

11/02/2021



Vaccination: Positive Strategies for Managers

The webinar will begin shortly



Agenda

1. How do I get vaccinated?
2. Behavioural Influences on Vaccine Uptake
3. Understanding Covid-19 and the Vaccines
4. Importance of continuing to follow guidance
5. Q&A

Where staff get vaccinated?

Behavioural Influences on Vaccine Uptake

Dr Michelle Constable,
Head of Behaviour Change Unit,
Hertfordshire County Council

11th February 2021

Vaccine uptake research

- Vaccination acceptance has fallen (Williams et al., 2020)
- Herd immunity
- Vaccine hesitancy (WHO, 2014)
 - Confidence
 - Complacency
 - Convenience
- Hesitancy = accept but concerned - refuse - delay

Vaccine uptake research cont.

- Acceptance of health professionals and public important
- Vaccination intention – 81%– 83% (RSPH 2020, Thornloe et al., 2020)
- Intention behaviour gap!
- Influence of misinformation

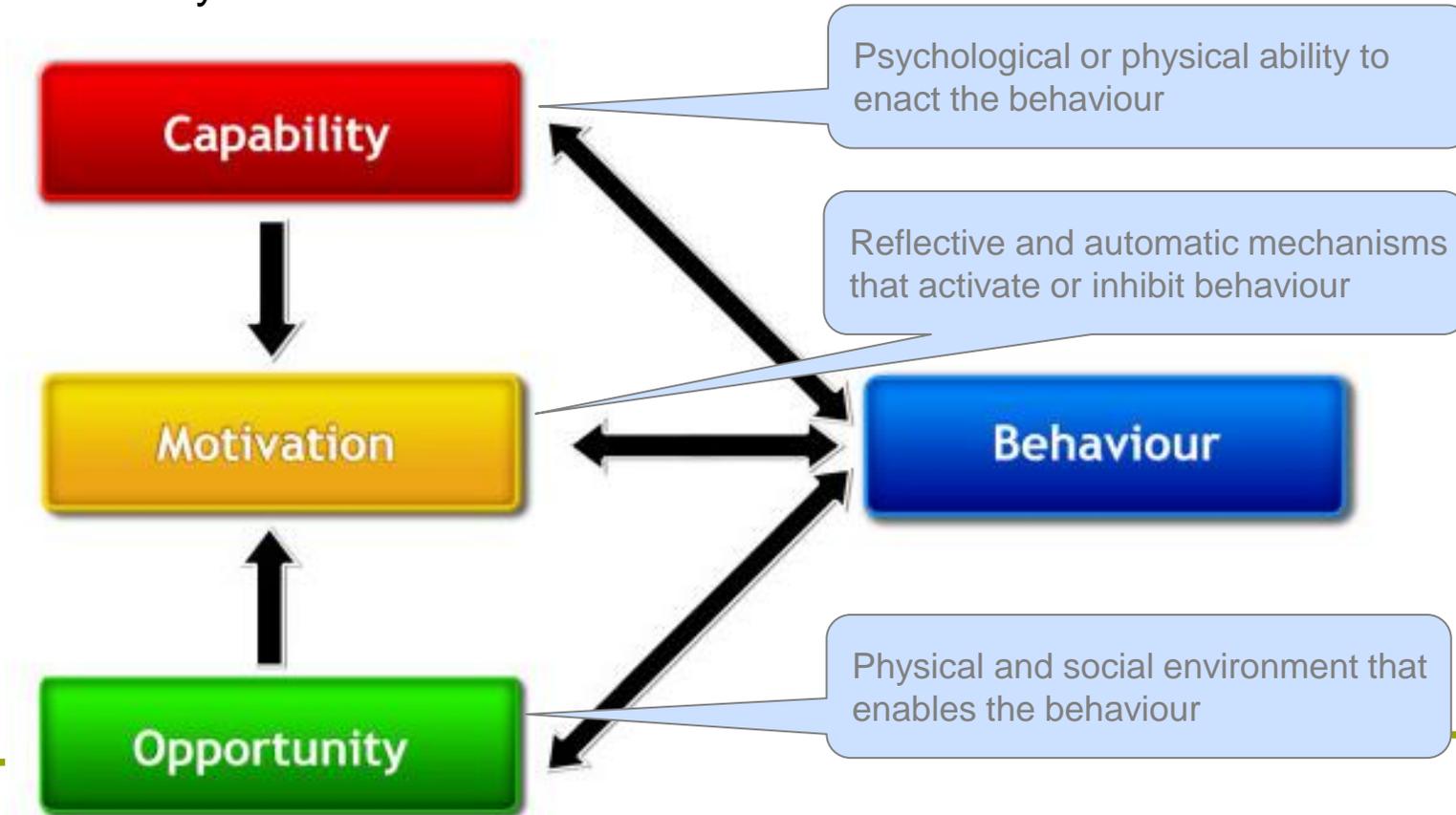


Reducing Vaccine Hesitancy

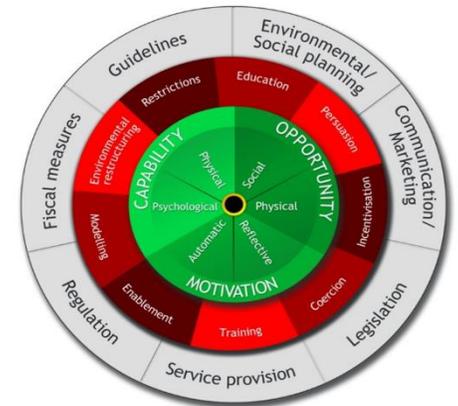
- Behaviourally informed approach
- Rapid review of literature
- Behavioural analysis using COM-B
- Recommendations
- Engagement principles for comms

Using Behavioural Science: The COM-B

The COM-B system – Behaviour occurs as an interaction between three necessary conditions



- Sources of behaviour
- Intervention functions
- Policy categories



Behavioural analysis - findings

Behaviour:
Receiving the COVID-19 vaccine

Capability

- Understand the risks (self and others) and potential severity
- Understand the risk they pose to others
- Understand why it is important to be vaccinated
- Know that the vaccine is safe and effective
- Know how to get the vaccine (where to go, how to get there)
- Have the skills required access the vaccine (use booking system)
- Know they need two doses of the vaccine
- Remember they need to receive both doses

Opportunity

- They are aware that most people in their community are having the vaccination.
- They see examples of other people in their community having the vaccination,
- Receiving the vaccination is seen as 'the right thing to do' by the majority of people in their peer group.
- They have the time to go and be vaccinated.
- Vaccination sites are easily accessible (location and operating hours).
- There is adequate social and practical support for people to attend a vaccination appointment.
- Relevant social and cultural narratives within the individual's community are supportive of vaccination.

Motivation

- They see contracting Covid-19 as a severe risk to their health.
- They have an intention to be vaccinated and believe it is in their control.
- They feel being vaccinated is important for the themselves, family and friends, and/or the community.
- They believe that the vaccination will protect them from contracting the virus and that they will not suffer harm from having it.
- People with whom they share a common identity, are also being vaccinated.
- Receiving a vaccination is consistent with their religious beliefs.
- They are able to make specific plans to receive the vaccine.
- They do not experience overwhelming feelings of fear, anxiety, or worry about having the vaccine.

