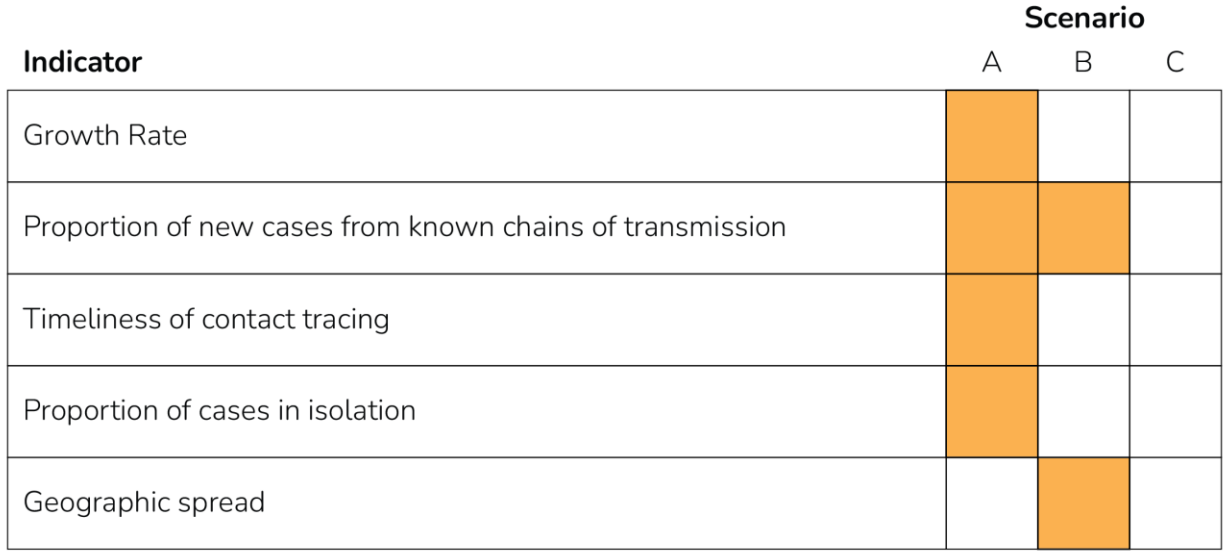
Scenario Assessments-Example

Practical Modeling Concepts for Public Health

Assess the current scenario

- **Example:** Marburg virus disease in Ethiopia
- Use available evidence
  - Historical outbreaks
  - Current outbreak situation e.g., growth rate, contact tracing efforts, cases in isolation, and geographic spread
- Incorporate expert judgement and data as appropriate
- Note any areas of uncertainty
  - E.g., ongoing surveillance efforts, potential for undetected chains of transmission, potential for spread, and availability of medical countermeasures



Indicator	Scenario A	Scenario B	Scenario C
Growth Rate	■		
Proportion of new cases from known chains of transmission	■	■	
Timeliness of contact tracing	■		
Proportion of cases in isolation	■		
Geographic spread		■	

Marburg virus disease in Ethiopia = Scenario A

Scenario assessment: Marburg Virus Outbreak in Ethiopia | CFA: Qualitative Assessments | CDC

