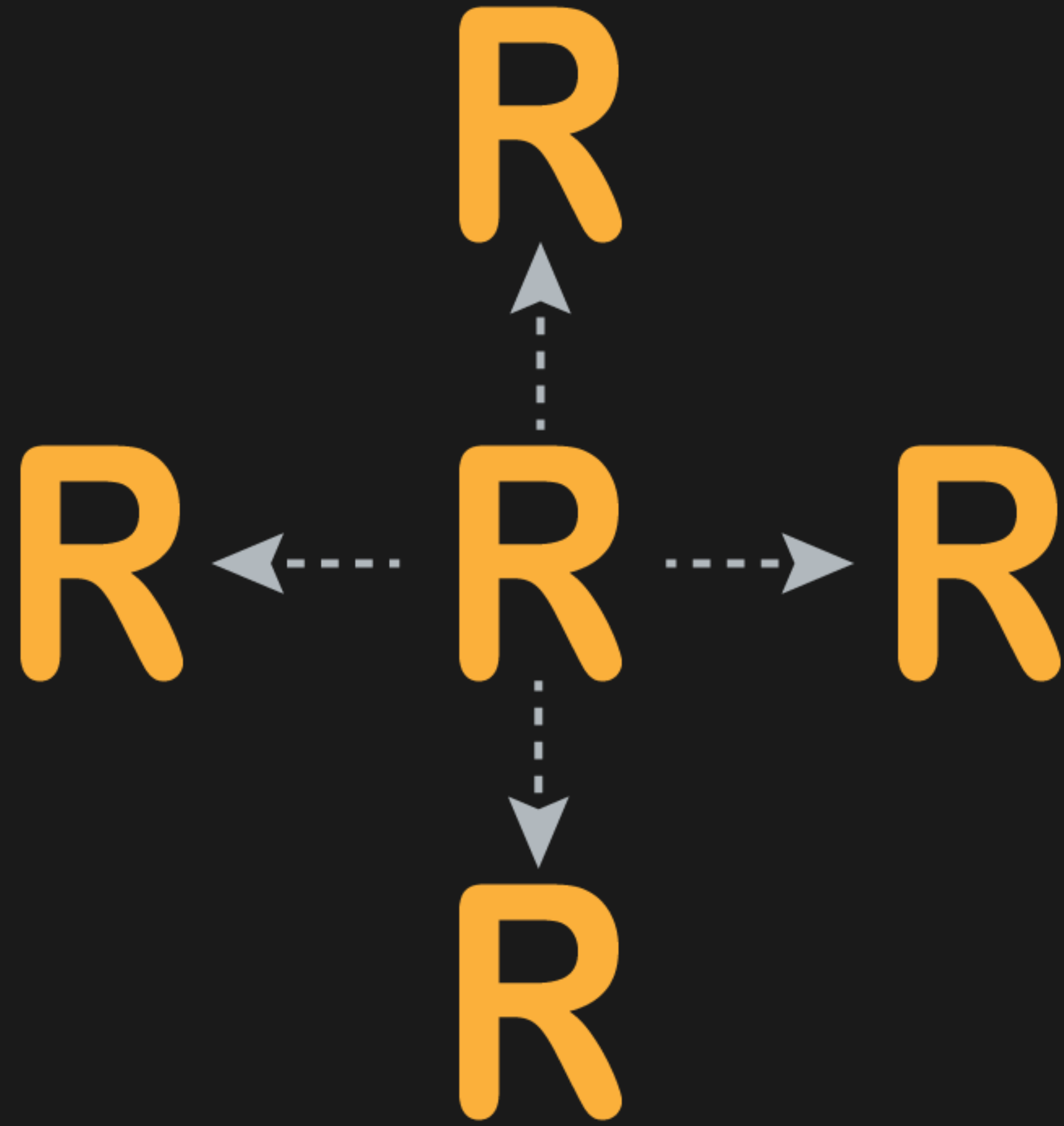


What is the 'R' number?