Behavioural analysis - Capability

Behaviour

Influence

Behaviour:
Receiving the COVID-19 vaccine

Capability - people are more likely to be vaccinated if:

- They understand the risks (self and others) and potential severity
- They understand the risk they pose to others
- They understand why it is important to be vaccinated
- Know that the vaccine is safe and effective
- Know how to get the vaccine (where to go, how to get there)
- Have the skills required access the vaccine (e.g. use booking system)
- Know they need two doses of the vaccine
- Remember they need to receive both doses

Behavioural analysis - Opportunity

Behaviour

Influence

Behaviour:
Receiving the COVID-19 vaccine

Opportunity - people are more likely to be vaccinated if:

- They are aware that most people in their community are having the vaccination.
- They see examples of other people in their community having the vaccination, particularly key members.
- Receiving the vaccination is seen as 'the right thing to do' by the majority of people in their peer group, and they are aware of this.
- They have the time to go and be vaccinated.
- Vaccination sites are easily accessible (location and operating hours).
- There is adequate social and practical support for people to attend a vaccination appointment.
- Relevant social and cultural narratives within the individual's community are supportive of vaccination.

Behavioural analysis - Motivation

Behaviour

Influence

Behaviour:
Receiving the COVID-19 vaccine

Motivation - people are more likely to be vaccinated if:

- They see contracting Covid-19 as a severe risk to their health.
- They have an intention to be vaccinated and believe it is in their control.
- They feel being vaccinated is important for the themselves, family and friends, and/or the community.
- They believe that the vaccination will protect them from contracting the virus and that they will not suffer harm from having it.
- People with whom they share a common identity, are also being vaccinated.
- Receiving a vaccination is consistent with their religious beliefs.
- They are able to make specific plans to receive the vaccine.
- They do not experience overwhelming feelings of fear, anxiety, or worry about having the vaccine.

Recommendations to reduce hesitancy

- Residents believe that there is a risk to them of getting Covid-19 and that this could have severe implications upon their health
- Residents believe that the Covid-19 vaccine is safe and is effective
- Being vaccinated is made as easy as possible for residents
- Residents are motivated to have the Covid-19 vaccine
- Information gaps are identified and filled, and misinformation is corrected
- Engagement crosses multiple communication channels

What can I do as a manager?

- Recommend that staff are vaccinated
- Provide links to good sources of information
- Ask staff who have been vaccinated to share their story/experience/reasons for being vaccinated with others
- Ensure that staff are given the time to attend vaccination appointments without loss of pay
- Ensure that staff are not penalised (time/money) if they experience side effects
- Make it easy!

References

- de Figueiredo, A., Simas, C., Karafillakis, E., Paterson, P., & Larson, H. J. (2020). Mapping global trends in vaccine confidence and investigating barriers to vaccine uptake: a large-scale retrospective temporal modelling study. *The Lancet*, 396(10255), 898-908.
- Hertfordshire Behaviour Change Unit Reducing Vaccine Hesitancy papers: <https://www.hertfordshire.gov.uk/behaviouralscienceresources>
- Michie et al. (2011) The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation Science*, 6:42
- Royal Society for Public Health (2020). <https://www.rsph.org.uk/about-us/news/one-in-five-public-unsure-about-getting-coronavirus-vaccine-if-available.html>
- Thorneloe, R., Wilcockson, H., Lamb, M., Jordan, C. H., & Arden, M. (2020). Willingness to receive a COVID-19 vaccine among adults at high-risk of COVID-19: a UK-wide survey. <https://doi.org/10.31234/osf.io/fs9wk>
- World Health Organization. (2014). Principles and considerations for adding a vaccine to a national immunization programme: from decision to implementation and monitoring. Accessed on 17.11.2020 at https://apps.who.int/iris/bitstream/handle/10665/111548/9789241506892_eng.pdf?sequence=1
- Williams, L., Gallant, A. J., Rasmussen, S., Brown Nicholls, L. A., Cogan, N., Deakin, K., ... & Flowers, P. (2020). Towards intervention development to increase the uptake of COVID-19 vaccination among those at high risk: Outlining evidence-based and theoretically informed future intervention content. *British Journal of Health Psychology*, 25(4), 1039-1054. <https://doi.org/10.1111/bjhp.12468>

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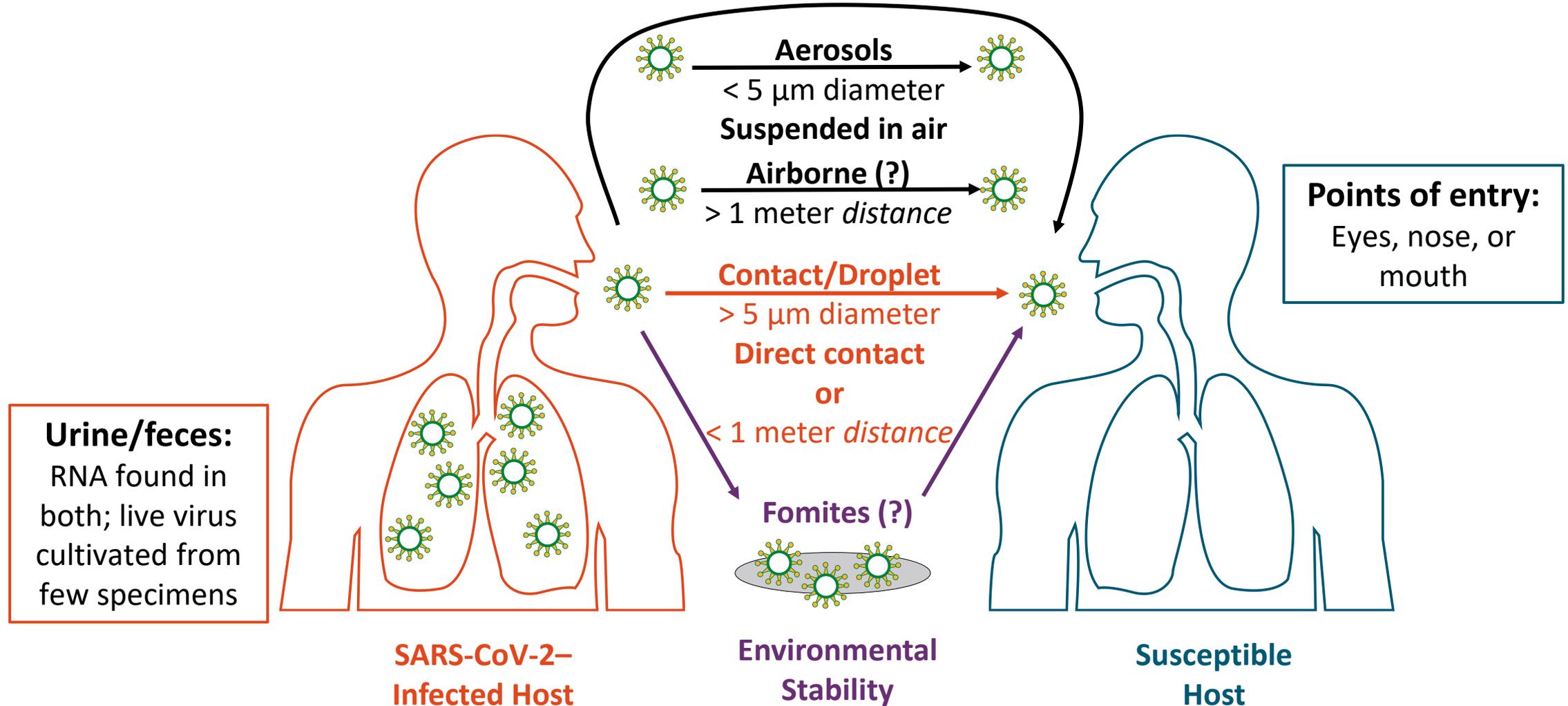
thank you

