Malaria Outbreak Investigation among Children <5 Years at a Hospital in a Non-endemic Region in Western Kenya between March And May 2017
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Background
• During the first quarter of 2017, there was an unusual increase in the number of confirmed malaria cases seen at Moi Teaching and Referral Hospital (MTRH), Eldoret – Kenya located in a non-endemic region.
• This coincided with the onset of the long term rains in Western Kenya that followed a period of prolonged drought

Methods
Study Design: Retrospective review of records
Study site: Moi Teaching and Referral Hospital, Uasin Gishu County - Kenya
Study period: January 2012 – September 2017
Case definition: Children <5 years who had been seen at MTRH between March and May 2017 and malaria diagnosis confirmed by blood slide microscopy

Results
• There was an increase in the cases between March and May 2017
• The median age was 2 years (IQR 1, 4)
• Males accounted for 58% (56/96) of the cases
• Majority of the cases, 66% (63/96), were admitted with a median length of stay of 3 days (IQR 2, 4) and a case fatality rate of 3% (3/96)
• Hotness of the body was the commonest symptom accounting for 92% (88/96). At presentation, 46% (44/96) had fever (>37.2°C)
• Anaemia was the commonest complication affecting 55% (53/96) of the cases
• Children <2 years had higher odds of mortality (OR 6.1; 95% CI 0.5 – 70.3; p = 0.34)

Conclusion
• There was a confirmed malaria outbreak between March and May 2017 coinciding with the onset of rainy season following prolonged drought
• Majority of the cases had severe forms of Malaria
• Anaemia was the commonest complication