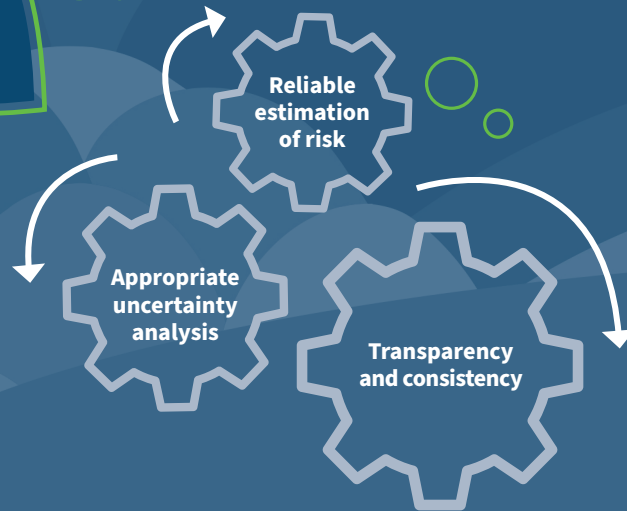


Microbiological Risk Assessment (MRA) for Food



MRA should be based on the best available science.

DATA should be of sufficient quality and any data gaps identified.

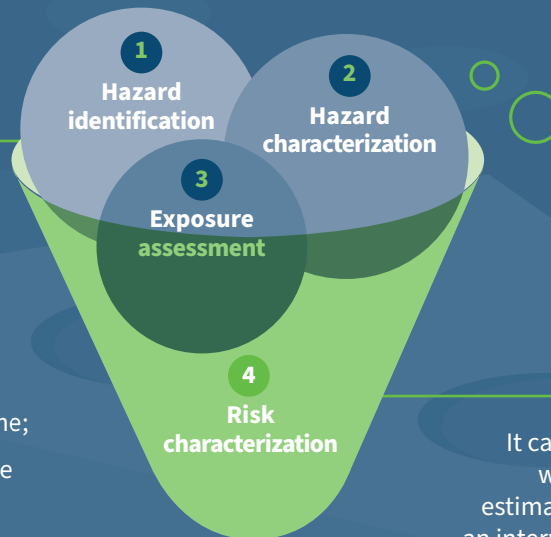


MRA: a structured approach that can be tailored to answer specific questions about risk or risk reduction.

All assumptions and their consequences for the risk estimates, and sources of variation and uncertainty should be fully presented and acknowledged.

MRA is a science-based process made up of four steps

- 1 **Hazard identification:** Microbial hazards in foods include infectious agents or toxins produced by microorganisms;
- 2 **Hazard characterization** is based on the adverse effects that can arise following ingestion;
- 3 **Exposure assessment** evaluates the likely amount of hazard a population may ingest over time;
- 4 **Risk characterization** is the integration of these three – an estimate of likelihood and severity of an adverse effect in a population.



MRA is a versatile tool

It can provide risk managers with best or comparative estimates of risk, and estimate an intervention's impact on risk.

Risk analysis

Risk Analysis results in better food safety outcomes, and improvements in public health and market access.

