

# The Malawi Longitudinal Study of Families and Health

Newsletter 2017-2:  
Surviving an Epidemic:  
Families and Well-Being,  
Malawi 1998–2021



## MLSFH Project Description

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The *Malawi Longitudinal Study of Families and Health (MLSFH)* is one of very few long-standing publicly-available longitudinal cohort studies in sub-Saharan Africa (SSA). With data collection rounds for up to 4,000 individuals in 1998, 2001, 2004, 2006, 2008, 2010, 2012+13, 2017, and forthcoming until 2021, the MLSFH documents more than two decades of demographic, socioeconomic and health conditions in one of the world's poorest countries. The MLSFH public-use data can be requested on the project website <http://www.malawi.pop.upenn.edu>. A *MLSFH Cohort Profile* in the *International Journal of Epidemiology* provides detailed project information, a review of MLSFH research, and discussions of MLSFH data quality. Funding by U.S. National Institutes of Health provides a continuation of the MLSFH through 2021, focusing on research questions related to *Surviving an Epidemic (SANE)*.

## Surviving an Epidemic: Families and Well-Being in Malawi, 1998–2021 (SANE 1998–2021)

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¶ Across SSA, a remarkable cohort is reaching middle and older ages: *the survivors of the AIDS epidemic*. Some were *infected* with HIV, but everybody was *affected* by HIV. Nobody could escape an epidemic that was devastating for both its health and social implications, and one that struck hard in a region also dealing with poverty, famines, and basic uncertainties of life. Were the survivors of this cohort just lucky, or did they systematically differ? What promoted survival and resilience in this terrible context?

¶ The main aim of the MLSFH project on *Surviving an Epidemic (SANE)* is to expand the MLSFH until 2021, and then ask two related critical sets of research questions about SANE:

¶ First, a set of questions about the *determinants of SANE*: Who did better, who did worse in

*surviving an epidemic*, and who failed to survive? Which strategies, family contexts, and life circumstances protected those faced with the tsunami of AIDS? Are the factors hypothesized earlier to be associated with SANE still predictors of survival and well-being in the post-ART era?

¶ Second, a set of questions related to the *consequences of SANE*: How did marriage and household changes during SANE affect the short- and long-term well-being of children and the investments of parents in children? How is the experience of SANE affecting the ongoing epidemiological transition, and how are individuals and families responding to the dual and interrelated burden of communicable and non-communicable diseases? How do children of survivors vs. non-survivors fare during adolescence? Do experiences during SANE contribute to the continued high fertility in some SSA countries, and if so, how? Has the experience of SANE weakened or strengthened families' ability to deal with new crises, such as crop failures and food shortages?

¶ To answer these questions about SANE, we intend to extend the MLSFH until 2021, allowing us to understand the lives of Malawians while they lived through the epidemic and managed its consequences across two+ decades. The year 2021, when the last data from this project will be collected, marks roughly 20 years after HIV prevalence peaked in Malawi and 15 years after AIDS-related deaths reached their maximum. Malawians reaching middle to older ages by 2021 have lived through the epidemic's *rise, peak and decline*.

¶ Our motivations to expand, publicly-release and analyze the MLSFH are fourfold: First, the MLSFH 1998–2021 will add 11 years of longitudinal data since the last comprehensive MLSFH data collection, and provide a lens on the lives of the remarkable SSA cohort who survived the epidemic's rise, peak and decline across more than two decades with dramatically varying epidemiological, social and economic conditions. These data will provide a unique opportunity to investigate questions about SANE, an opportunity *not* available from Health and Demographic Surveil-

lance Sites (HDSS), DHS or other data. Second, the MLSFH 1998–2021 will be exceptional in allowing researchers to understand how the experience of SANE, and the strategies employed by individuals and families to survive, affect current behaviors shaping well-being, economic development and ongoing epidemiological and demographic transitions. Third, life-course research is critical for understanding SANE, but most long-term cohort studies have been conducted in high-income, stable socioeconomic contexts. Life-course research thus has much to gain from studying the MLSFH cohort, which did not enjoy such stability. Fourth, the AIDS epidemic decline is not the end of global health crises. To cope with new crises, low-income country citizens will have to rely on mechanisms similar to those that promoted SANE in the MLSFH cohort. We need to understand these mechanisms, and understand how to enhance them, because social safety nets and health-care systems are likely to remain inadequate to cope with inevitable future crises.

¶ In asking what mattered for making it to 2021, *Surviving an Epidemic (SANE)* is broadly construed: not just dead vs. alive, but also including social, economic, physical and mental well-being among the survivors and their families, and the consequences of SANE on fertility, investments in children, intergenerational transfers, and household interactions. We also adopt a population-perspective: outcomes will be assessed for HIV+ or HIV– individuals, for individuals and their families, and across all ages from children and youth to mature and old adults. The specific aim of the MLSFH project on *Surviving an Epidemic* include:

¶ **Aim 1: Establish a unique data set for analyzing SANE:** Collect and publicly-release new MLSFH data during 2017–21 from (a) surviving respondents and their families, (b) proxies for deceased respondents, (c) children of surviving and deceased respondents, and (d) MLSFH migrants, with an expected  $N \approx 6,300$  plus data on 1,200 deceased respondents. The topics to be covered include past and current well-being, mortality & morbidity, family & household dynamics, social

capital (family/village networks, social participation), physical & mental health, household production & consumption, and intergenerational relations. These data will be collected as part of a 2018–19 MLSFH Follow-up Survey, a 2019–20 MLSFH Migration Follow-up, and a 2021 MLSFH Well-being & Vital Status Update. Household and individual data will be complemented by census-linkages, village-level and other ecological data, and extensive ethnographies to provide context, assess data quality, and yield insights into perceptions and behaviors underlying SANE.

¶ **Aim 2: Analyze multiple determinants of SANE:** Using the MLSFH 1998–2021 and diverse methodological approaches for longitudinal data—ranging from ethnographic journals to survival models, multi-state life-table (MSLT) models, fixed-effect (FE), multi-level and instrumental variable (IV) regressions, spatial and social network analyses, and econometric structural equation models—analyze SANE and well-being among MLSFH respondents, their children, and other family members. Analyses will include, all within a longitudinal framework and relying on the long life-cycle segments covered by the MLSFH: (a) mortality, survival and well-being, before and after the availability of antiretroviral therapy (ART), as a function of individual characteristics, past risk behaviors, life-course transitions, and factors beyond individuals; (b) disease/mortality perceptions, life-course behaviors and SANE, (c) migration, health and SANE, (d) patterns of clustering, divergence and recovery of well-being during SANE, (e) husband-wife interactions and SANE, and (f) the long-term population-level consequences of ART.

¶ **Aim 3: Analyze health and other impacts of SANE:** Analyze the consequences and lasting imprints of SANE on (i) physical/mental health and NCDs among surviving adults and children of survivors and non-survivors, (ii) fertility, investments in children and human capital in families differentially affected by the epidemic and STE, (iii) migration and remittances, and (iv) coping capabilities for new shocks and crises.

## MLSFH Project Website

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<http://www.malawi.pop.upenn.edu>

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## Contact Information

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The MLSFH is conducted by the [Population Studies Center](#) at the University of Pennsylvania, in collaboration with the [College of Medicine](#) at the University of Malawi and [Invest in Knowledge in Zomba, Malawi](#). Key contact persons for the MLSFH project on *Surviving an Epidemic* are:

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Additional members of the *MLSFH Study Team* are listed on the MLSFH Website.

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