Kenya Cholera Response

Artificial intelligence supported listening to communities for cholera

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WHO Kenya

World Health Organization

In Numbers: Cholera Outbreak at its peak in 2025

423

Cases

51% men, 49% Women.

46%

of the cases are aged

between 15 - 44 years old

20

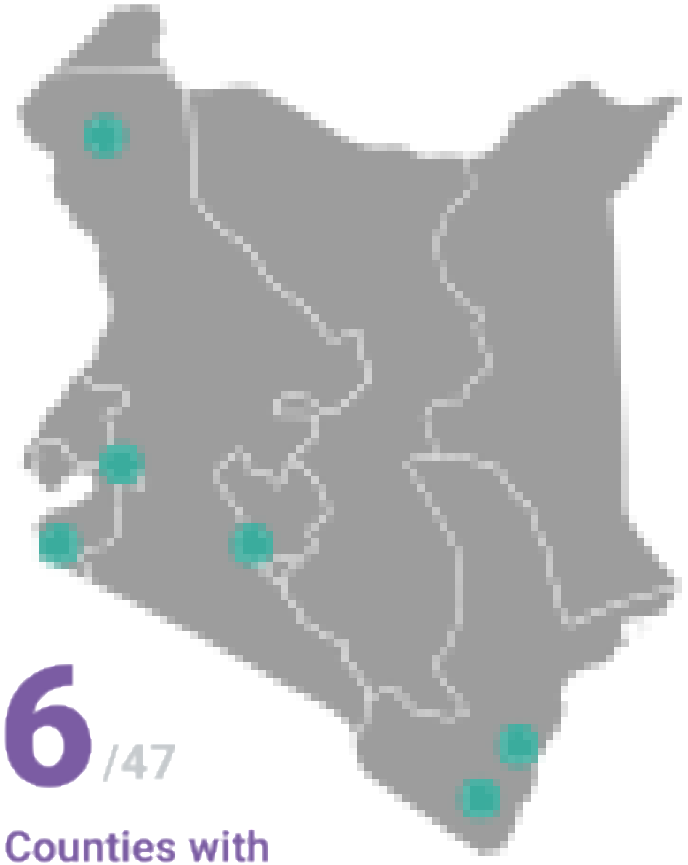
Loss of life

Case Fatality Rate 4.8%

99

Cases confirmed

the presence of Vibrio cholerae serogroup O1, biotype Ogawa.



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Counties with confirmed cases

Counties include **Kisumu, Nairobi , Migori, Turkana, Mombasa and Kwale**

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How community data was collected

Use a combination of **AI-powered social listening platforms and real-time data analytics tools** to generate actionable infodemic insights, which are synthesised into WHO social listening reports to inform response interventions

Multi-platform social listening across X, Facebook, TikTok, Instagram.

Keyword and hashtag tracking using disease-specific and local terms.

Used disease-specific keywords (e.g., mpox, Ebola, cholera, HIV, Marburg) and local terms/slang to capture relevant conversations

Geographic filtering focused on Kenya-specific conversations, with deeper attention to affected counties (e.g., Narok, Nairobi, Turkana, Migori)

Incorporated feedback from community inputs such as CHVs, radio, and local WhatsApp groups

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AI-assisted scanning of large datasets data collection:

Leveraged AI tools to:

- Rapidly scan large volumes of social media content
- Identify trending topics and emerging narratives
- Surface high-engagement posts and recurring themes

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How data was analysed

Sentiment analysis:
Classified discussions into fear, panic, skepticism, trust, or neutrality to understand public perception

AI-supported analysis:
AI used to :
- Categorize large datasets into themes quickly
- Detect patterns and anomalies in conversations
- Summarize high-volume discussions into actionable insights

Thematic clustering:
Conversations grouped into recurring themes (e.g., stigma, distrust, knowledge gaps)

Trend identification:
Monitored:
Spikes in conversations
Re-emergence of past misinformation narratives
Geographic spread of concerns

Human validation layer:
All AI outputs were reviewed and contextualized to ensure:
- Cultural relevance (Kenyan context)
- Accuracy and nuance
- Alignment with public health priorities
- Respect of ethical rules in social listening