You might have heard the government talk about the

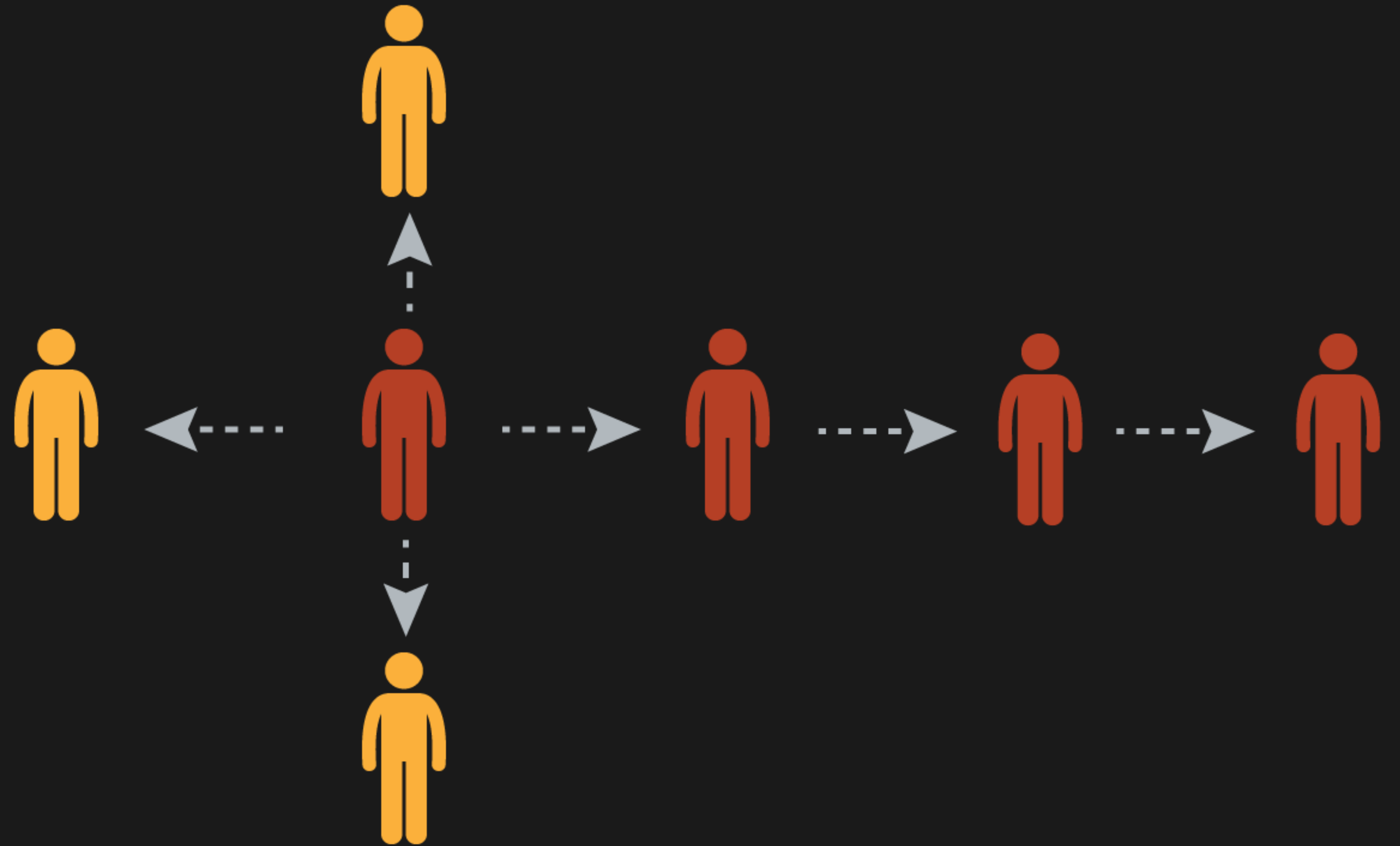


It is one of the most important numbers of the
coronavirus pandemic.



