

Category 2

Pathogen with Enhanced Pandemic Potential (PEPP) builds on the definition of Pathogen with Pandemic Potential (PPP). PPP is defined as “a pathogen that is likely capable of wide and uncontrollable spread in a human population and would likely cause moderate to severe disease or mortality in humans.”

PEPP is a type of PPP “resulting from experiments that enhance a pathogen’s transmissibility or virulence, or disrupt the effectiveness of pre-existing immunity, regardless of its progenitor agent, such that it may pose a significant threat to public health, the capacity of health systems to function, or national security.”

It is important to note that wild-type pathogens from nature are not PEPPs but may be considered PPPs because of their pandemic potential. Additionally, the wild-type pathogen (not enhanced) also does not necessarily need to begin as a PPP to result in a PEPP.

- Exhibit sustained human-to-human transmission
- Uncontrollable spread (lack of pre-existing immunity, environmental stability, respiratory transmission, no available vaccine/treatment)
- Likely cause moderate to severe disease and/or mortality in humans

SARS CoV-2 PPP in 2020, not PPP in 2024

- When the starting agent is a **PPP** and the research is reasonably anticipated to result in one of the experimental outcomes to produce a **modified** pathogen that meets the definition of a **PEPP**.
- When the starting agent is a **not a PPP** and the research is reasonably anticipated to result in one of the experimental outcomes to produce a modified pathogen that meets the definition of a **PEPP**.
- When one transfers, generates, uses, or reconstitutes an **extinct or eradicated PPP, regardless of whether** the extinct or eradicated pathogen will **be enhanced** relative to its wild-type form.