Understanding Covid-19 and the Vaccine

Jim McManus,
**Director of Public Health | Public
Health Service** , Hertfordshire
County Council

11th February 2021

Routes of SARS-CoV-2 Transmission

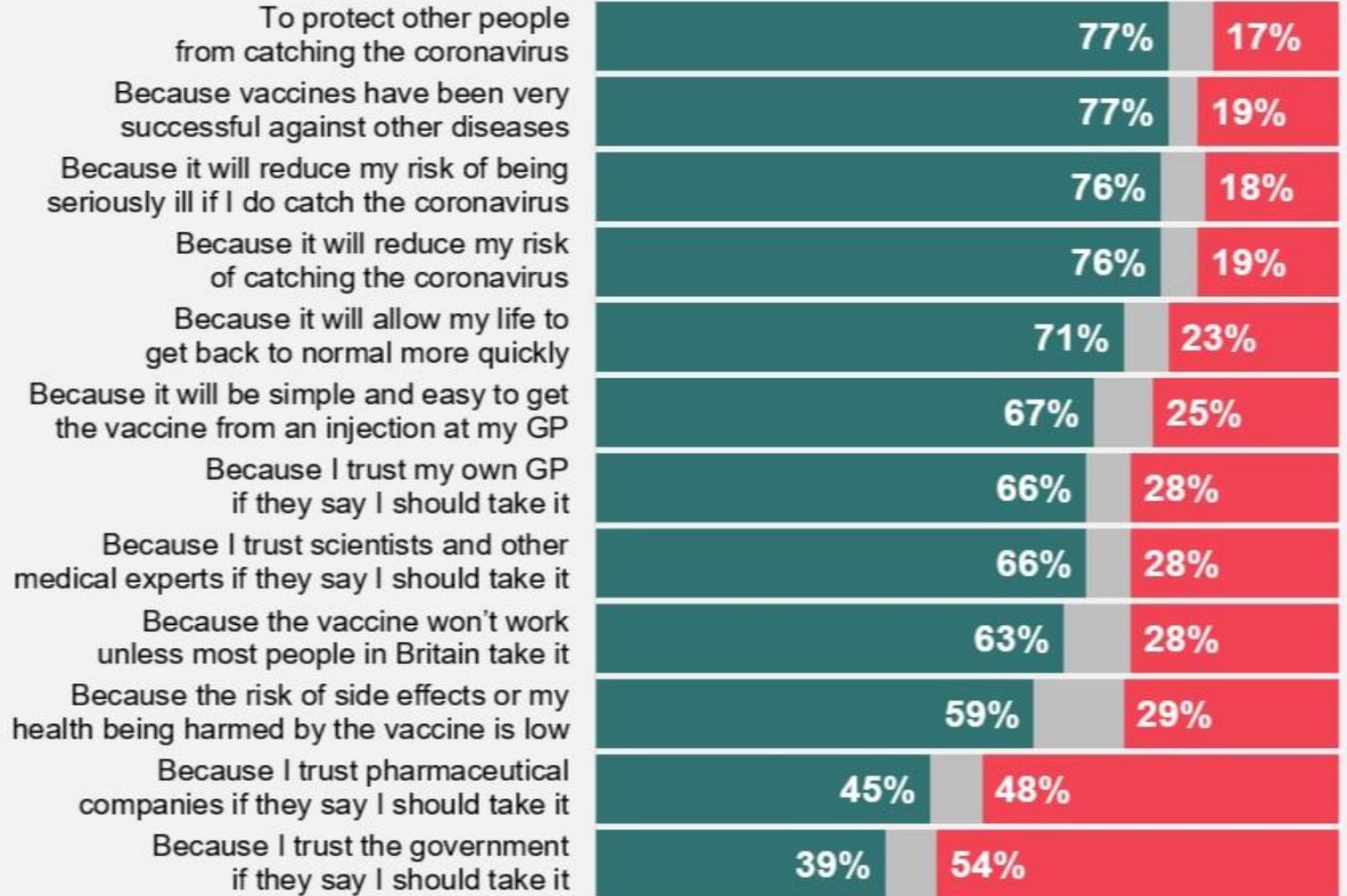


How convincing are arguments for taking a Coronavirus vaccine?

How convincing, or otherwise, do you find each of the following reasons why you should take a vaccine against coronavirus (when one becomes available)?

