Establishing Medical Need
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Course Number PB-VI01P: Development of a Vaccine During a Pandemic
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Key Components

• Epidemiology of the Disease:
  • Asymptomatic infection, illness, severe illness, death?

• Target Population for Vaccination:
  • High-risk group(s) vs. General Public?
    • Children??

• Disease Burden:
  • Death vs. hospitalization vs. long term disability?
  • How do you quantify these outcomes?
    • QALYS and DALYS
Health Economics

• Cost benefit analysis:
  • Direct medical costs of the disease vs. direct medical costs of the immunization intervention
  • Indirect costs of the disease vs. the intervention:
    • Lost economic productivity, school absenteeism......
  • Eradication vs. Control
    • Eradication: costs are time limited, benefits are not
    • Control: costs are ongoing