

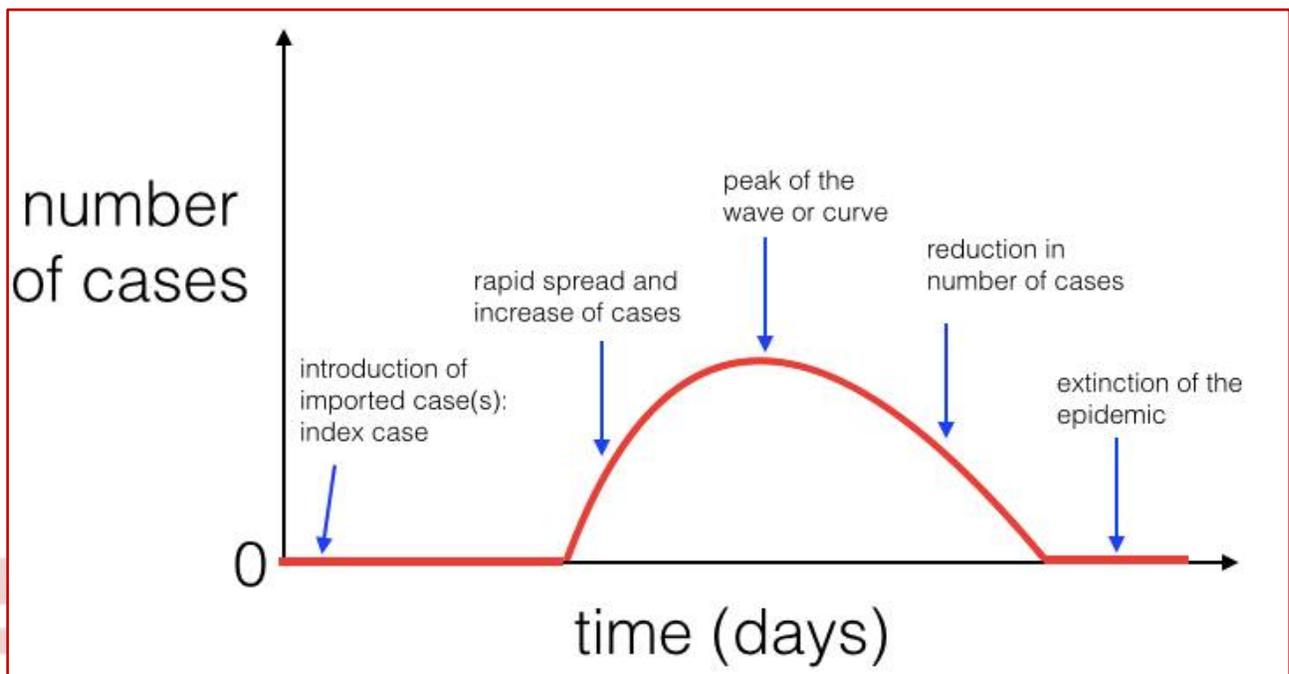
# Briefer on How an Epidemic Happens and What is an Epidemic Wave

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The COVID-19 epidemic in the Philippines has most likely started with an imported case from an infected person or persons who entered the Philippines. This infected person or persons with the virus is/are the index case(s) that spread the virus to others locally. The index case(s), especially those that did not cause local transmission, does not form part of the epidemic wave.

When the virus is transmitted locally to other people, there is an incubation period. For COVID-19, the incubation period (meaning the virus infecting the new host but without any symptoms/clinical signs yet) can be on average 5.2 days up to 14 days. That is why you see a flat line after the introduction of the index case (see Figure).



After the incubation period, newly infected hosts develop symptoms and clinical signs – that is why they seek medical attention. In addition, because of the threat of the pandemic, our country increased its vigilance and capacity to screen more people. Hence, you can see the rapid spread and increase of cases (see Figure). The ease of movement of people by plane, land transportation, or boat made it very easy to spread the virus across the Philippines. Hence, we have an epidemic (meaning it has spread all over to many provinces and infecting thousands of people).

We will know that we have reached the peak of the curve when the net increase in the number of active cases is starting to decline (because of lockdowns, country-wide vigilance, etc.). Eventually, there will be reduction in number of cases (where the number of infected people recovering will be higher than those becoming infected). Then there will be a point where there are no more cases. That's when we know the epidemic has stopped.

That curve from the rapid rise of local cases to reaching the peak to reduction in number of cases to the extinction of an epidemic is one epidemic wave. I did not include the index cases that started the epidemic in the "wave". They acquired infection elsewhere out of the country.

*Note: The term epidemic instead of Pandemic was used because the COVID-19 infection is spreading locally. It is a pandemic because it is now in 213 countries and territories infecting millions of people. This is just a simplified curve or wave for an epidemic. It can be more complex when we plot actual data.*

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