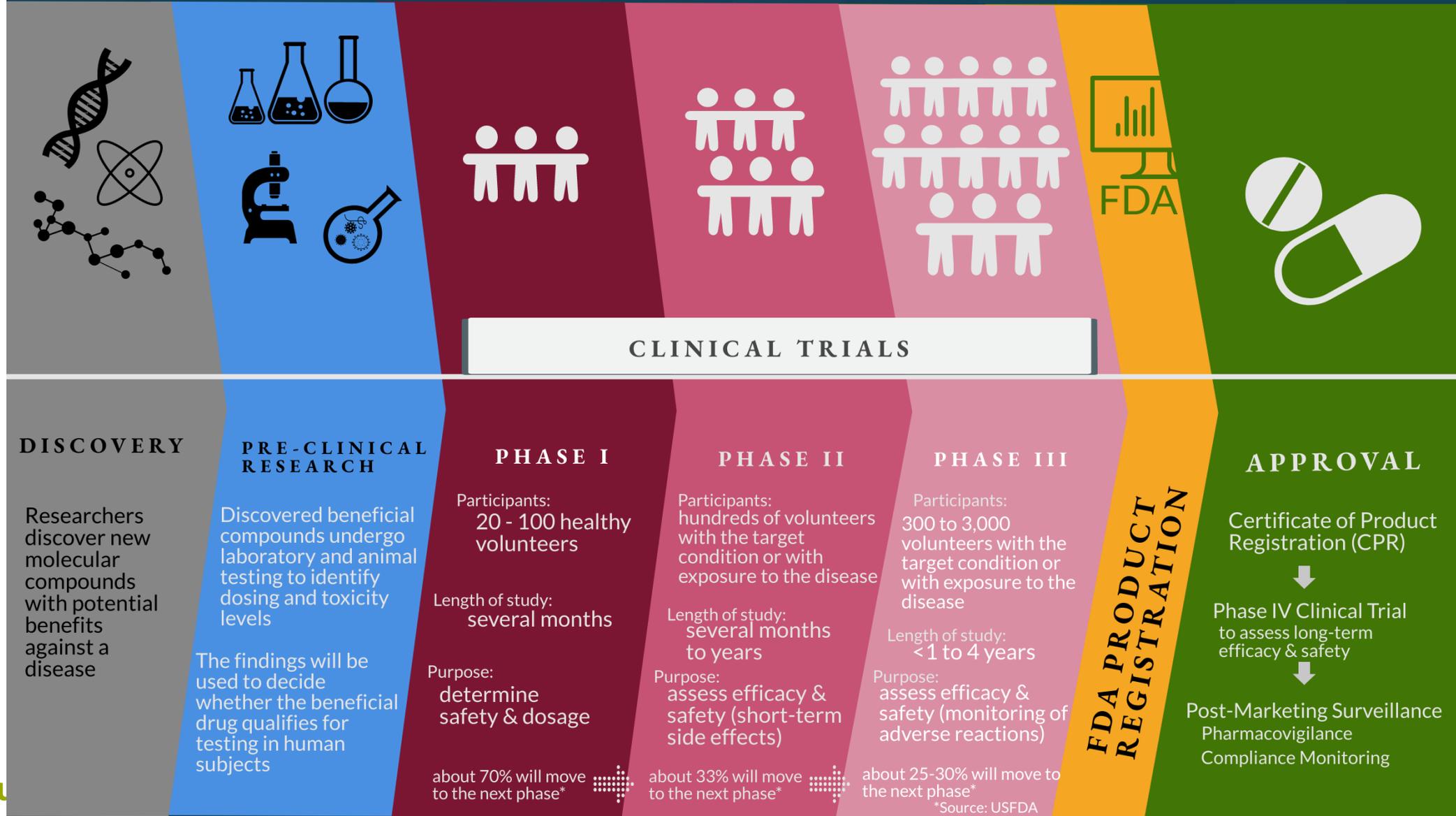
Convincing

Not convincing



Base: 1,049 Online British adults 18-75, 13-16 November 2020

Development of Drugs & Vaccines



Why we use vaccines

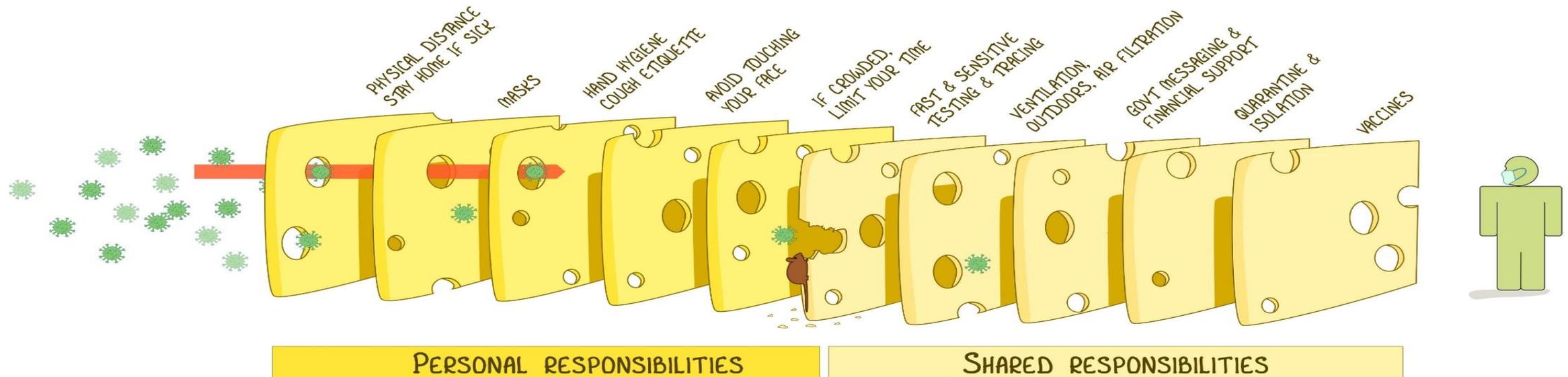
- **Vaccines can prevent infectious diseases.** Examples of vaccine-preventable diseases are: measles, polio, hepatitis B, influenza and many others.
- When most people in a community are vaccinated against a disease, the ability of the pathogen to spread is limited. This is called ‘herd’ or ‘indirect’ or ‘population’ immunity.
- When many people have immunity, this also indirectly protects people who cannot be vaccinated, such as very young babies and those who have compromised immune systems.



Keep going with prevention & control till Spring

THE SWISS CHEESE RESPIRATORY VIRUS PANDEMIC DEFENCE

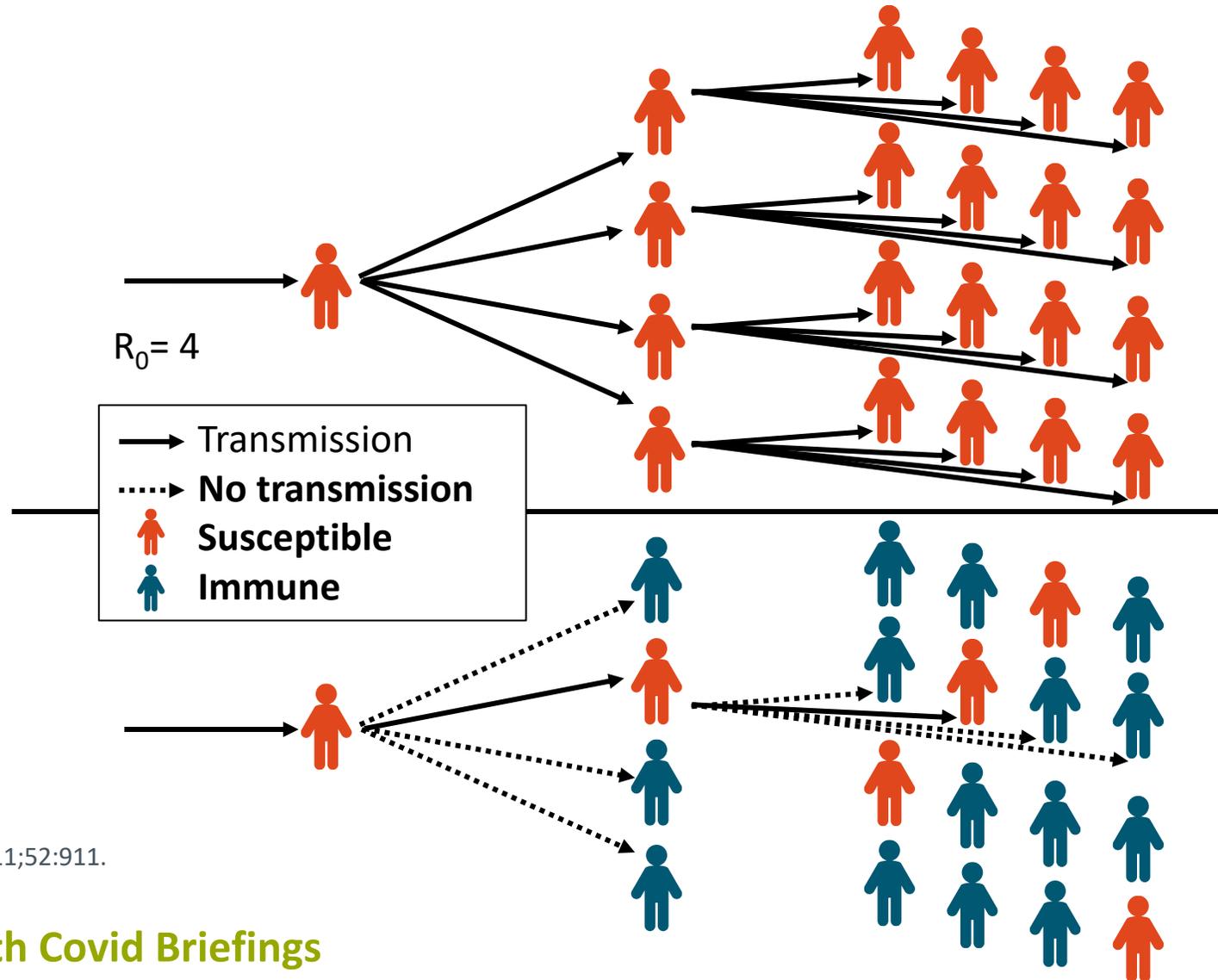
RECOGNISING THAT NO SINGLE INTERVENTION IS PERFECT AT PREVENTING SPREAD



EACH INTERVENTION (LAYER) HAS IMPERFECTIONS (HOLES).
MULTIPLE LAYERS IMPROVE SUCCESS.

