COVID-19 vaccinations learning resource

Key Stages 3–5

February 2021

KEEP LONDON SAFE

Refer to teacher notes at the bottom of each slide

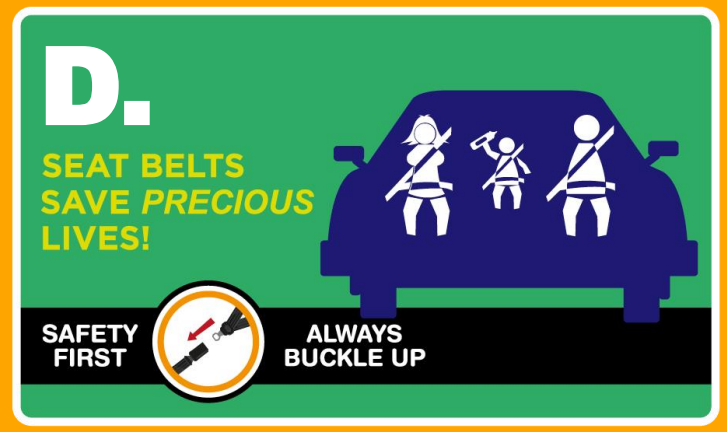
NHS

Smoke alarms

Anti-smoking campaigns

Which of these measures saves the most lives every year?

Vaccinations



Compulsory seat belt wearing

Answer: Vaccinations

All four of these measures save lives. However, **vaccinations** save more lives than the other three put together.

The World Health Organization estimates that vaccinations save 2 million lives a year.

Margaret Keenan was the first person in the world to receive a COVID-19 vaccine on 8th December 2020.

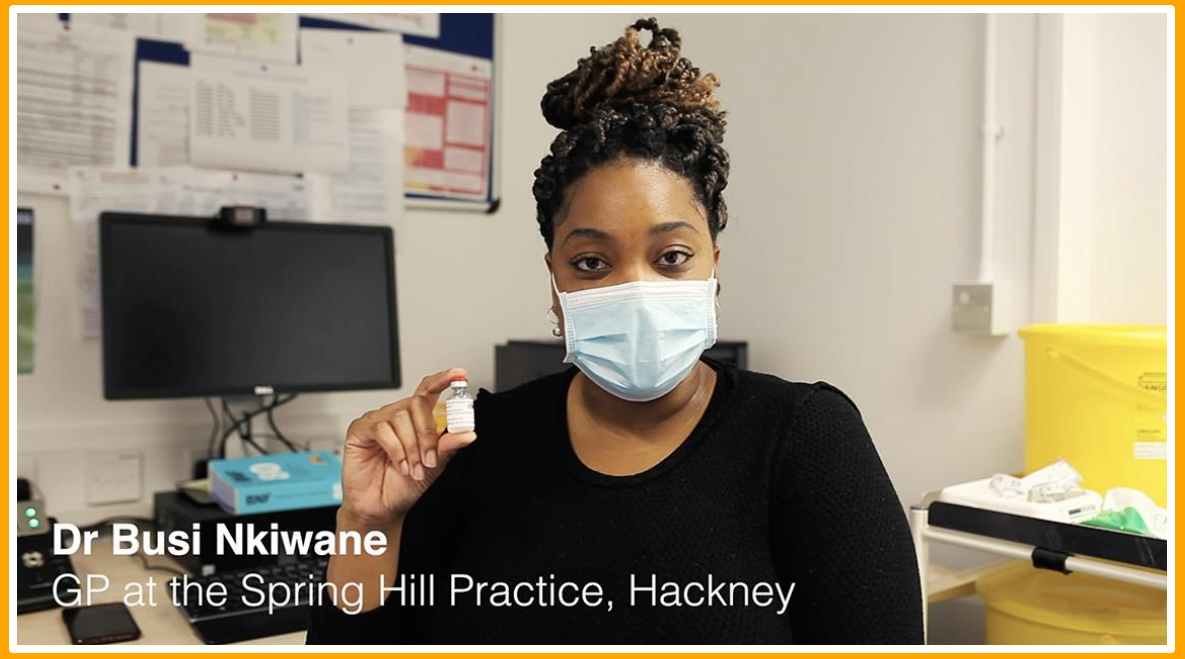
If your GP offered you the vaccine for COVID-19 today, would you take it?

