

Correction: VIDEO: the guardian, can you get coronavirus twice?

Use your knowledge to explain why most of the time we are not affected by a disease we already encountered.

When our body is infected by a pathogen, it produces memory cells specific to this particular pathogen.

Indeed, when the adaptive response is triggered, CD4 T lymphocytes multiply and both effector and memory cells are produced. The same process produces memory CD8 T lymphocytes and memory B lymphocytes when their activation is triggered. This stage of the life of these cells is called amplification.

When the adaptive response stops because all pathogens are destroyed, memory cells last and they are able to trigger a faster response in case of a second infection.

As a result, if it happens, the virus, or bacterium, will be killed so fast that the person will not experience any symptoms.

According to Hannah Devlin, can we get the coronavirus twice and, if yes, how could it be possible?

She says that even though we have reports that talk about people being reinfected, we must be careful because of several reasons:

- Possibility of false negative
- Technical errors (not enough the sample was taken)

She thinks we need to stand back and wait in order to lead good conclusions about long term immunity in the case of corona virus.

Indeed, even if our body can get immune against disease, Hannah tells us that, in certain cases, our immunity can wane over time. In other cases, the virus can mutate and the next time we get infected, we're not immune anymore.

Anyway, she also teaches us that people affected by serious symptoms of past diseases seemed to have a bigger reserve of immune cells and stronger defences against a reinfection.

As a conclusion, it's difficult to know how the situation is going to evolve with covid-19. We need more time and more knowledge about the behaviour and the characteristics of this virus.