDs and how vaccines work to protect us.



IF POSSIBLE, ASSIST AND GUIDE YOUR PATIENT TO VACCINATION CENTERS, SETTING UP A VACCINATION APPOINTMENT AND WITH ANY RESOURCES THAT CAN REDUCE THE COST OF VACCINES.

ACTION

In addition, we should raise awareness about how influenza is transmitted. We must also encourage patients to adopt a good hand, cough and sneeze hygiene routine.

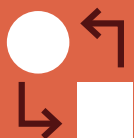
Influenza is spread through droplets from coughs and sneezes and by touching an object that has the flu virus on it and then touching your own face.



Below are some general tips to communicate to your patients.

- **Wash hands often** with soap and water or use hand sanitiser when you are not able to get to a water source. Preferably with 60% and above alcohol content.
- **Cover mouth and nose** either with a tissue when sneezing or coughing, or cough into your elbow. If using a tissue, bin it as soon as possible and wash or sanitise your hands.
- **Stay at home when you are sick.** You can spread the influenza virus up to 7 days after you become ill.
- **Avoid close contact with others** if possible, especially those who are vulnerable.
- **Try not to touch your face, eyes, nose or mouth** as you may pass on the virus to others through touch.

ARRANGE



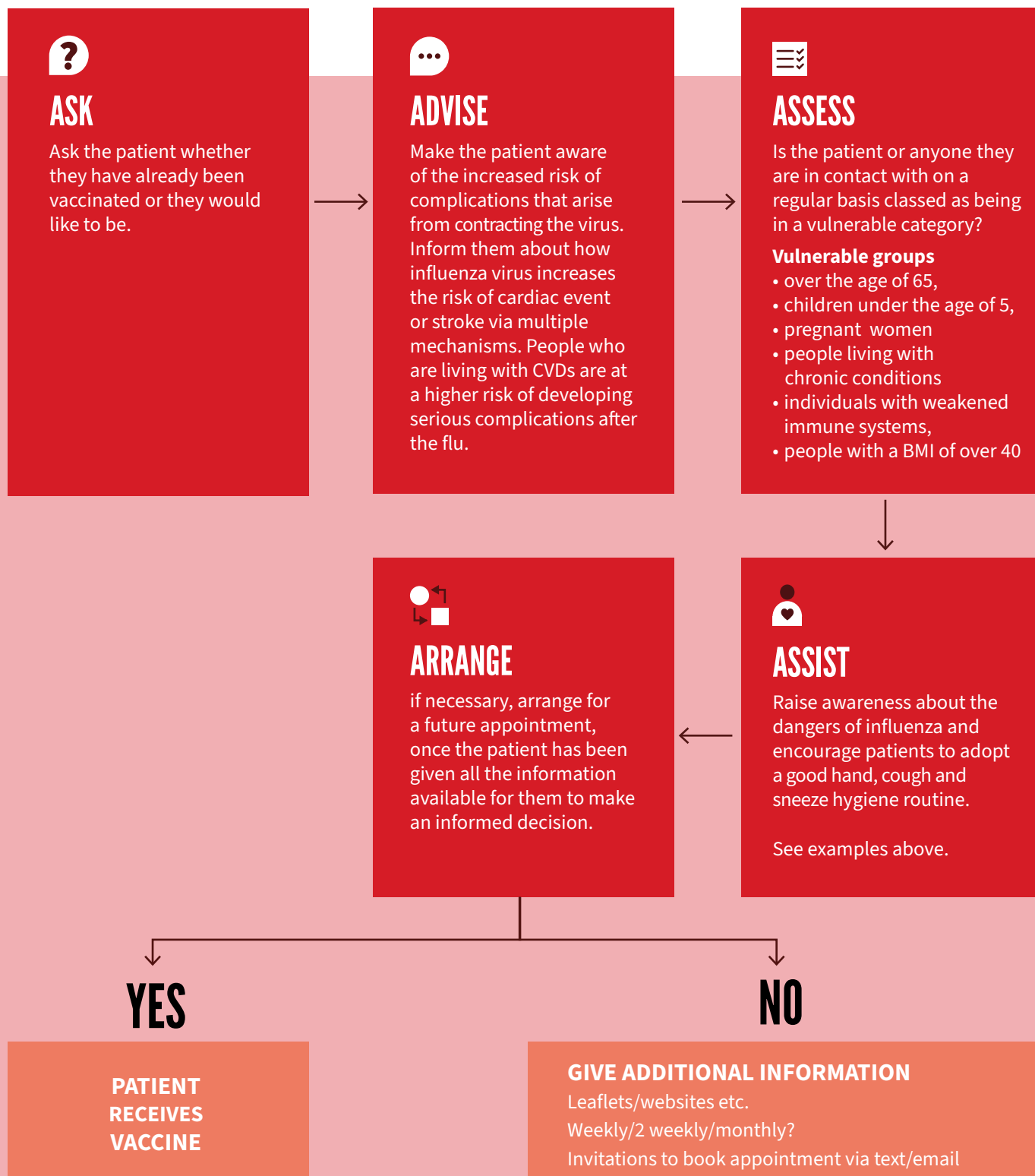
Once the patient has been given all the information available for them to make an informed decision and they choose to get the flu vaccine, help arrange the most feasible way for them to receive it.