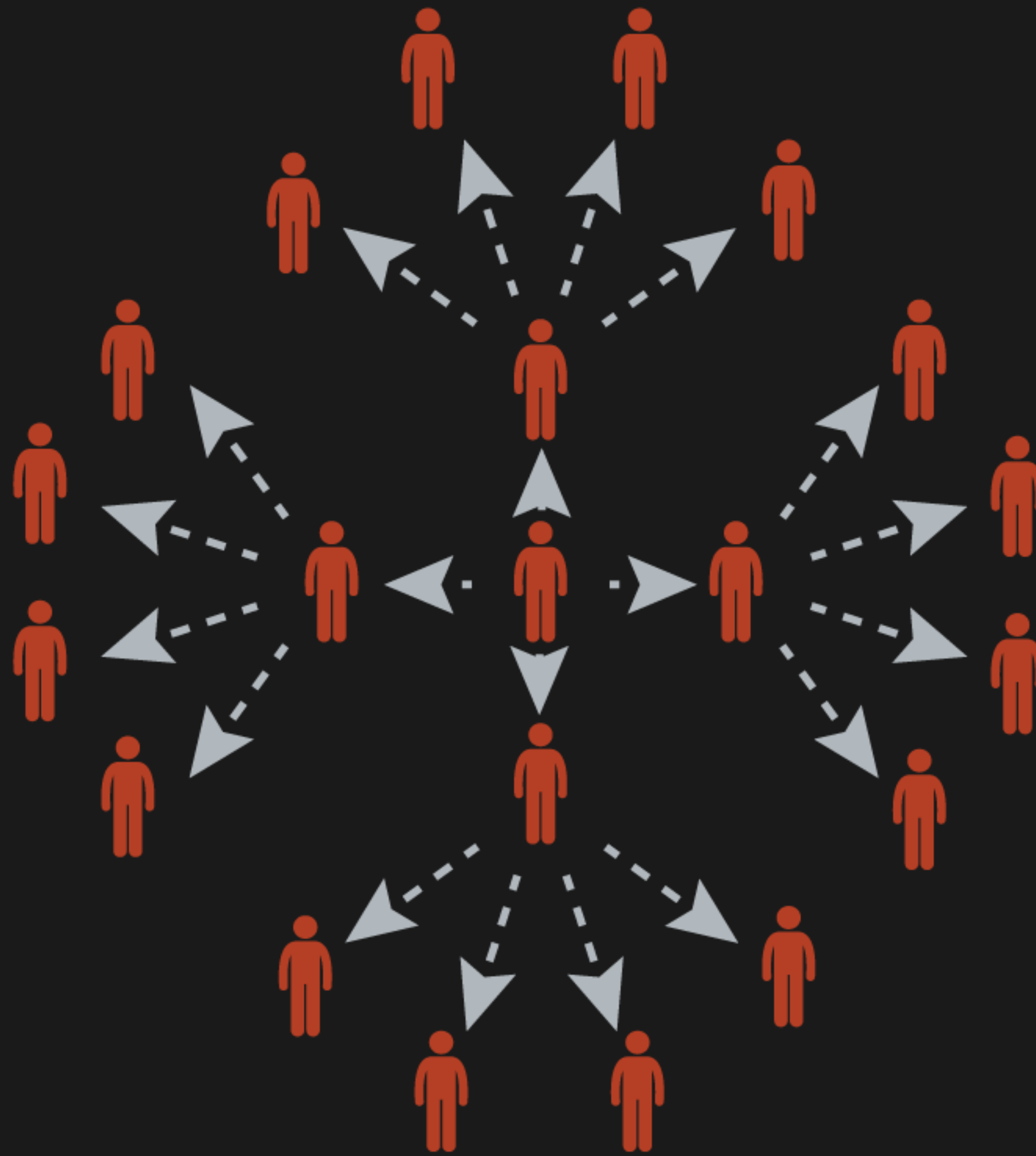
'R' stands for reproduction. It says how many people each person who has a disease will infect.