IAN M MACKAY
VIROLOGYDOWNUNDER.COM
WITH THANKS TO JODY LANARD, KATHERINE ARDEN & THE UNI OF QLD
BASED ON THE SWISS CHEESE MODEL OF ACCIDENT CAUSATION, BY JAMES T REASON, 1990
VERSION 3.0
UPDATE: 24OCT2020

Herd Immunity Concept

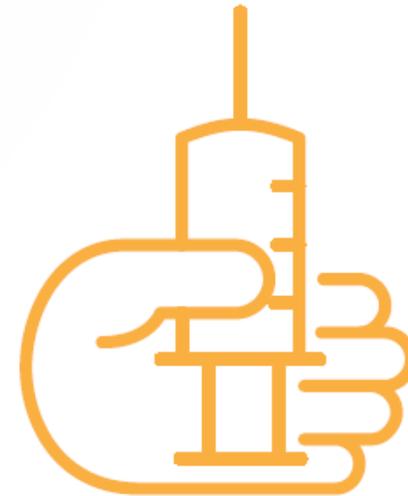


Fine. Vaccines. 2011;52:911.

How vaccines work

- Vaccines greatly reduce the risk of infection by training the immune system to recognize and fight pathogens such as viruses or bacteria
- Vaccines safely deliver an **immunogen** which is a *specific type of antigen that elicits an immune response*, to train the immune system to recognize the pathogen when it is encountered naturally.

Put crudely, vaccines make your body think it has been infected, or present an infections agent to it so your body recognises it when it comes back



There are multiple types....

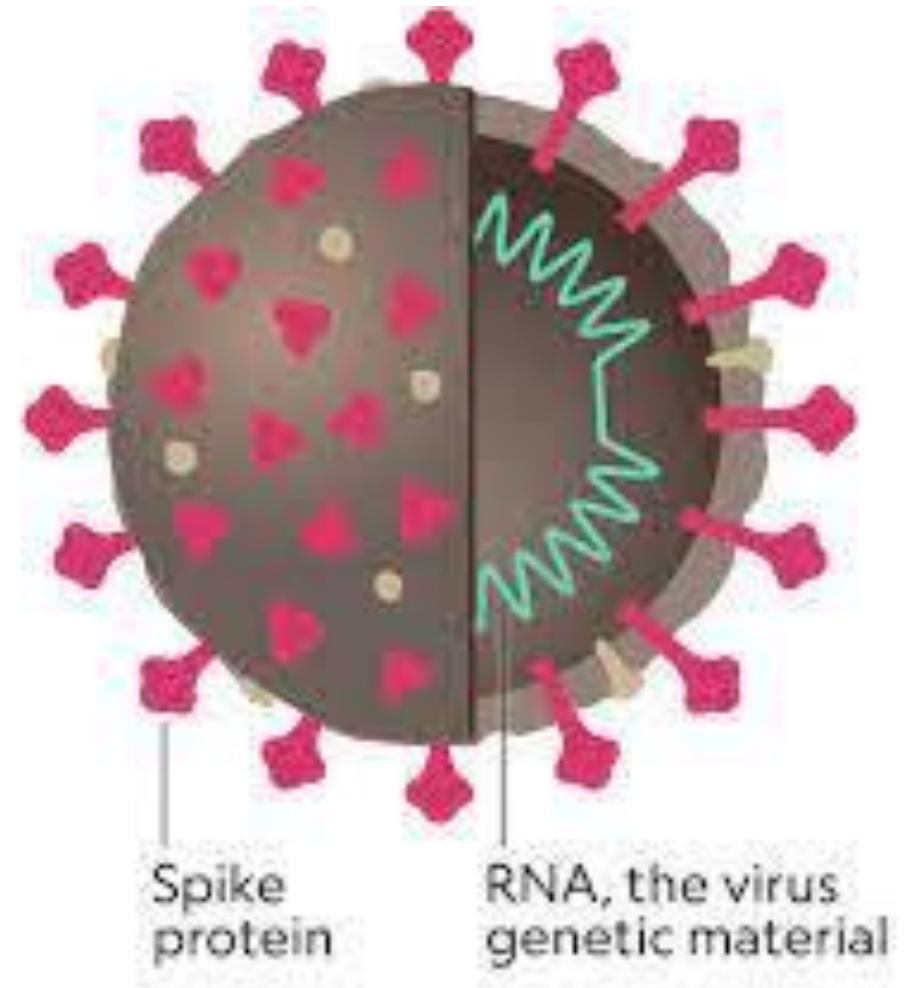
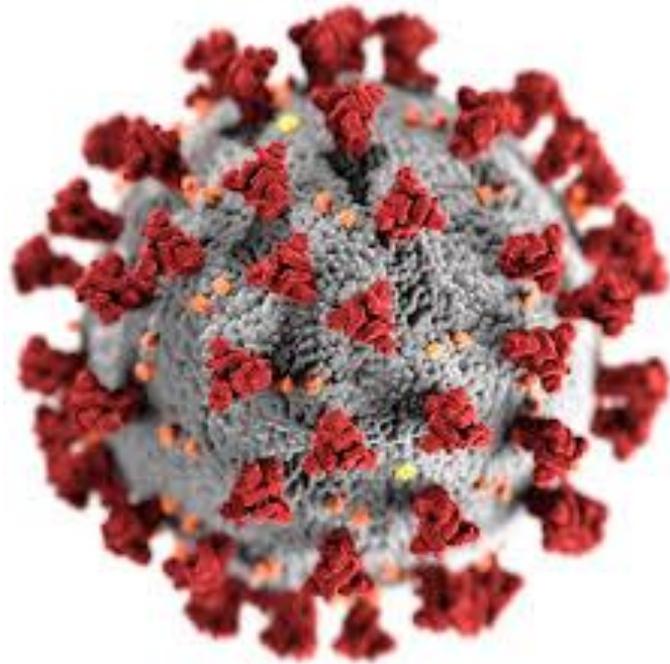
How some of the Covid-19 vaccines compare

BBC NEWS

Company	Type	Doses	How effective	Storage
 Oxford Uni- AstraZeneca	Viral vector (genetically modified virus)	 x2	62-90%	 Regular fridge temperature
 Moderna	RNA (part of virus genetic code)	 x2	95%	 -20C up to 6 months
  Pfizer- BioNTech	RNA	 x2	95%	 -70C
 Gamaleya (Sputnik V)	Viral vector	 x2	92%	 Regular fridge temperature (in dry form)

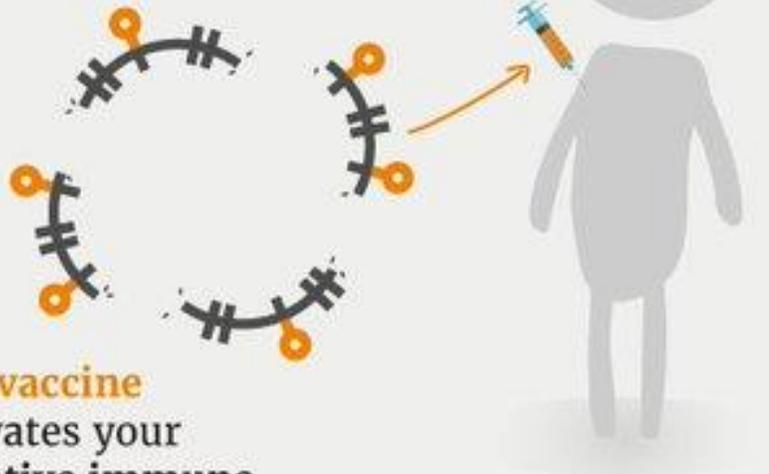
*

SARS-CoV-2

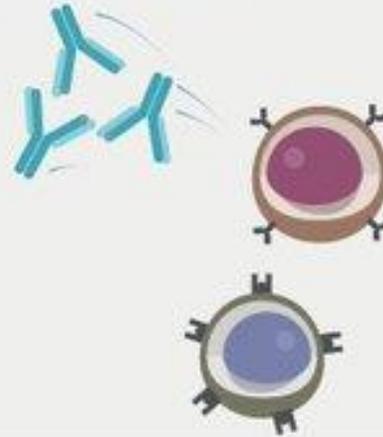


COVID-19, long-term immunity and vaccines

Vaccines train your immune system using a harmless form of the virus.



