

Vaccination against COVID-19

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graph TD; A[Prevent serious illness/mortality] -.-> B[Transmission]; A -.-> C[Duration of immunity]; A -.-> D[Safer workplace and travel];
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Prevent serious illness/mortality

Transmission

Decrease transmission (lower viral load)
Eliminate nasal carriage
Herd immunity effect

Duration of immunity

Revaccination
Variant escape

Safer workplace and travel

Immunity/vaccination passport
personal protection
protection of others

Diagnostic testing during the COVID-19 pandemic

Activity	Purpose	Role of testing	Required test attributes
ILI Surveillance	Outbreak alert	Detect outbreak	Highly sensitive and specific
	Patient diagnosis	Patient management	Highly specific
	Genetic epidemiology	Identify variants	Highly sensitive and specific
	Vaccine efficacy	Identify correlate of protection	Highly sensitive
Patient management	Hospital discharge	Ensure that patients are not infectious on discharge from health facility	Highly sensitive and specific
Contact tracing	Confirm infection in self-isolating persons	Identify infected contacts from those who become sick	Highly sensitive and specific
Immunity profile community	Epidemiological study	Determine populations at risk	Highly sensitive
Workplace/ travel	Worker and travel safety	Rapid screening before entry	Highly sensitive and specific
Need to vaccinate/ revaccinate	Immune passport (?) Booster dose (?)	Identify correlates of protection	Highly sensitive