

Tribal Community Engagement for Wastewater Testing of Infectious Diseases

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INTRODUCTION

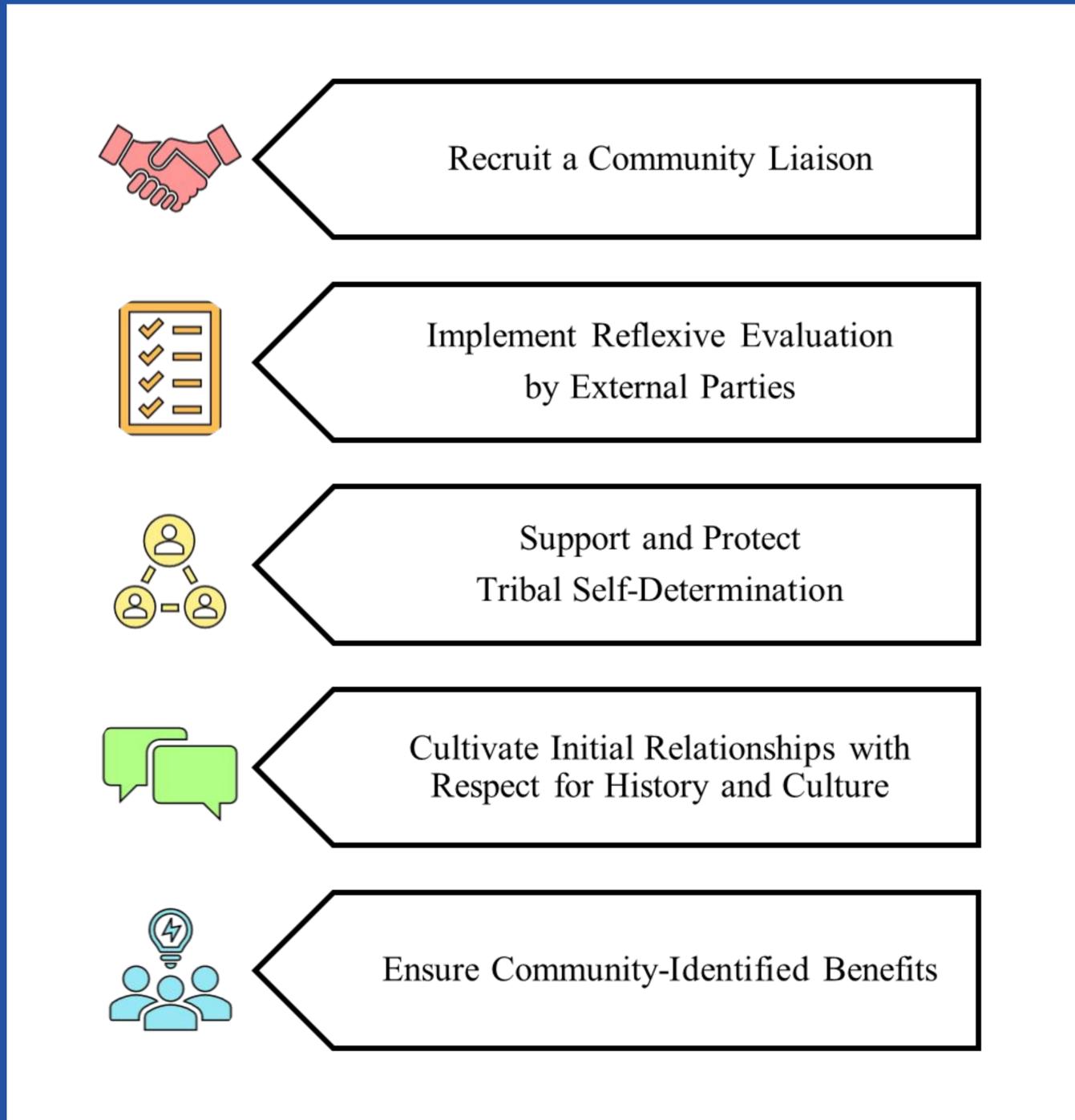
- WBE can support health equity, but ethical, culturally aligned approaches are essential to address historical harms and build trust with Indigenous communities.
- The principles of IRM include the 6 R's (Relationship, Respect, Responsibility, Representation, Relevance, Reciprocity) and Tribal Self-determination.

Relationship	•Emphasizes building trust and ongoing rapport through continuous engagement
Respect	•Acknowledges cultural norms and honors Indigenous traditions and values
Responsibility	•Involves active participation and co-creation in projects, ensuring accountability
Representation	•Prioritizes Indigenous voices in guiding project directions and outcomes
Relevance	•Aligns projects with needs that Tribal communities have identified
Reciprocity	•Promotes collaborative and equitable exchanges of benefits
Tribal Self-determination	•Recognizes Tribal governance, autonomy, and supporting data sovereignty

METHODS

- A descriptive, non-experimental approach was used to select and analyze three case studies for adherence to the IRM principles. These studies were chosen for their relevance to public health policy, internal Tribal dynamics, and frameworks promoting self-reflection and continual improvement in Tribal community engagement.

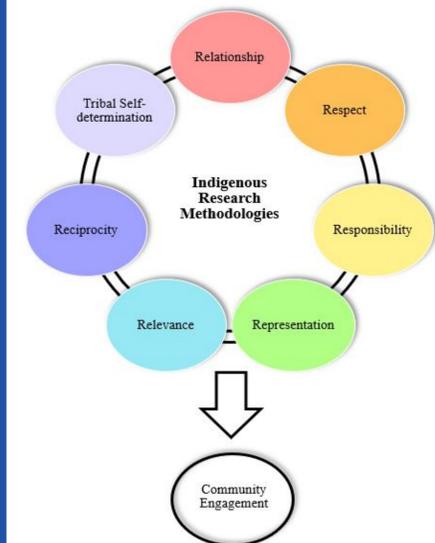
Integrating Indigenous Research Methodology (IRM) principles into wastewater-based epidemiology (WBE) projects fosters collaborative, effective partnerships with Tribal stakeholders, empowering these communities and ensuring that public health actions are shaped by and responsive to Indigenous voices and needs.



These recommendations are derived from the lessons learned in the case studies. By following these guidelines, WBE projects can be developed and implemented with a deep understanding and respect for the cultural and ethical considerations of Tribal communities.

DISCUSSION

- The case studies reveal that even without explicitly referencing Indigenous Research Methodologies (IRMs), successful engagement with Tribal communities naturally aligned with IRM principles.
- Recommendations were developed based on lessons learned from the case studies and grounded in the principles of IRM to support more equitable partnerships.



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