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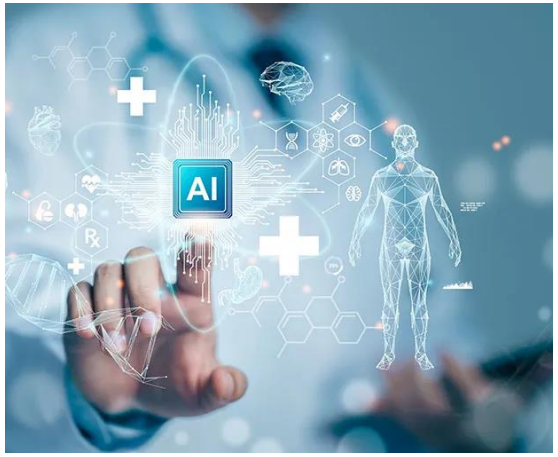
Infodemic Insights Generation

Detection of information gaps:
e.g., low awareness of symptoms, confusion on transmission, low risk perception

Identification of misinformation narratives:
e.g., conspiracy theories, false transmission routes, distrust in institutions



Understanding community concerns:
e.g., school safety (mpox), border control (Marburg), stigma (HIV), water safety (cholera)

Localization of insights:
Insights broken down by:

- County (e.g., Narok, Nairobi, Turkana)
- Population groups (youth, traders, border communities)
- Early warning signals:
  Identification of emerging narratives before they escalate into widespread misinformation

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From insight to action

Actionable Recommendations Developed:

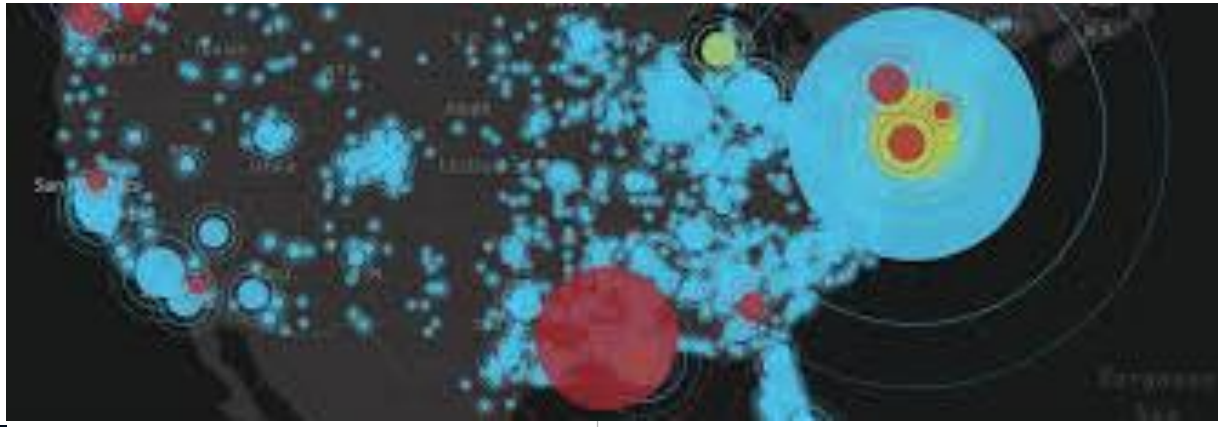
Tailored to:

- Ministry of Health
- County health teams
- Risk Communication (RCCE) partners

Targeted Communication Strategies:

Suggested channels:

- Local radio stations
- WhatsApp groups
- Community barazas
- Social media platforms



Pre-bunking approach:

- Addressed potential misinformation before it spreads widely

Support to outbreak response:

Insights used to:

- Improve messaging
- Strengthen community engagement
- Enhance trust in health interventions

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Innovation & Role of AI

Speed:
AI enabled real-time monitoring and rapid analysis of large datasets

Scalability:
Ability to track multiple disease outbreaks simultaneously

Early detection:
AI helped identify emerging narratives before they trend widely

Enhanced decision-making:
Combined AI insights + human expertise for accurate, context-aware reporting

Efficiency:
Reduced manual workload, allowing focus on interpretation and response planning

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