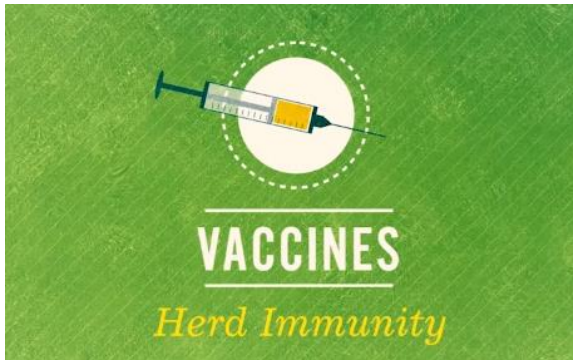


Vaccines: herd immunity



Answer the questions with the help of the information in the following video:

www.mediatheque.lindau-nobel.org/videos/38131/vaccine-ii

What happens to a pathogen if the majority of a population is immune to it thanks to vaccination?

Why is it not possible for everyone to be vaccinated?

Why does it protect other people if you are vaccinated?

Which disease has already been eradicated thanks to vaccines?

Which disease was actually supposed to have been eradicated by the year 2000?

Why has it not been possible to eradicate the disease?

Solutions

(for example for faster students to correct their own work)

What happens to a pathogen if the majority of a population is immune to it thanks to vaccination?

The pathogen cannot spread and can no longer multiply. Over a longer time period, the pathogen will be eradicated.

Why is it not possible for everyone to be vaccinated?

Some people cannot be vaccinated because they are already ill, have a weakened immune system, or because they are too young (newborns).

Why does it protect other people if you are vaccinated?

If the majority of people are immune against the pathogen due to vaccination, it is highly improbable that the pathogen will be able to reach non-vaccinated people as it will die before reaching them.

Which disease has already been eradicated thanks to vaccines?

Smallpox has already been eradicated.

Which disease was actually supposed to have been eradicated by the year 2000?

Measles was supposed to have been eradicated, but this has not worked as planned.

Why has it not been possible to eradicate the disease?

Not enough people are being vaccinated, either because they underestimate the effectiveness of the vaccine, are critical of vaccinations, or because they have 'vaccine fatigue'.