For example, offer to administer it during that appointment as a cardiologist or primary care clinician, you can help them arrange to see another health professional,

OR HELP THEM DECIDE ON A SPECIFIC TIME AND PLACE WHEN THEY WILL GO TO GET VACCINATED.



4. QUICK PITCH AND DISCUSSION ALGORITHM - FLOW DIAGRAM



5. ADDITIONAL RESOURCES

EXAMPLES

Influenza Communication Toolkit Guidelines

- https://www.ecdc.europa.eu/sites/default/files/media/en/healthtopics/seasonal_influenza/communication_toolkit/Documents/ECDC_Influenza_toolkit_guidelines.pdf

Influenza Vaccination Infographic

- <https://world-heart-federation.org/resource/influenza-vaccination-infographic/>

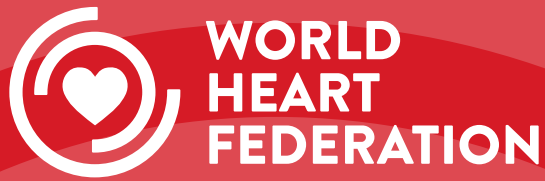
WHO flu facts: Influenza (Seasonal)

- [https://www.who.int/news-room/fact-sheets/detail/influenza-\(seasonal\)](https://www.who.int/news-room/fact-sheets/detail/influenza-(seasonal))



6. REFERENCES

1. MacDonald NE. Vaccine hesitancy: Definition, scope and determinants. *Vaccine*. 2015 Aug 14;33(34):4161-4.2.2.
<https://doi.org/10.1016/j.vaccine.2015.04.036>
 2. European Centre for Disease Prevention and Control. Seasonal Influenza (Webpage). Available from:
<https://www.ecdc.europa.eu/en/seasonal-influenza>
 3. Petrova VN, Russell CA. The evolution of seasonal influenza viruses. *Nature Reviews Microbiology*. 2018 Jan;16(1):47-60.
<https://doi:10.1038/nrmicro.2017.118>
 4. Chen C, Jiang D, Yan D, et al. The global region-specific epidemiologic characteristics of influenza: World Health Organization FluNet data from 1996 to 2021. *International journal of infectious diseases*. 2023 Apr 1;129:118-24.
<https://doi:10.1016/j.ijid.2023.02.002>
 5. Kwong JC, Schwartz KL, Campitelli MA, et al. Acute myocardial infarction after laboratory-confirmed influenza infection. *New England Journal of Medicine*. 2018 Jan 25;378(4):345-53.
<https://doi:10.1056/NEJMoa1702090>
 6. World Health Organization. Seasonal Influenza Factsheet (Website). Available from:
[https://www.who.int/news-room/fact-sheets/detail/influenza-\(seasonal\)](https://www.who.int/news-room/fact-sheets/detail/influenza-(seasonal))
 7. CDC. Flu and Pregnancy (Website). Available from:
<https://www.cdc.gov/flu/highrisk/pregnant.htm>
 8. World Heart Federation. Influenza Vaccination (Infographic). Available from:
<https://world-heart-federation.org/resource/influenza-vaccination-infographic/>
- 8.1. Kwong et al., 2018. NEJM ; Warren-Gash C, et al. Eur Respir J. 2018-51; Ohland J. et al., Eurosurveillance 2020.
- 8.2. Macintyre et al., 2016. Heart.



WORLD HEART FEDERATION

32, rue de Malatrex, 1201 Geneva, Switzerland

(+41) 22 807 03 20

info@worldheart.org

www.worldheart.org

-  [worldheartfed](#)
-  [worldheartfederation](#)
-  [worldheartfederation](#)
-  [World Heart Federation](#)
-  [World Heart](#)
-  [World Heart Federation](#)