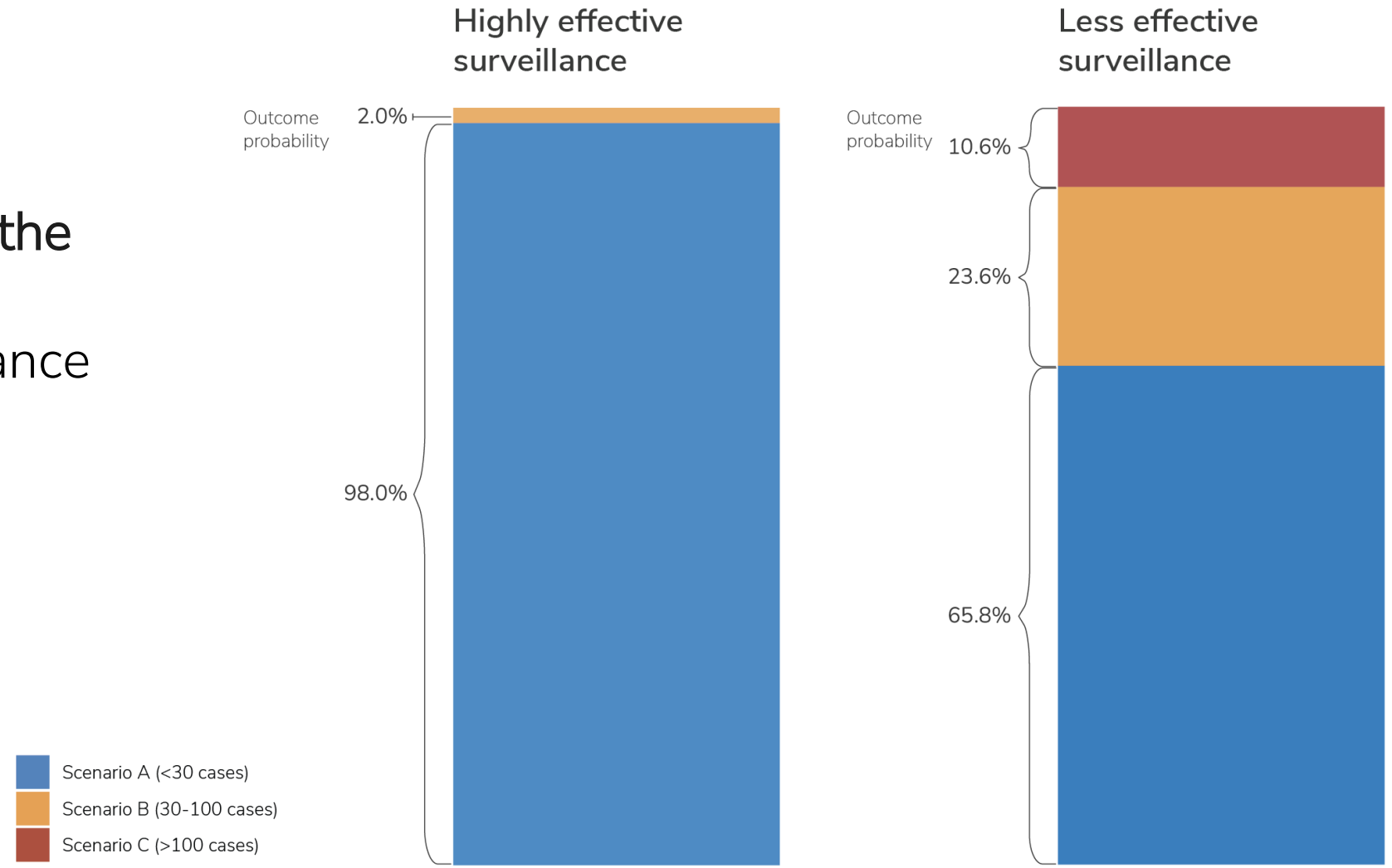
Incorporate modeling insights

- *When appropriate and available*, insights from modeling can be incorporated to answer decision-maker questions, such as:
  - How effective could the available interventions be?
  - What are the most important sources of uncertainty in the outbreak, and how much will what we don't know impact its progression?

- Modeling can be included at a range of levels, depending on data availability and questions of interest:

Incorporate modeling insights

- **Example:** Marburg virus disease in Ethiopia
- **Modeling helped bolster the qualitative analysis** by underscoring the importance of highly effective surveillance on outbreak mitigation.



[Scenario assessment: Marburg Virus Outbreak in Ethiopia | CFA: Qualitative Assessments | CDC]

Scenario assessments outline what could occur in the coming weeks to months of an outbreak, even with limited data.

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov