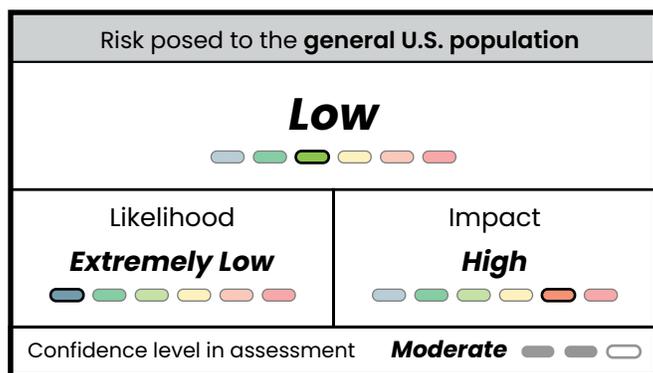# What is a Qualitative Risk Assessment?

A qualitative risk assessment is a rapid assessment of public health implications of an outbreak that:

- Elucidates key drivers of disease spread and impact, as well as uncertainties
- Assesses risk for the general U.S. population and specific populations at higher risk or of interest to decision-makers
- Can be updated over time as new information becomes available

Risk assessments support public health and national security decision-making:

- Can be used early in an outbreak when data are limited — later integrating more data and analyses, including modeling
- Applies to any type of outbreak, facilitating risk comparison and communication across diseases

To assess risk, we determine both the likelihood and impact of an outbreak. Confidence in the assessment is based on the amount and quality of evidence.

Likelihood
Probability or extent of exposure/infection across the population of interest

- Number of people exposed and/or infected
- Population prevalence of infection
- Pathogen infectiousness & population immunity against infection
- Response capacity to limit spread

Impact
Collective impact of individual infections and other population impacts

- Disease severity
- Population immunity against severe disease
- Resources available to limit impact
- Societal impact

Confidence
Level of confidence in the assessed risk

- Quality of evidence
- Availability and gaps in evidence
- How well lines of evidence corroborate each other

Risk posed to the **general U.S. population**	
Low	
Likelihood	Impact
Extremely Low	***High***
Confidence level in assessment	***Moderate***

*In this example risk assessment for Marburg virus disease, the likelihood is **extremely low** and the impact is **high.** The overall risk, which is a combination of likelihood and impact, is **low.** Confidence is **moderate.***

Scan the QR code to learn more about CFA's risk assesssment methods

U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION

www.cdc.gov/forecast-outbreak-analytics