Do you know someone who has received the COVID-19 vaccine?

What is a vaccine?

- A **vaccine** is a medicine which protects people from getting a disease. Vaccines are made from dead or inactive versions of **viruses** or **bacteria.**
- Vaccines stimulate the body's **immune system** to produce chemicals called **antibodies** which can prevent illness. Vaccines themselves cannot give you the disease.
- A vaccinated person should be able to produce the correct antibodies very quickly and therefore fight the disease.

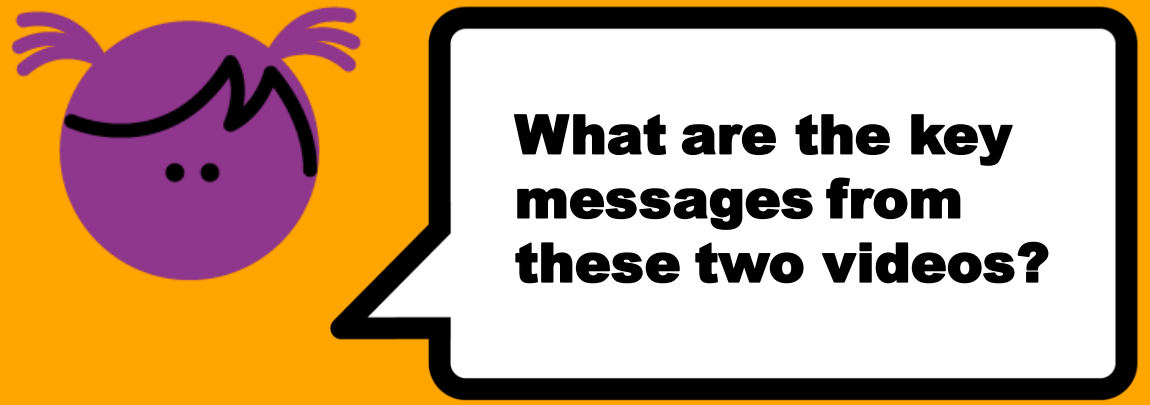
What is a vaccine?