$R=1$

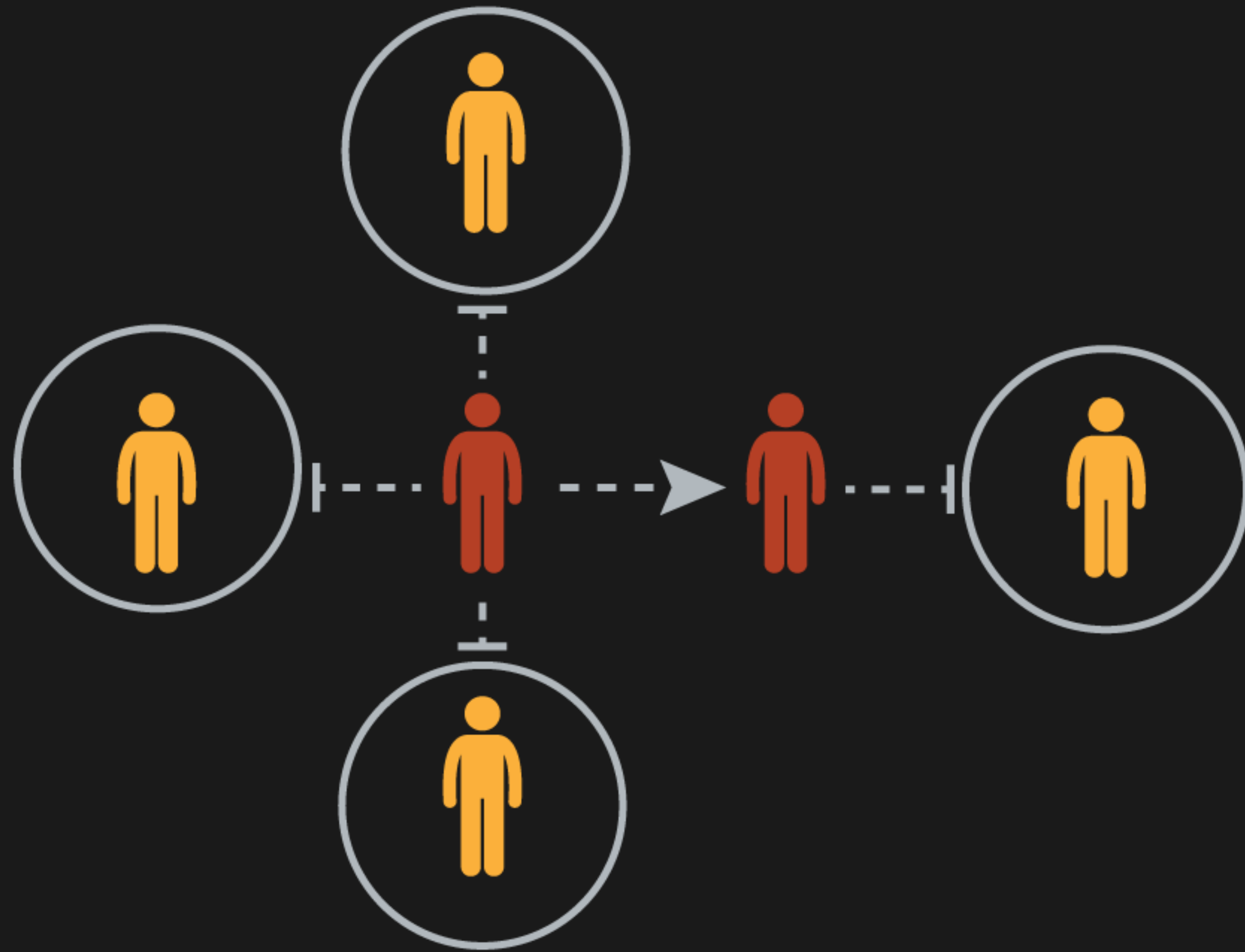


If the 'R' number is 1,
1 person with coronavirus will infect 1 other person,
who will then infect another person.

R=4



If the 'R' number is 4, 1 person with coronavirus will infect 4 other people, who will then infect another 4 people.

