

VAC-PACT PILOT PROJECT
VACCINATION CONFIDENCE –
PATIENTS' AND PROFESSIONALS'
AWARENESS, COMMUNICATIONS &
TRUST

Vaccination & Chronic Diseases



Funded by the
European Union



The status quo

- Thousands of adults around the world get sick from diseases that could be prevented by vaccines every year.
- People with chronic diseases and long-term conditions, in specific, are often at higher-risk of complications from vaccine-preventable diseases.

The World Health Organization (WHO) reports that:

2-3 million deaths

are prevented by immunisation every year, making it one of the most effective health interventions available: reducing the burden of chronic as well as vaccine-preventable diseases by avoiding unnecessary hospital admissions through better management of chronic conditions.



- **The COVID-19 pandemic is a reminder of the serious impact infectious diseases can have on our lives** and of how critical vaccines are in the prevention and control of outbreaks. Necessary efforts to control COVID-19 have resulted in disruptions in vaccination and other healthcare services.

▪ The WHO “pulse survey” reported persistent **substantial disruptions** with about **90% of countries** still reporting one or more disruptions to **essential health services** in 2021.

The status quo

...continued

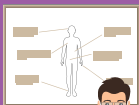
- Older people with chronic diseases are particularly vulnerable to complications from infectious diseases. The European Centre for Disease Prevention and Control (ECDC) estimates that:

30% of the population

in the EU/EEA is either over 60 years old or has an underlying condition associated with COVID-19 risk.

- It is important to note that immunisation is a key component of primary healthcare and an indisputable human right.
- Moreover, equitable access to safe and effective vaccines is critical to ending the COVID-19 pandemic.

Certain vaccines may not be recommended for **some people with compromised immune systems**, putting them at **higher risk to the falling rates of vaccination** in the population.



Talk to a healthcare professional, discuss your individual situation and health needs, and make sure you get your vaccinations up to date.

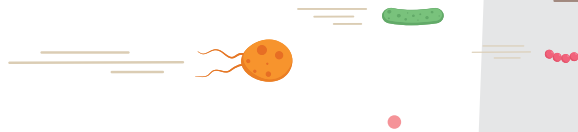
Vaccine basics

- When unwanted germs, such as bacteria or viruses, invade the body, causing an imbalance in the health system, they attack and multiply. This invasion is called an **infection** and is what causes a **disease**.
- The **immune system**, which is the body's natural defence system, uses several tools to fight the infection. This includes red blood cells, for carrying oxygen to tissues and organs, and white blood cells, also referred to as immune cells, for fighting infection.
- White cells consist primarily of macrophages (engulf foreign substances), B-lymphocytes (produce antibodies), and T-lymphocytes (memory cells).

What?
Vaccines

Vaccines are biological preparations administered to stimulate the body's natural defenses to develop protective and relatively long-lasting adaptive **immunity** (resistance) to a specific disease.

Vaccines are usually administered through needle injections, but can also be administered by mouth or sprayed into the nose.



Why?

Vaccination

Vaccines stimulate the body's natural defences to create **antibodies**, just as it does when it is exposed to a disease, but instead when given in controlled doses helps it to build resistance to the specific infections. Vaccination prevents us from getting sick by effectively inducing an **immune response** (defence against foreign substance) in the body without causing illness.

How?

Immunisation

Vaccination is the use of vaccines to produce **immunity** against a serious disease, rather than treating a disease after it occurs. Without vaccines, we are at risk of life-threatening diseases and disability. The process of becoming immune to (protected against) a disease through vaccination is called **immunisation**.



The concept of herd immunity

- Vaccination protects those vaccinated, the people around them, and the overall community. When **enough people** in a population are **immune** to an infectious disease, the disease is then unlikely to spread from person to person. This is known as **community immunity** (also referred to as **herd immunity**).
- This is especially beneficial for **subgroups of the population who cannot be vaccinated**, or in which **the effect of vaccination could be sub-optimum** (e.g., people with compromised immune systems due to autoimmune diseases, recent organ transplant, cancer treatment, and/or allergies).