Dr Busi Nkiwane, GP at Spring Hill Practice, Hackney

Maurice Mcleod, Chief Executive of Race on the Agenda

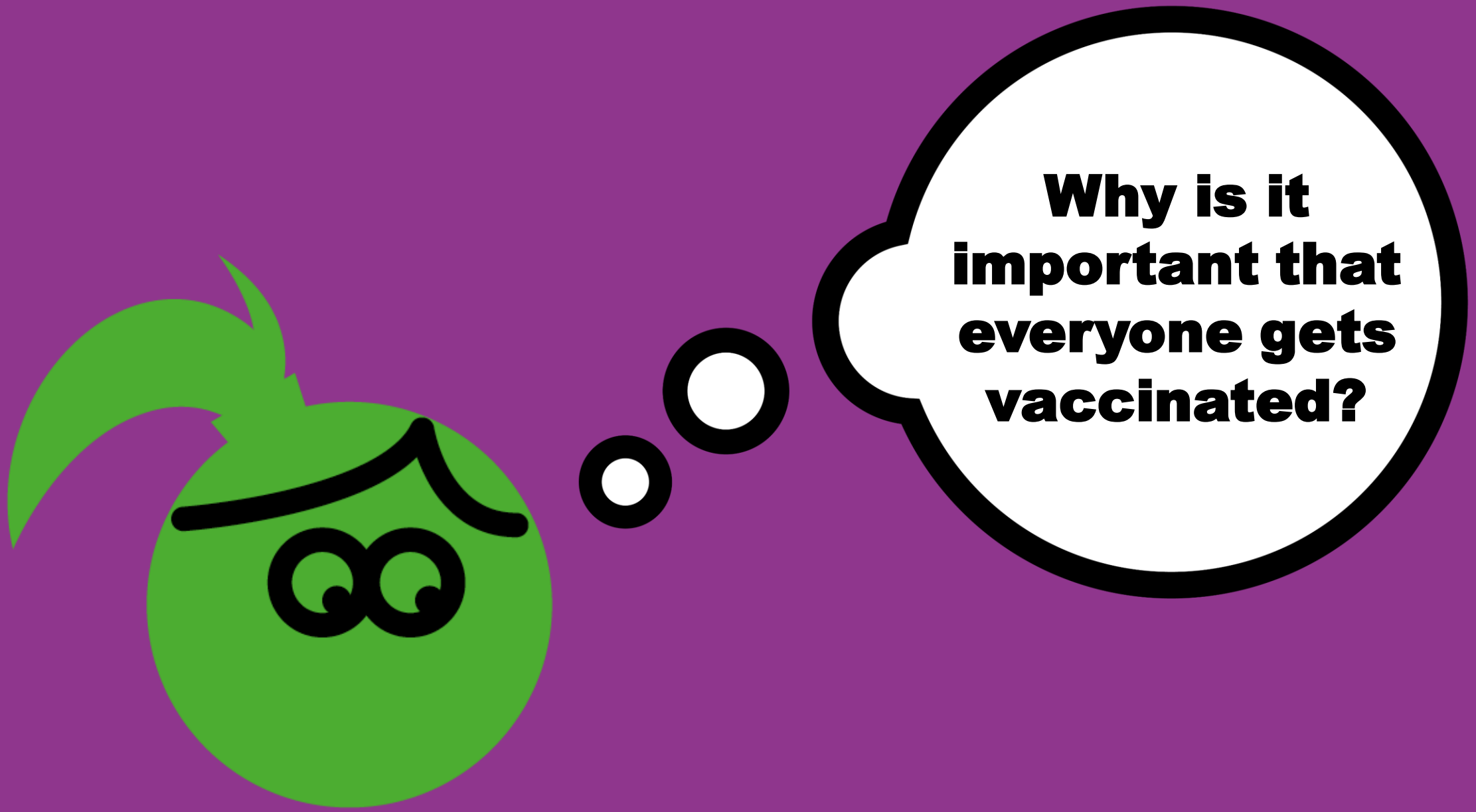
Thoughts on the COVID-19 vaccine



This table shows when children in the UK are scheduled to receive different vaccinations

Age due	Disease protected against
8 weeks old	- Diphtheria, tetanus, pertussis (whooping cough), polio, Haemophilus influenza typ B (Hib) and Hepatitis B - Pneumococcal (13 serotypes) - Meningococcal group B - Rotavirus gastroenteritis
12 weeks old	- Diphtheria, tetanus, pertussis and polio, Hib and hepatitis B - Rotavirus
16 weeks old	- Diphtheria, tetanus, pertussis and polio, Hib and hepatitis B - Pneumococcal (13 serotypes) - Meningococcal group B
1 year old (on or after the child's first birthday)	- Measles, mumps and rubella (German measles) - Hib and Meningococcal group C - Pneumococcal - Meningococcal group B
3 years 4 months old (or soon after)	- Diphtheria, tetanus, pertussis and polio - Measles, mumps and rubella
Girls aged 12 to 13 years	- Cervical cancer caused by human papillomavirus types 16 and 18 (and genital warts caused by types 6 and 11)
14 years old (School year 9)	- Tetanus, diphteria and polio - Meningococcal Groups A, C, W and Y disease

Do you know which vaccinations you've had?


Why is it important that everyone gets vaccinated?

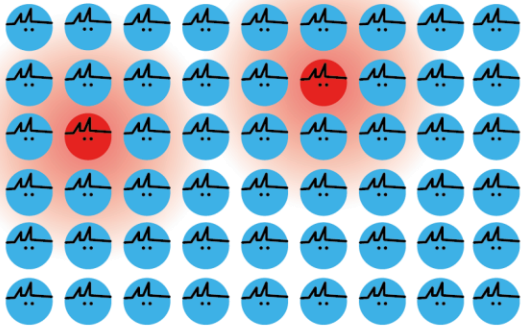
What do these diagrams show?

= not vaccinated but still healthy

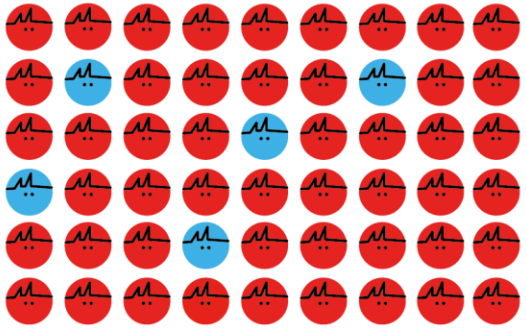
= vaccinated and healthy

= not vaccinated, sick and contagious

A.