The **vaccine** activates your **adaptive immune response**.



The adaptive immune response involves:

B cells that make highly specific **antibodies** to stop the virus getting into your cells.

T cells that can help stimulate the B cells and kill any infected cells.

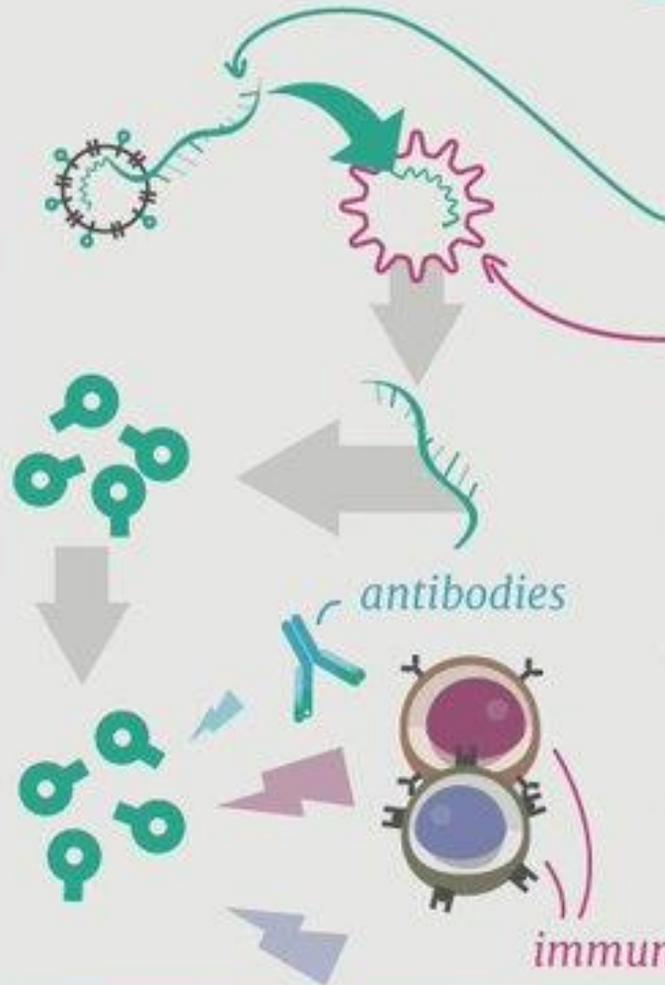


These cells remember the virus and remain in the body. This is **immune memory**.

If you encounter the real virus in the future, your immune system responds faster and more effectively to prevent infection. This is **long-term immunity**.

An effective COVID-19 vaccine will produce a strong, long-term, adaptive immune response. It might stimulate B cells and specific antibodies or T cells or a combination of both.

Viral vector vaccines



Use an unrelated harmless virus, modified to deliver **SARS-CoV-2 genetic material**. The delivery virus is known as a **viral vector**.

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

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

Considerations

Generate strong immune response.

May need to be stored at specific low temperatures.



Examples in human use

University of Oxford/AstraZeneca COVID-19 vaccine
Ebola vaccine

In clinical trials for COVID-19

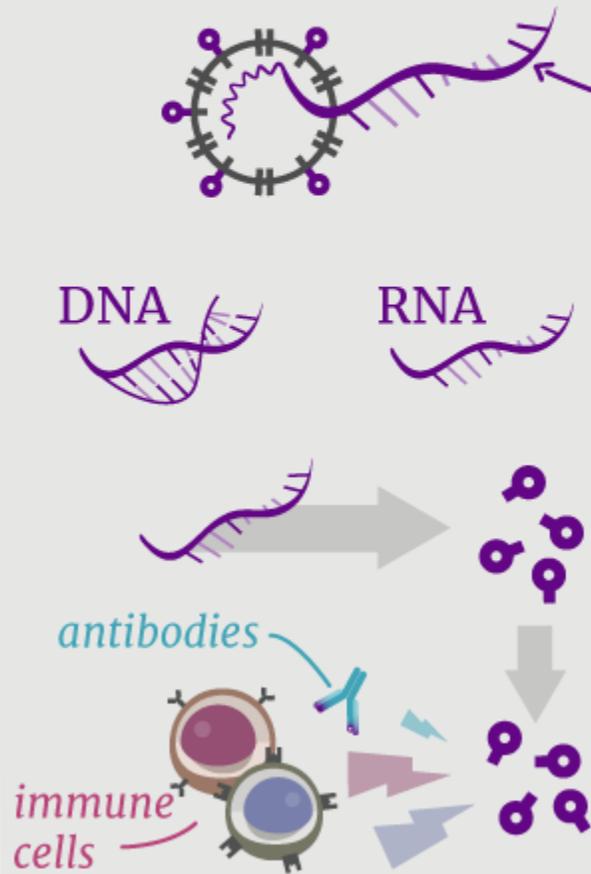
Janssen, Cansino, Gamaleya

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

Genetic vaccines (nucleic acid vaccines)

British Society for
immunology

www.immunology.org



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

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

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

Considerations

Low cost and fast to develop.

May need to be stored at specific low temperatures.



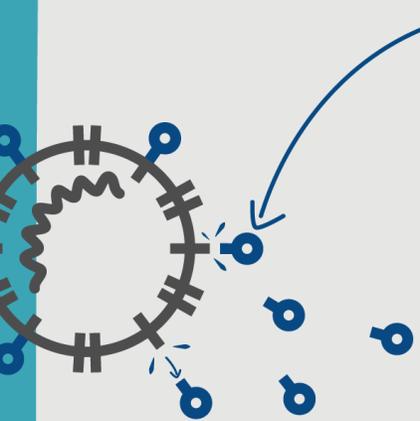
Examples in human use

Pfizer/BioNTech & Moderna
COVID-19 vaccines

In clinical trials for COVID-19

Imperial College London

Protein vaccines

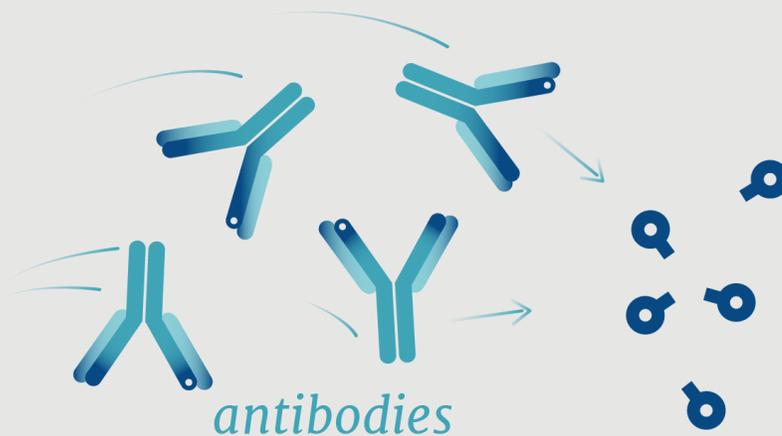
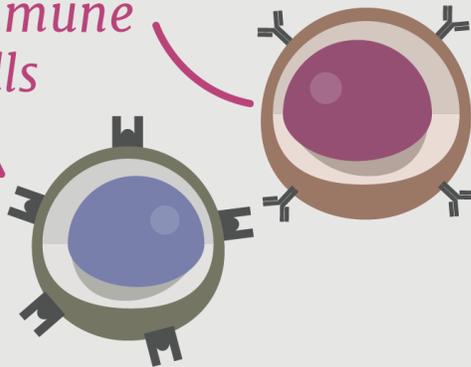


Contain **proteins** from the SARS-CoV-2 virus, which are recognised by the immune system to trigger a response.