Not immunised but healthy



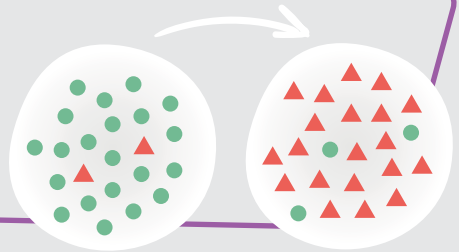
Not immunised, sick & contagious



Immunised and healthy

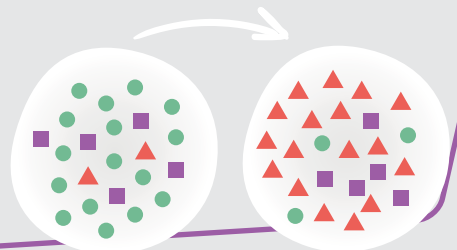
Scenario 1:

Disease spreads freely from contagious to susceptible people when no one is immunised.



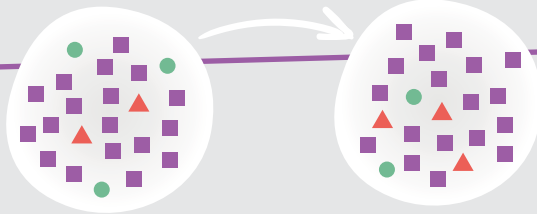
Scenario 2:

If only some people are immunised, disease still spreads, however, those immunised are spared.



Scenario 3:

Spread of disease is contained when most people are **immunised**. It is difficult for infectious diseases to spread to **susceptible people** when the population achieves herd immunity.



The World Health Organization (WHO) reports that increasing immunisation globally could save an additional

1.5 million lives / year

Furthermore, immunisation programmes help reduce the social, psychological, and financial burdens of disease on patients and their families as well as the overall pressure on healthcare, social care systems, and governments.



Vaccine **types**

There are different approaches to developing vaccines. This is based on the **cause of infection** (virus or bacteria), **how it infects cells**, **what the vaccine will prevent**, and how **the immune system responds** to it.

It is also essential to keep in mind that different virus strains can also exist around the world due to geographic settings and changing environments. There are now **6 main types** of vaccines:



Attenuated (live) vaccines

These vaccines contain a weakened form of the virus or bacteria. This is the closest version to a natural infection. Unfortunately, not everyone may be able to receive these. More than one dose may be needed to develop the best immune response.

Measles

Mumps

Rubella

Chickenpox

Yellow fever



Inactivated (killed) vaccines

These vaccines contain inactivated or killed form of virus or bacteria. These are relatively safer for immunocompromised patients, though they may require repeated or booster doses.

Polio

Hepatitis A

Rabies

Typhoid

Influenza inj.



Subunit, recombinant, polysaccharide, and conjugate vaccines

These vaccines contain only some part of the virus or bacteria, such as polysaccharides (sugars) or proteins. These accordingly have less side effects.

H. Influenza type b

Whooping cough

Hepatitis B



Toxoid vaccines

Some bacteria release toxins (poisonous proteins) when they attack the body. Toxoid vaccines contain weakened toxins (also referred to as toxoids) that prevent diseases caused by bacteria that produce those toxins.

Diphtheria

Tetanus



Messenger-ribonucleic acid (mRNA) vaccines

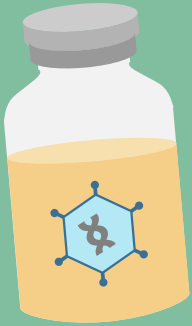
These vaccines contain genetic instructions in the form of mRNA to temporarily make a protein, or even a part of the protein, triggering an immune response. From the COVID-19 vaccines authorised in the EU as of September 2021, Cominarty (Pfizer-BioNTech) and Spikevax (Moderna) are mRNA vaccines.

It is important to highlight that mRNA vaccines do not affect or interact with your DNA and the body quickly gets rid of it.

COVID-19

Ebola

Vaccine types ...continued



Viral-vector vaccines

These vaccines contain a virus that has been genetically modified to include instructions in the form of genetic code to temporarily make a protein, or even a part of the protein, triggering an immune response. From the COVID-19 vaccines authorised in the EU as of September 2021, Vaxzevria (AstraZeneca) and Janssen are viral-vector vaccines.