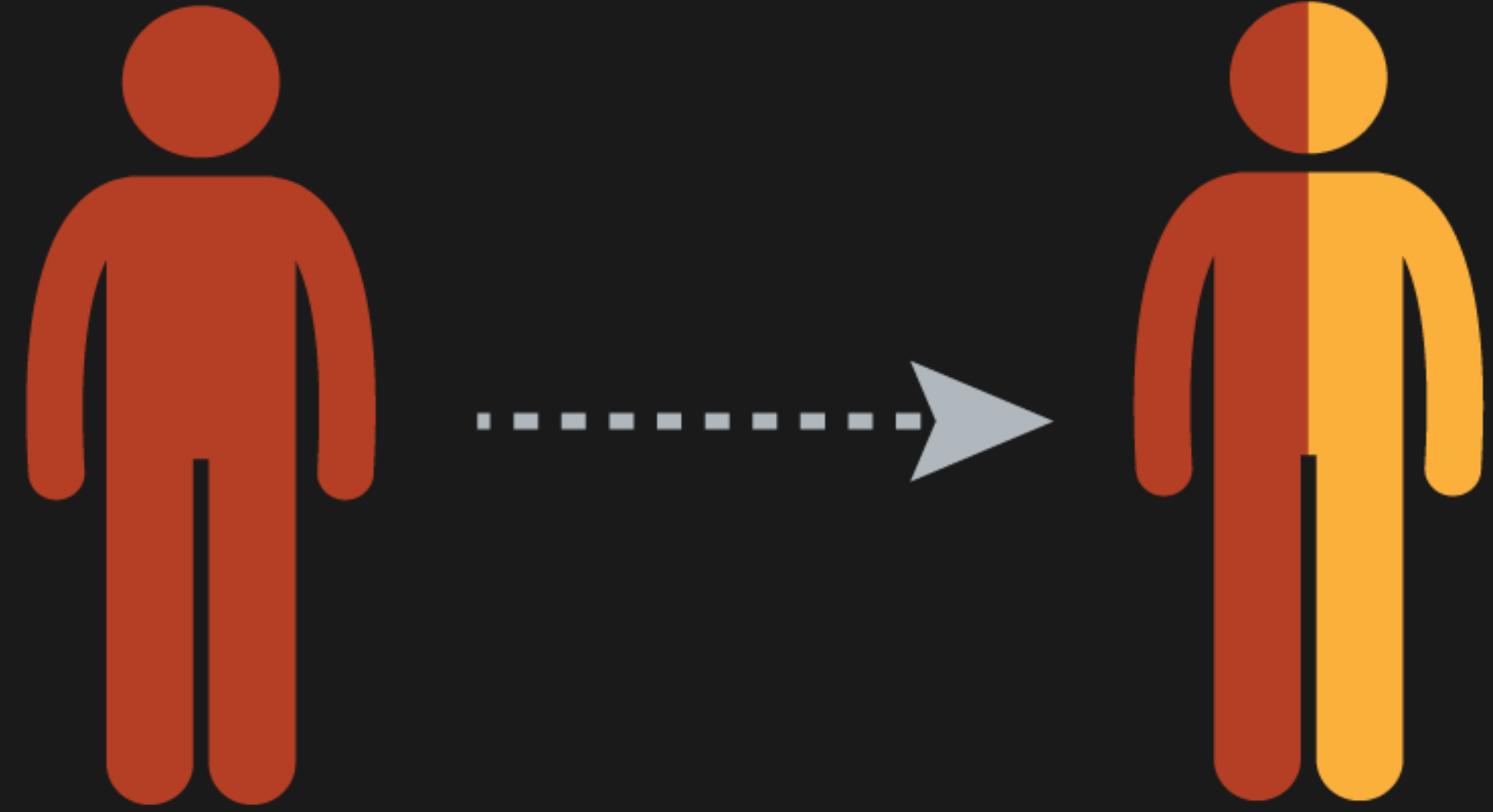


The 'R' number can change. It depends on how many contacts people have with others.

It has changed since we have been on lockdown.

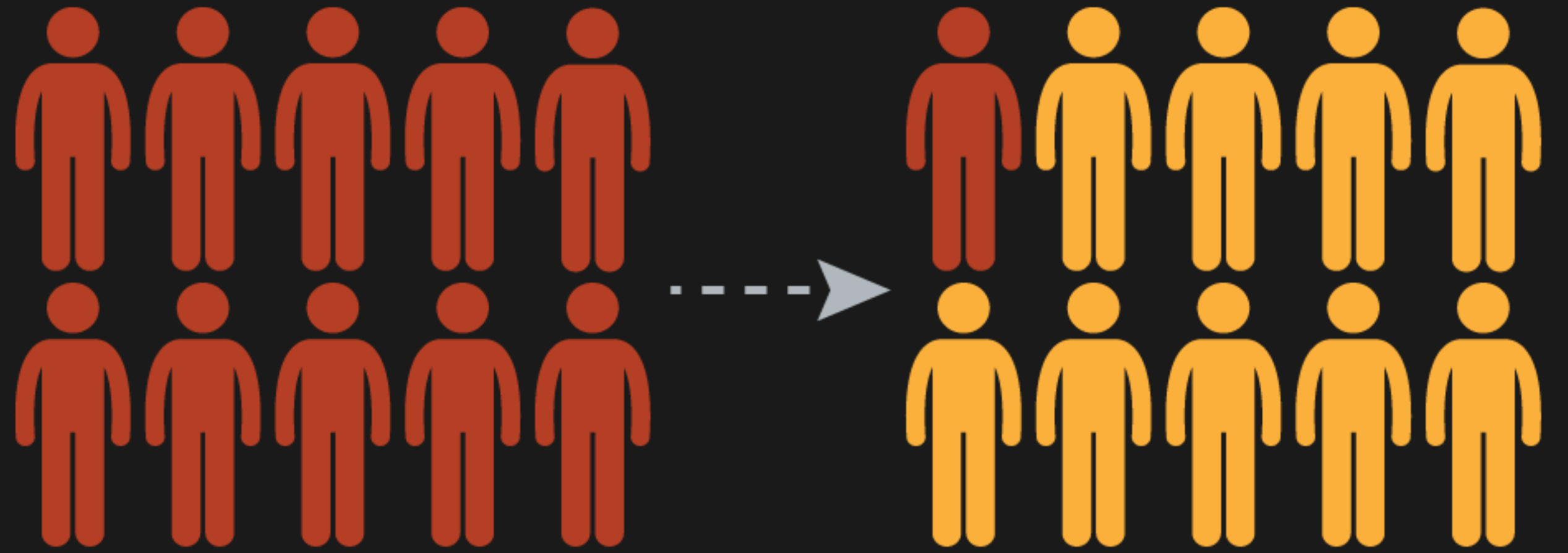
Why is it important?