Can be whole proteins, protein fragments, or many protein molecules packed into nanoparticles.

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

immune cells



Considerations

Have good previous safety records.



Usually administered with an adjuvant to boost immune response.



Examples in human use

Hepatitis B vaccine

In clinical trials for COVID-19

Novavax, Sanofi/GSK

What's in a vaccine?

Water

The main ingredient.

Preservatives and stabilisers

Maintain vaccine quality, safe storage and prevent contamination.
Example: Sorbitol; naturally found in fruit in larger amounts.

Residual traces

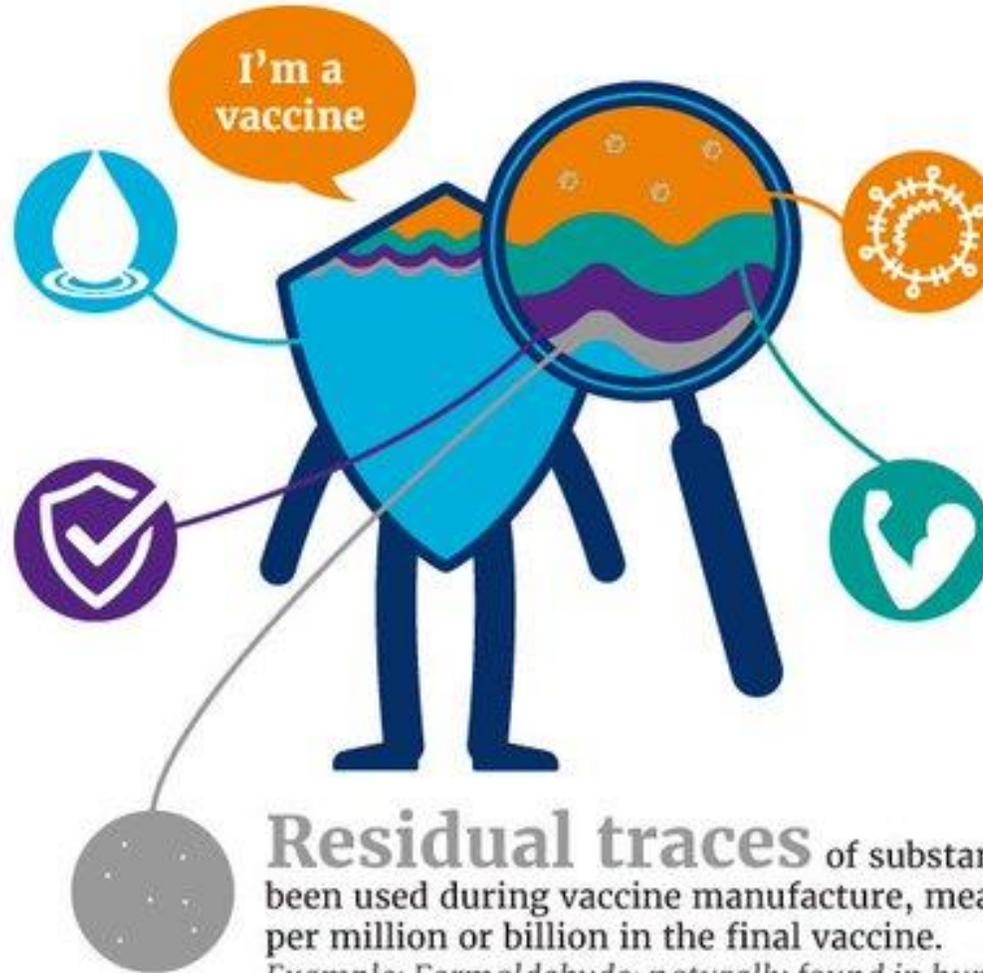
of substances that have been used during vaccine manufacture, measured as parts per million or billion in the final vaccine.
Example: Formaldehyde; naturally found in human body.

Active ingredient

A very small amount of a harmless form of the bacteria or virus you are immunising against.

Adjuvants

Create a stronger immune response to the vaccine. Pose no significant risk to health in the very small quantities used.
Example: Aluminium; naturally found in drinking water at higher levels.



JCVI vaccination prioritisation: Sept 25 2020

1. Older adults' resident in a care home and care home workers*
2. All those 80 years of age and over and health and social care workers*
3. All those 75 years of age and over
4. All those 70 years of age and over
5. All those 65 years of age and over
6. High-risk adults under 65 years of age
7. Moderate-risk adults under 65 years of age
8. All those 60 years of age and over
9. All those 55 years of age and over
10. All those 50 years of age and over
11. Rest of the population (priority to be determined) **

JVCI expert comments:

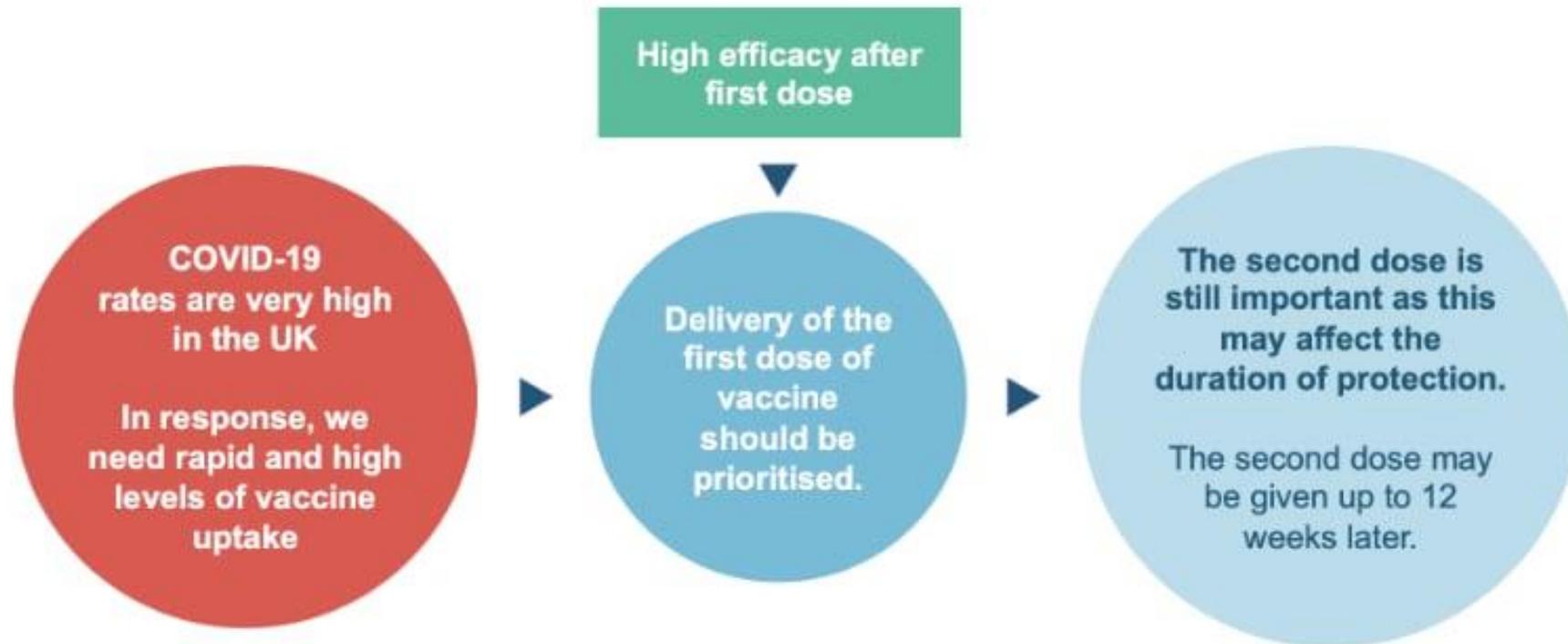
- No long term safety data on novel formats (adeno, mRNA)
- Assume waste (10-15%) and uptake (60-75%)
- 28 day gap desirable between flu and COVID vaccine requirement
- May consider vaccinating younger people to stop asymptomatic transmission spread once safety established

