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Pandemic Special

- Grasp and Understand - Vaccine

→ Vaccine – will it stop a pandemic immediately?

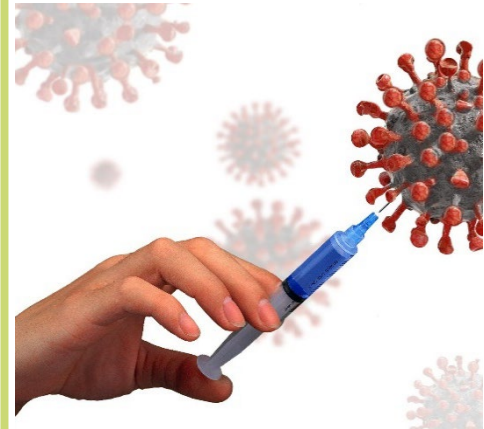
During a pandemic people eagerly wait for the development of a vaccine. Therefore, they feel very relieved as soon as a vaccine is found and expect the pandemic to end soon. But does it really stop in a blink of an eye?

Infobox

There are several phases in the development of a vaccine. The phase, where basically everyone can get the vaccine is, when it is “authorized for emergency use” with some restrictions: Usually the vaccine is not “authorized for emergency use” from the very beginning for kids or expectant mothers.

In order to get a feeling for how long it could possibly take to end a pandemic after a vaccine has been “authorized for emergency use” look at the Covid-19 pandemic and the plans, that were made for how many people could be vaccinated per day in your region/country. Of course, the possible vaccinations per day are not the only limiting factor – the most limiting factor is the availability of the vaccine.

Usually not everyone will be vaccinated, but the pandemic will stop before everyone is being vaccinated. When enough people have been vaccinated to stop the pandemic, the so-called “herd-immunity” is being reached. In the Covid-19 pandemic it was being estimated, that this means about 70% of the population has to be vaccinated.



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Grasp and Understand

Put yourself in the shoes of a Politician.

- 1) Reflect on how long it would take to vaccinate everyone in your region, if the vaccination plans could be followed.
- 2) Estimate the number of people necessary for administering the vaccines.
- 3) How long would it take to vaccinate 70% of your region/country? so that herd immunity can be attained?
- 4) Come up with a plan to distribute vaccination appointments, to fairly distribute the vaccines available. Consider risk groups and people exposed to higher infection risks – risk groups could be children (e. g. Polio), elderly people (e. g. Covid-19) or other groups depending on the disease.

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