

## **Outbreak investigation: Gastroenteritis outbreak among Chapita village community members following a birthday party in Chipata District, August 2024**

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**CITATION:** Mulenga Chilambwe et al. Outbreak investigation: Gastroenteritis outbreak among Chapita village community members following a birthday party in Chipata District, August 2024. Journal of Interventional Epidemiology and Public Health. 2025; 8 (Conf Proc 4): 24.

**DOI:** <https://doi.org/10.37432/JIEPH-CONFPRO4-00024>

**LINK:** <https://afenet-journal.org/outbreak-investigation-gastro-enteritis-outbreak-among-chapita-village-community-members-following-a-birthday-party-in-chipata-district-august-2024/>

**RECEIVED:** 03/07/24 **ACCEPTED:** 11/08/24 **PUBLISHED:** 16/07/25

**KEYWORDS:** Poisoning, Munkoyo, Diarrhoea Outbreak

This is part of the proceedings of the Zambia Field Epidemiology Training Program Alumni Conference, September 11 – 13, 2024

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### **Introduction**

On 4th August 2024, the Chipata district health office received a notification of a suspected food poisoning outbreak in Chapita village a few hours after eating food from a birthday party. The cases presented with diarrhea, vomiting and abdominal pains. We conducted an outbreak investigation to determine the source of exposure.

### **Methods**

We conducted a retrospective cohort study. We interviewed community members to recruit party attendees and those who did not attend but still ate food from the party. A case was defined as anyone who developed acute watery diarrhoea between the 3rd and 4th of August with or without vomiting. For descriptive epidemiology, we presented frequencies, proportions attack rate and calculated risk ratio.

### **Results**

Seventy-one people were enrolled in the cohort, of these 44(61.9%) were female, Median age(range) was 18(0-84) years. Thirteen(18%) did not attend the party, 50(70.4%) got sick. Symptoms included

diarrhoea 50(70.4%) abdominal pain 51(76%), vomiting 31(43.7%), fever 11(15.5%) with 33(46.5%) presenting with dehydration. For exposure specific attack rates munkoyo 79.0% (49/62), nshima 71%(35/49) vegetables 68.8%(33/48) and chicken 65.4%(34/52). People who drank munkoyo were 7.1 times more likely to get sick than those who did not drink munkoyo (RR 7.1; P<0.0001).

### **Conclusion**

We established that the outbreak was most likely caused by exposure to Munkoyo. Outbreaks due to munkoyo poisoning are common during this time of the year and are usually attributed to the misidentification of roots used as the main ingredient in the preparation of Munkoyo. We recommend intensive community education on the identification of munkoyo roots and training of community first responders to diarrhoeal outbreaks.