UK priority groups

Elderly >65	12m
NHS workers	1.5m
Social care/care homes	2m
Co-morbidities <50	~3m
BAME	<4m
	= 22m

Single Dose is NOT single dose

Advice on dosing interval for COVID-19 vaccines



The delay in the two doses

- Both fine
- Oxford Astra Zeneca Data here

New data shows a **single dose** of the Oxford/AstraZeneca vaccine provides high levels of protection that do not decay rapidly

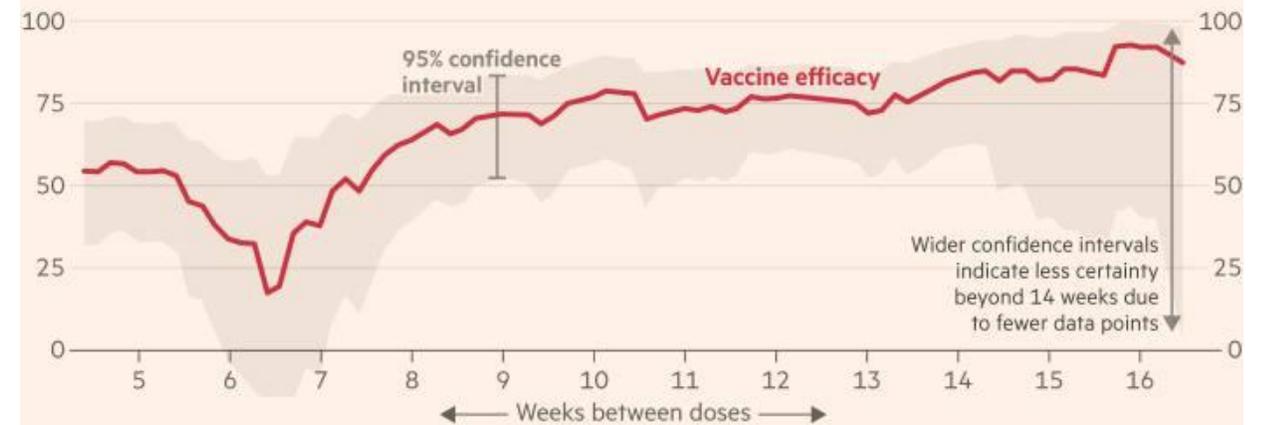
Vaccine efficacy (%) over time for single standard dose



Sources: University of Oxford; AstraZeneca; South African Medical Research Council and others
© FT

New data shows the Oxford/AstraZeneca vaccine is highly effective with an interval of 12 weeks or longer between first and second dose

Vaccine efficacy (%) against symptomatic Covid-19, by interval between first and second dose



Sources: University of Oxford; AstraZeneca; South African Medical Research Council and others
© FT

Key Messages

- Behave as if everyone you meet outside your home is infected and you are too
 - 2m Distance **even with a mask**, avoid crowds, face coverings (2 layers min, preferably three), hand hygiene
- There is no alternative to people complying with the rules. The more non compliance
 - the longer the virus circulates
 - the longer the restrictions
 - The more NHS staff sickness
 - The longer it takes to vaccinate
 - The more new variants will emerge and we risk "vaccine escape"

If you want to get out of lockdown, your only real option is compliance otherwise we will be here till well after Easter

Keeping up Standards

You MUST continue with their high standards of PPE and IPC and they have a duty of care even in their home lives to take all of the current government precautions.

- ✓ PPE
 - ✓ Cleaning
 - ✓ Social Distancing
 - ✓ Testing
 - ✓ Hand hygiene
- Encourage staff to be vigilant inside and outside of work.
 - Government Update [here](#)
 - **To support you we have created a new page on all the latest guidance and resources- www.hcpa.info/ipc**

Social care staff have done so well up to now; let's not let our guard down.

Vaccination Myth Busting Resources

To review current information [Click here for Vaccination FAQs](#)

As promised-

- [Click here for the recording](#)
- [Click here for slides](#)
- For other Covid-19 support [click here](#)
- For previous webinars [click here](#)

COVID-19: VACCINATIONS

Check the facts!

Search

Concerns:	Guidance:	Resources:
Speed in development	All steps in the usual vaccine development process have been rigorously followed for the COVID-19 vaccine	View Resource
Safety	The COVID-19 Vaccine has undergone rigous tests, including clinical trials that are globally recognised as having the highest safety standards	View Resource
Culture	People from all walks of life have been part of the COVID-19 vaccine trials including healthcare professionals	View Resource
Fertility	There are no concerns about the COVID-19 vaccines affecting present or future fertility	View Resource
Effective Defense	Vaccination is one of your most effective defences against COVID-19	View Resource

Vaccination FAQs

- Introduction
- General
- Alternatives
- Clinical & Allergies
- Consent
- Direct Employers
- Doses & Evidence
- Frequency
- Ingredients
- Prioritisation & Access
- MRNA
- Pregnancy, Fertility & Breast Feeding
- Proof
- Side Effects

Introduction

Below is a collection on Vaccination FAQ's for those working in Adult Social Care in Hertfordshire. Under each category you scroll through or search for key words.

To return to the main Vaccination page with further information and resources [click here](#)

Care Staff Vaccination Myth Busting Sessions

- ▶ [Click here](#) for Slides
- ▶ [Click here](#) for recording 21st January
- ▶ [Click here](#) for recording 27th January
- ▶ [Click here](#) for recording 4th February

For further support email assistance@hcpa.co.uk

General

Question

Can you catch COVID-19 from the vaccine?
[+ Click here to view the answer](#)

Q&A

Provider Hub

Call 01707 708 108 (9am – 5pm | Mon – Fri)

Email assistance@hcpa.info

Visit- www.hcpa.info/covid-19

Sign up for the Daily HCPA newsletters



Support COVID-19 pages managed on the HCPA website- www.hcpa.info/covid-19

