

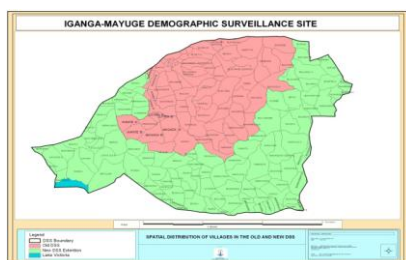
Iganga-Mayuge Health and Demographic Surveillance Site

Brief introduction

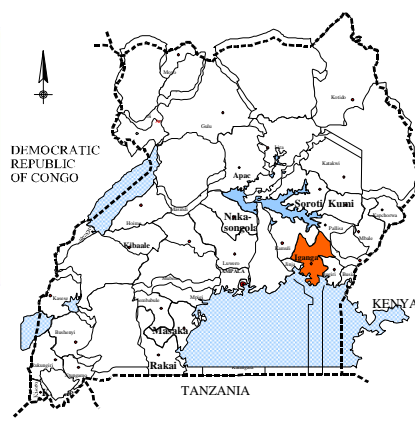
The Iganga-Mayuge Health & Demographic Surveillance Site (IMHDSS) is located astride the two eastern Uganda districts of Iganga and Mayuge. The site is about 120 kilometres or 2.5 hours drive east of Kampala, the capital city of Uganda, along the Uganda-Kenya highway – see map below.

Figure 1: Location of the Iganga-Mayuge Health & Demographic Surveillance Site

Map of the IMHDSS Area



Location of Iganga and Mayuge Districts in Uganda



Location of Uganda in Africa



With core funding from the Swedish International Development Cooperation Agency (SIDA), the site was established by Makerere University in partnership with Iganga and Mayuge Districts Administrations, and Karolinska Institutet in Sweden; to serve as a platform for training and developing operational research capacity of the graduate students and academic staff and to continuously generate population based data to facilitate evidence based decision making and policy at district and national level. The site operations are driven by a vision of “becoming a centre of excellence in conducting multi-disciplinary policy relevant research and research training”.

Routine Operations:

The IMHDSS started its operations in August 2004 with a baseline census of all resident population of the surveillance area conducted between March and June 2005. The site covers 65 villages, and a population of 64,200 people were registered during the baseline census. Over the years and through bi-annual household members data update, the population has increased to about 79,794 people as of 30th September 2013. Surveillance data has since 2004 been updated twice a year, except in 2012. The routine surveillance data collection records: births, deaths, in and out-migrations, verbal autopsies that try to determine cause of death, and monitoring pregnancies and their outcomes

Key demographic and health indicators:

The population is a largely a young population, with more than 60% of the population below the age of 15 years, and is typical of most Ugandan rural populations – see Figure 2. The population is also characterized by a high birthrate (CBR= 31.6 per 1000), high infant mortality (41.4 per 1000 live births), etc – see Table 1.

Figure 2: Population Structure of Iganga-Mayuge HDSS (2012)

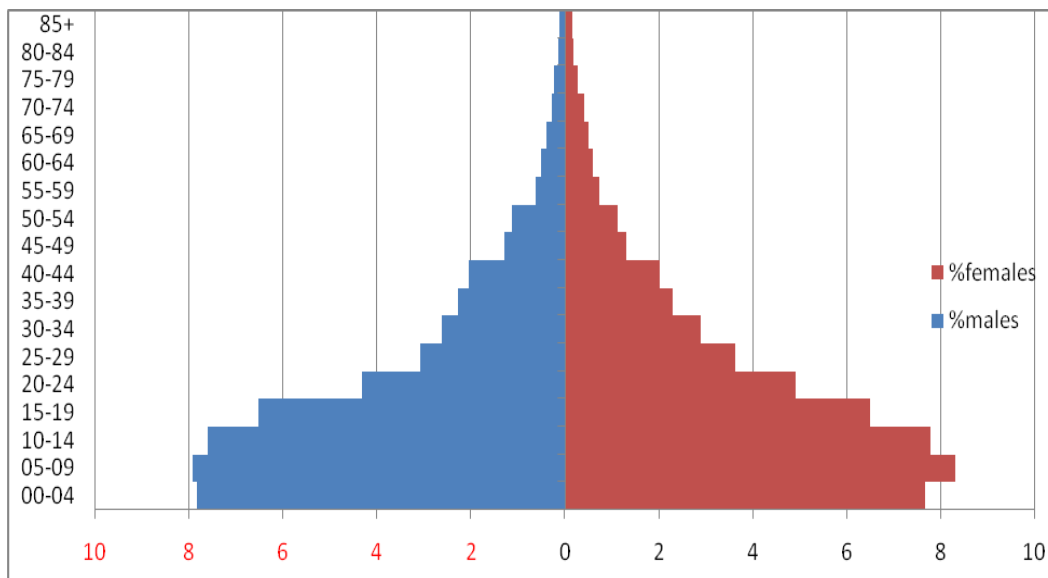


Table 1: Key health indicators (2012):