$R=0.5$



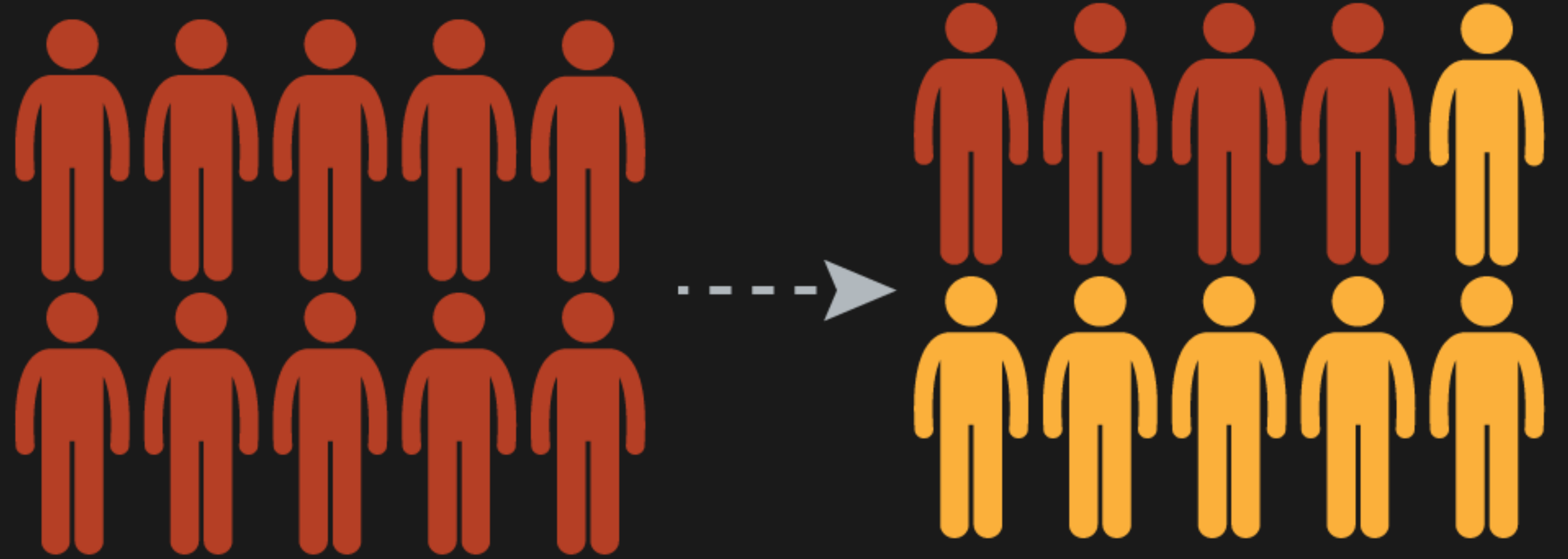
As long as the 'R' number is less than 1, every person who has coronavirus will on average infect less than 1 person per day.

$R=0.1$



If the 'R' number is 0.1,
for every 10 people already infected with coronavirus,
there would be just one new person infected each day.