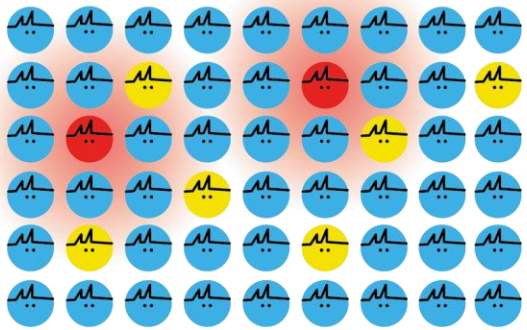


No one is vaccinated

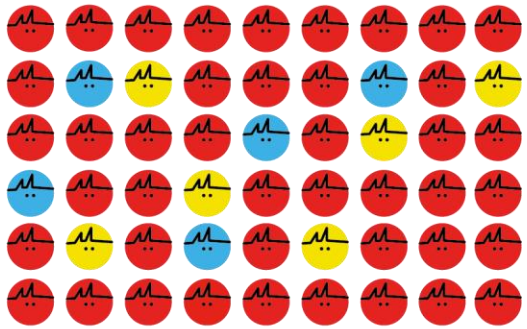


Contagious disease spreads through the population

B.

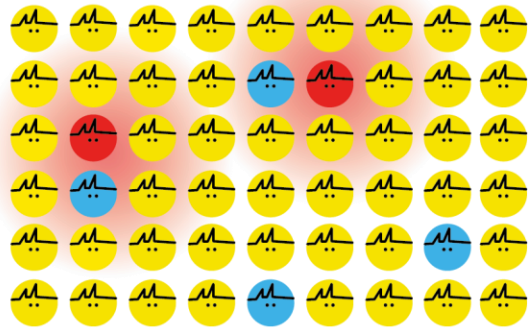


Some of the population gets vaccinated



Contagious disease spreads through some of the population

C.



Most of the of the population gets vaccinated

Spread of contagious disease is contained

Measles is a serious disease caused by a virus. To achieve herd immunity with measles, you need at least 95% of the population vaccinated against it.

To contain or eradicate a disease through vaccinations, you need **herd immunity**.

This means that enough of the population are vaccinated against the disease that any spread of the disease is contained.

Herd immunity

How have COVID-19 vaccines been made

There are three COVID-19 vaccines which have already been approved by the MHRA. The MHRA regulates medicines, including vaccines, in the UK

Name of COVID-19 vaccine developer	Volunteers tested in vaccine trials*	Date approved for use in UK by MHRA
Pfizer / BioNtech	More than 46,000 in USA, Germany, South Africa, Turkey, Brazil and Argentina	2nd December 2020
Oxford – AstraZeneca	More than 23,000 in the UK, Brazil and South Africa	30th December 2020
Moderna	More than 30,000 in USA	8th January 2021

*Volunteers taken from a range of ages and ethnicities

How have COVID-19 vaccines been made so quickly and yet safely?

All of these people have concerns about being vaccinated against COVID-19.

Discuss how you would explain to them the importance of having the vaccine.

A.

The vaccine might give me COVID.

B.

I will wait a few years before I decide. I'm not scared of coronavirus anyway.

The vaccine hasn't been tested properly. I'm worried about the side effects.

C.

The vaccine has things in it that I disagree with.

D.

Acknowledgements and sources

Acknowledgements

These teaching resources were created by Hackney teachers and education specialists, for London schools, with help from the students of Stoke Newington School, as part of the Keep London Safe campaign.

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Sources

http://www.who.int/publications/10-year-review/vaccines/en/

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https://www.npr.org/sections/health-shots/2012/10/16/162670836/wiping-out-polio-how-the-u-s-snuffed-out-a-killer?t=1611088331342

Polio graph:
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Information relating to vaccine trials
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https://theconversation.com/oxford-scientists-how-we-developed-our-covid-19-vaccine-in-record-time-153135

https://www.nih.gov/news-events/news-releases/promising-interim-results-clinical-trial-nih-moderna-covid-19-vaccine

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