



Herd Immunity Scenario: Teacher Answer

Number of students vaccinated

| Day | 25% | | 50% | | 75% | |
|-----|-----|--|-----|--|-----|--|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |

The results in this table will vary depending on the number of people in the class and where the vaccinated people are positioned in relation to the susceptible people. There will however be a decreasing trend of infected people as more people get vaccinated.

As more people get vaccinated, what happens to the spread of the infection?

> Vaccination programmes make it extremely difficult for diseases to spread in a community. As more people get vaccinated or become infected and develop natural immunity, they become immune to the disease therefore the disease cannot spread.

Conclusions

What is herd immunity?

Herd immunity (or community immunity) describes a type of immunity that occurs when vaccination of a portion of the population or becoming infected and developing natural immunity, provides protection to unprotected individuals.

What happens when vaccination drops to a low level within the community?

When the vaccination drops to a low level, people start contracting the disease again leading to a re-emergence of the disease.

Why is a vaccine regarded as a preventative measure and not a treatment?

Vaccines are used to boost the body's immunity so that when a microbe does enter the body, the immune system is ready to fight it preventing the microbe from causing serious infection.