

Ever Heard about Herd Immunity

Introduction

Herd immunity is name given to the concept that more people who acquire immunity against the virus, the less likely it is for the virus to be spread! One way to reduce the spread of virus is by **vaccination**. Vaccines are a safe way to build immunity and stop the virus from spreading!

The aim of this activity is for you to see what impact high infection rates have on the community and how herd immunity can help reduce virus spread.

Prepping for the activity

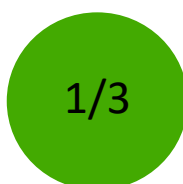
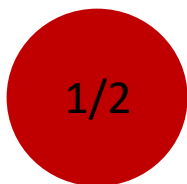
Materials

- 2-3 wooden block towers
- 3 x Different coloured stickers



Preparation

- Blocks in each tower get a different coloured sticker. The sticker colour represents the proportion of the population that is infected with a virus:
 - Red = $1/2$ of the population
 - Green = $1/3$ of the population
 - Blue = $1/4$ of the population



- Add a different coloured sticker to each tower with
 - Red sticker covering half of the blocks
 - Green stickers covering one third of the blocks
 - Blue stickers covering one quarter of the blocks

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Activity

- Gather the pupils into groups, 3-4 pupils per group
- Ask each pupil to remove a block with a sticker on it; this represents “infected people”
- Keep going around until the tower collapses
- Record how difficult it is to remove the bricks from each tower. And how many bricks are removed prior to the tower collapsing.



Length of time

- The activity should take 15-20 minutes

What to expect and post game discussion

- The blocks from the tower with the least infected people should be easiest to remove without the tower collapsing.
- This highlights that a community is more stable when there are more people with immunity (unlabeled blocks) illustrating **herd immunity**

Questions:

- What is herd immunity?
- Which tower illustrates the consequences of herd immunity?
- How is herd immunity best achieved?
- What factors limit herd immunity/ promote herd immunity?

