

# COVID19\_PH : Epidemiological models of COVID-19 in the Philippines

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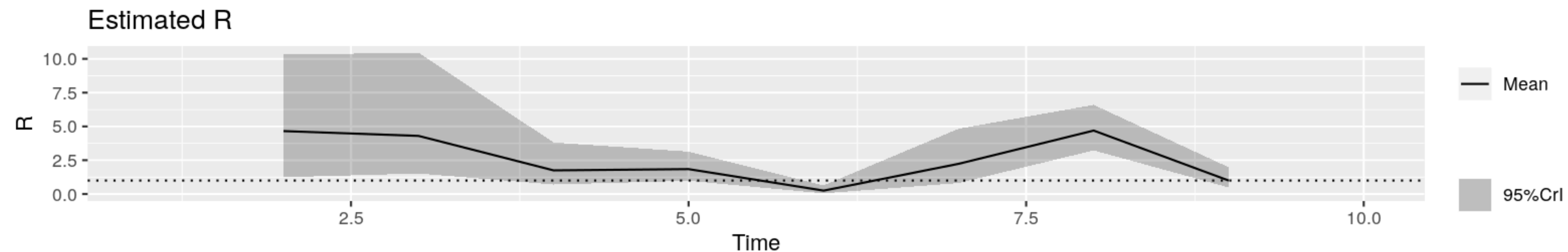
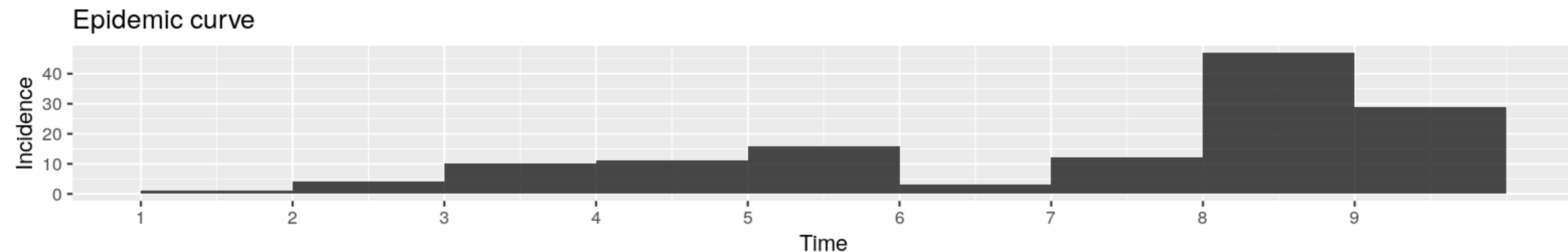
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# COVID-19 reproductive number for Philippines

**Current (March 15, 2020) : 2.5 (CI 95% 1.1-2.5)**

Previous: (March 13, 2020): 2.7 (CI 95% .8- 4.8)

Interpretation: Disease continues to spread if  $R$  is  $> 1$



What is **reproductive number**?

Reproductive number (R) is an epidemiological metric of **contagiousness or transmissibility of infectious agents.**

**How do we interpret R?**

R value of  $>1$  means the disease will spread

R value of  $<1$  means disease will not propagate

# Epidemiological model of COVID19 outbreak in the Philippines

- 1.) Determine when is the **peak** of the outbreak
- 2.) Calculate projected number of cases of COVID-19 in the Philippines

## **Epidemiological Model parameters:**

initial\_population\_size:

desc: 'initial number of individuals in the population'

value: 100000

initial\_infected:

desc: 'initial number of infectious individuals in the population'

value: 10

transmission\_l:

desc: 'transmission rate from infectious individuals (/day)'

value: 0.189

recovery:

desc: 'recovery rate (/day)'

value: 0.07