$R = 0.4$



If the 'R' number is 0.4,
for every 10 people already infected with coronavirus,
there would be just 4 new people infected each day.

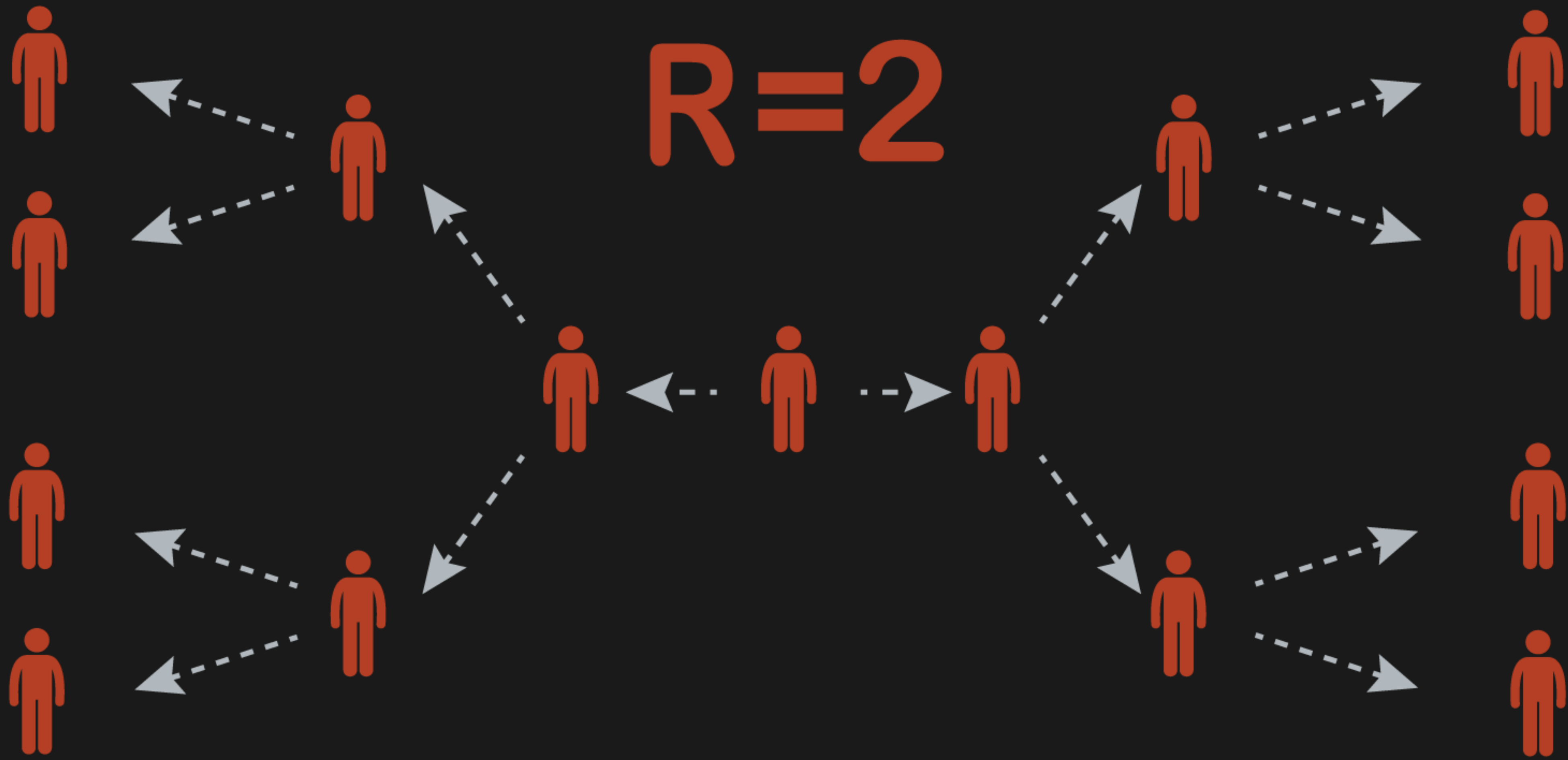


$$R=0.01$$

This means that as the 'R' number gets smaller the number of people with coronavirus will get less and less.



The virus will then eventually stop.
This is why it is important to carry on social distancing.



If the 'R' number was to go back above 1,
more people will get coronavirus.
This means we could have another outbreak.