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Aiken, AM; Mturi, N; Njuguna, P; Mohammed, S; Berkley, JA; Mwangi, I; Mwarumba, S; Kitsao, BS; Lowe, BS; Morpeth, SC; Hall, AJ; Khandawalla, I; Scott, JA; Kilifi Bacteraemia Surveillance Group; , COLLABORATORS; Ahmed, I; Akech, S; Makazi, AB; Hajj, MB; Brent, A; Chesaro, C; Dayo, H; Idro, R; Kosgei, P; Maitland, K; Marsh, K; Mwalekwa, L; Mwaringa, S; Newton, C; Ngama, M; Pamba, A; Peshu, N; Seale, A; Talbert, A; Williams, T (2011) Risk and causes of paediatric hospital-acquired bacteraemia in Kilifi District Hospital, Kenya: a prospective cohort study. *Lancet*, 378 (9808). pp. 2021-7. ISSN 0140-6736 DOI: [https://doi.org/10.1016/S0140-6736\(11\)61622-X](https://doi.org/10.1016/S0140-6736(11)61622-X)

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DOI: [10.1016/S0140-6736\(11\)61622-X](https://doi.org/10.1016/S0140-6736(11)61622-X)

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Supplementary webappendix

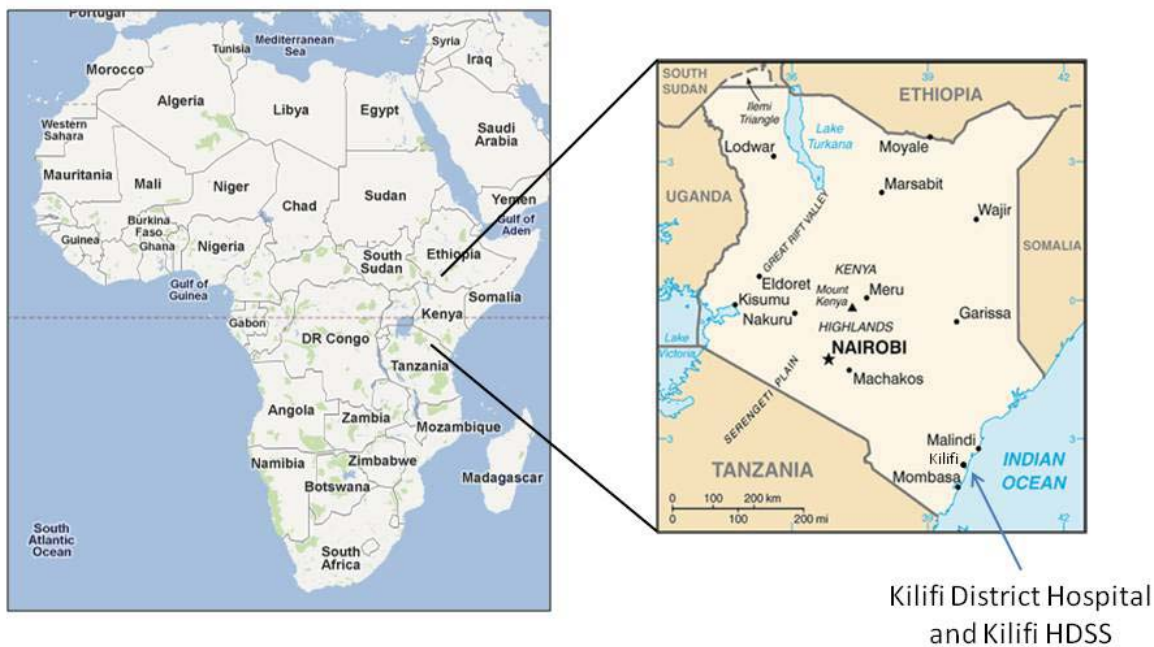
This webappendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Aiken AM, Mturi N, Njuguna P, et al. Kilifi Bacteraemia Surveillance Group. Risk and causes of paediatric hospital-acquired bacteraemia in Kilifi District Hospital, Kenya: a prospective cohort study. *Lancet* 2011; published online Nov 30. DOI:10.1016/S0140-6736(11)61622-X.

Webappendix: background information for Kilifi District Hospital, Kenya

Kilifi District Hospital (KDH) is a Government facility situated in Kilifi town on the Indian Ocean coast of Kenya – see figure 1. The KEMRI-Wellcome Trust Research Programme (KWTRP) was established in 1989 as a collaboration between the Kenya Medical Research Institute (KEMRI), the Wellcome Trust and the University of Oxford to conduct medical research on infectious diseases of children. During the 1990s, the Programme developed longitudinal clinical surveillance in the paediatric wards of KDH. Since 2000, Kilifi Health and Demographic Surveillance System (KHDSS) has been established to create a longitudinal community-based cohort study linked, at inception, to hospital morbidity surveillance by integrating the existing clinical and field-based research infrastructure. Further information about the Kilifi HDSS is available at www.kemri-wellcome.org/khdss.

Figure 1: Location of Kilifi District Hospital, Kenya



The paediatric wards at KDH consist of a 54 bed "general ward", divided into 5 cubicles, where patients are cohorted by diagnosis, a 9 bed high-dependency unit and a 20 cot newborn unit. The bed occupancy in these units is normally between 150 and 200%: two children often share a bed/incubator, with an average of 80-90 inpatients, depending on time of the year.

There are normally 6 nurses on duty during daytime-shifts and 2 overnight (in the general ward). The same staffing pattern applies in the High Dependency Unit in a 3-3-2 shift system. Children are admitted via the outpatient department during the day and via Casualty at night. Blood samples are taken by the admitting clinician, or may be taken by a ward aide (a clinical support worker who has had phlebotomy training). The admitting clinician may be either a Medical Officer (a junior doctor) or a Clinical Officer (a vocationally-trained medical professional who performs similar duties to a junior doctor). During the day, blood cultures are taken to the main KWTRP laboratory within the hour, whilst at night, they are taken to a "satellite" laboratory adjacent to the paediatric ward, where a BACTEC machine is available for immediate incubation.