It is important to highlight that viral-vector vaccines do not affect or interact with your DNA and the body quickly gets rid of it.

COVID-19

Certain vaccines are not recommended for people with compromised immune systems. **Consult with your healthcare professional on a case-by-case basis.**



It is essential to also note that though some patients may develop minor symptoms after vaccination, these are normal signs that the body is building protection. Symptoms, if any, should subside in a few days.



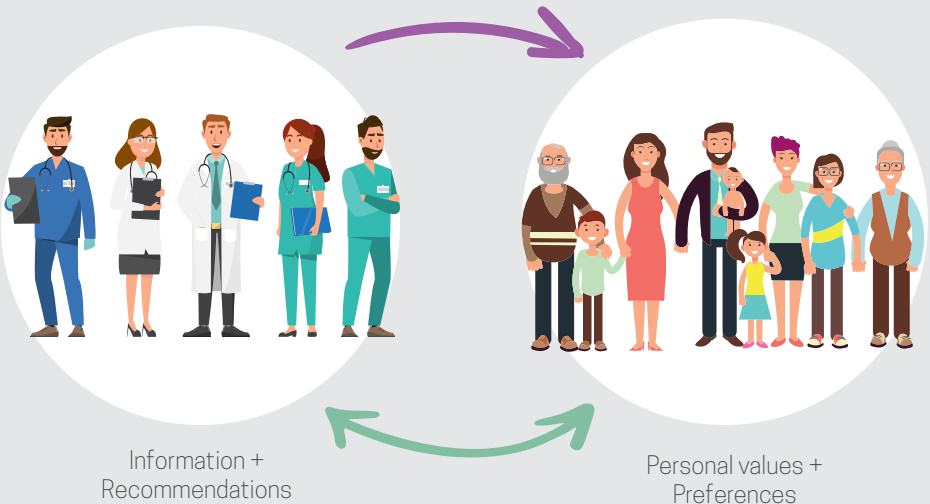
The safety of all vaccines in the EU is carefully monitored by the European Medicines Agency (EMA).

Partners in care

- **People sometimes underestimate the risk** of catching a disease which can lead to the decision of not being vaccinated. This could potentially **result in a serious risk** to their health, if they become infected, **and to the health of others** by spreading the disease. Accordingly, patients need to be better informed about the risks of not being vaccinated.
- Healthcare professionals' advice also has an important impact on attitudes towards **vaccination**. It is vital that lack of vaccination uptake and hesitancy is addressed through **open dialogue, backed with scientific evidence**. Healthcare professionals are strongly recommended to engage with chronic disease patients' to assess their needs, ensure patients and their families are aware of the latest national and/or regional recommendations, and offer vaccination options when needed.

TRADITIONAL PRACTICE

- Paternalistic information + recommendations
- Informed decision



SHARED DECISION-MAKING



1
Seek patients' participation

2
Help patients explore treatment options

3
Assess patients' values and preferences

4
Reach a mutual decision about a treatment plan

5
Evaluate treatment progress and seek feedback



- Although, the World Health Organization (WHO) Europe provides guidance to countries, **vaccination policies, immunisation schedules**, legal rules and recommendations are still set by individual EU countries that decide which vaccines are funded by their national health systems and should be part of their national vaccination programmes.
- You can get an insight about vaccine schedule variations in EU/EEA countries, by using the Vaccine Scheduler provided by the European Centre for Disease Prevention and Control (ECDC).

Recommendations

It is vital that vaccination is regarded as a public health priority for adults living with chronic conditions. Future steps should include:



Tackling patients' barriers to access, availability, and cost across the EU.



Integrating vaccination in national **chronic disease management plans** and clinical guidelines.



A **life-course approach** aiming to change society's perception on vaccination through **informed shared decision-making**.



The Vaccination Confidence - Patients' and Professionals' Awareness, Communication and Trust (VAC-PACT) pilot project received funding by the European Union's Health Programme under the SANTE/2019/C3/013-S12.820639 Service Contract and brings together key stakeholders with a broad range of expertise and backgrounds across Europe



COMITÉ PERMANENT DES MÉDECINS EUROPÉENS
STANDING COMMITTEE OF EUROPEAN DOCTORS



Health Connect Partners
supporting trust in data