Crude Birth Rate (CBR)	31.6 per 1000 population
Crude Death Rate (CDR)	6.7 per 1000 population
Neonatal Mortality	23.1 per 1000 live births
Post-neonatal Mortality	18.3 per 1000 live births
Infant Mortality	41.4 per 1000 live births
Child Mortality (1-4 years)	82.1 per 1000 live births

Priority research areas:

Besides the routine surveillance data collection activities, Iganga-Mayuge HDSS collaborates with researchers within, and outside Uganda to conduct “special studies”. Priority research areas have been:

- a) Newborn health, including improving survival and access to care,
- b) Maternal health
- c) Epidemiology of non-communicable diseases including injuries and disabilities, diabetes, hernias, etc
- d) Health systems research
- e) Malaria and pneumonia surveillance in under-five children

Funders:

Iganga-Mayuge HDSS activities have mainly been supported by a grant from the Swedish International Development Cooperation Agency (SIDA) since its inception. Additional funding is raised from the periodic add-on research studies charged as overhead for use of the HDSS research platform.

Collaborators:

Our main collaborators have been:

- a) Karolinska Institutet in Sweden
- b) The Johns Hopkins School of Public Health, Maryland, USA

Contact:

Site Leader: David Guwatudde, PhD.
Associate Professor of Epidemiology & Biostatistics
School of Public Health,
Makerere University, Kampala, Uganda.
Email: dguwatudde@musph.ac.ug

Website: <http://www.igangamayuge-hdss.mak.ac.ug>

Key Publications:

1. Rutebemberwa, E., S. K. Katureebe, S. N. Gitta, A. D. Mwaka, and L. Atuyambe. 2013. "Perceptions of diabetes in rural areas of Eastern Uganda." *Curationis* 36(1): E1-7.
2. Mayega RW, Guwatudde D, Makumbi F, Nakwagala FN, Peterson S, Tomson G, Ostenson CG. Diabetes and Pre-Diabetes among Persons Aged 35 to 60 Years in Eastern Uganda: Prevalence and Associated Factors. *PLoS One*. 2013;8(8):e72554.
3. Kayemba Nalwadda C, Guwatudde D, Waiswa P, Kiguli J, Namazzi G, Namutumba S, Tomson G, Peterson S. Community health workers - a resource for identification and referral of sick newborns in rural Uganda. *Trop Med Int Health*. 2013 Jul;18(7):898-906.
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5. Kalyango, J. N., E. Rutebemberwa, C. Karamagi, E. Mworzi, S. Sali, T. Alfven, and S. Peterson. 2013. "High adherence to antimalarials and antibiotics under integrated community case management of illness in children less than five years in eastern Uganda." *PLoS One* 8(3): e60481.
6. Rutebemberwa E, M. Lubega, S. K. Katureebe, A. Oundo, F. Kiweewa, and D. Mukanga. 2013. "Use of traditional medicine for the treatment of diabetes in Eastern Uganda: a qualitative exploration of reasons for choice." *BMC Int Health Hum Rights* 13: 1
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8. Kalyango J. N., A. Lindstrand, E. Rutebemberwa, S. Ssali, D. Kadobera, C. Karamagi, S. Peterson, and T. Alfven, 2012, Increased Use of Community Medicine Distributors and Rational Use of Drugs in Children Less than Five Years of Age in Uganda Caused by Integrated Community Case Management of Fever, *Am. J. Trop. Med. Hyg.*, 87(Suppl 5), 2012, pp. 36–45.
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10. Larsson, E. C., A. E. Thorson, G. Pariyo, P. Waiswa, D. Kadobera, G. Marrone, and A. M. Ekstrom. 2012. “Missed Opportunities: barriers to HIV testing during pregnancy from a population based cohort study in rural Uganda.” *PLoS ONE* 7(8): e37590.
11. Ngugi, A. K., C. Bottomley, I. Kleinschmidt, R. G. Wagner, A. Kakooza-Mwesige, K. Aengibise, S. Owusu-Agyei, H. Masanja, G. Kamuyu, R. Odhiambo, E. Chengo, J. W. Sander, and C. R. Newton. 2013. “Prevalence of active convulsive epilepsy in sub-Saharan Africa and associated risk factors: cross-sectional and case-control studies.” *Lancet Neurol* 12(3): 253-63.
12. Nabiwemba, E., T. Marchant, G. Namazzi, D. Kadobera, and P. Waiswa. 2013. “Identifying high-risk babies born in the community using foot length measurement at birth in Uganda.” *Child Care Health Dev* 39(1): 20-6.
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17. Waiswa, P., S. Peterson, G. Tomson, and G. W. Pariyo. 2010c. “Poor newborn care practices - a population based survey in eastern Uganda.” *BMC Pregnancy Childbirth* 10: 9.