

What do you understand by herd immunity? How it can be achieved? Discuss it in the light of recent COVID 19 pandemic.

What is herd immunity

- When most of a population is immune to an infectious disease, this provides indirect protection – or herd immunity to those who are not immune to the disease.
- For example, if 80% of a population is immune to a virus, four out of every five people who encounter someone with the disease won't get sick (and won't spread the disease any further).
- In this way, the spread of infectious diseases is kept under control. Depending how contagious an infection is, usually 50% to 90% of a population needs immunity to achieve herd immunity.
- Herd immunity makes it possible to protect the population from a disease, including those who can't be vaccinated, such as newborns or those who have compromised immune systems. Examples Measles, mumps, polio, and chickenpox are examples of infectious diseases that were once very common but are now rare because vaccines helped to establish herd immunity.

How is herd immunity achieved

- Herd immunity may be achieved either through
- infection and recovery vaccination

Herd Immunity and COVID - 19

Vaccines

- A vaccine for the virus that causes COVID-19 would be an ideal approach to achieving herd immunity. Vaccines create immunity without causing illness or resulting complications.

Challenges

- Reaching herd immunity through vaccination sometimes has drawbacks, though.
- Protection from some vaccines can wane over time, requiring revaccination.
- Sometimes people don't get all of the shots that they need to be completely protected from a disease.

- In addition, some people may object to vaccines because of religious objections, fears about the possible risks or skepticism about the benefits.

Natural infection

- Herd immunity can also be reached when a sufficient number of people in the population have recovered from a disease and have developed antibodies against future infection

Challenges

However, there are some major problems with relying on community infection to create herd immunity to the virus that causes COVID-19.

- First, it isn't yet clear if infection with the COVID-19 virus makes a person immune to future infection.
- Even if infection with the COVID-19 virus creates long-lasting immunity, a large number of people would have to become infected to reach the herd immunity threshold.

Conclusion

In the absence of a vaccine or drug, and without a clear understanding of the disease pathology, seeking to achieve herd immunity through infection is a dangerous strategy. Allow the disease to spread too quickly, it overwhelms the health system and causes many people to die “unnecessarily”; do it too slowly, and it takes that much longer for life to come back to “normal”. Therefore, for almost all countries, at this juncture, it is a cruel choice between saving lives and saving livelihoods.

