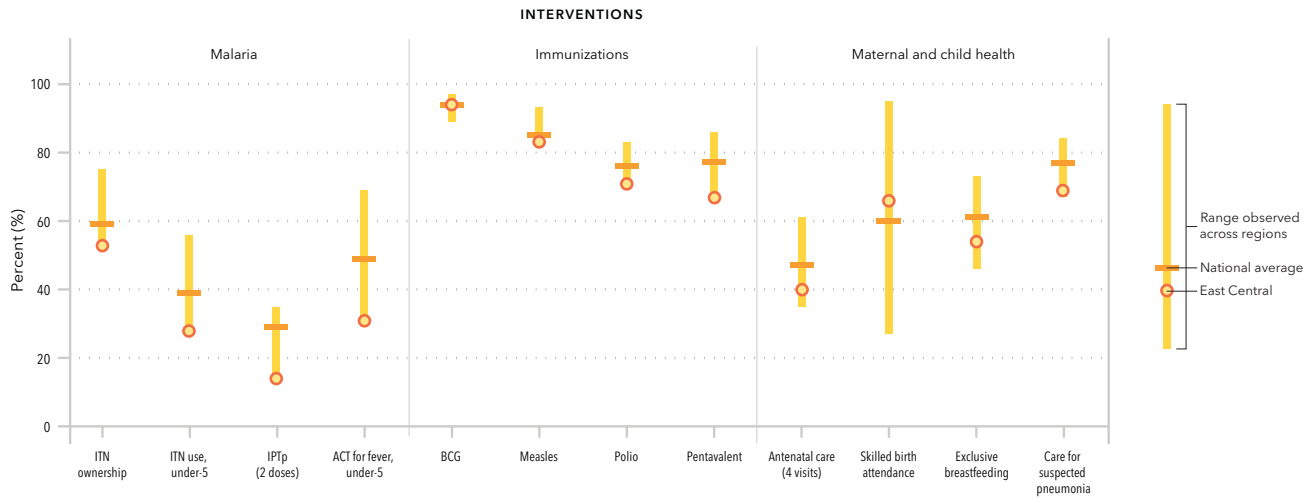




East Central



Note: Estimates of intervention coverage are for 2011, with better performance reflected by higher levels of coverage.

SUMMARY

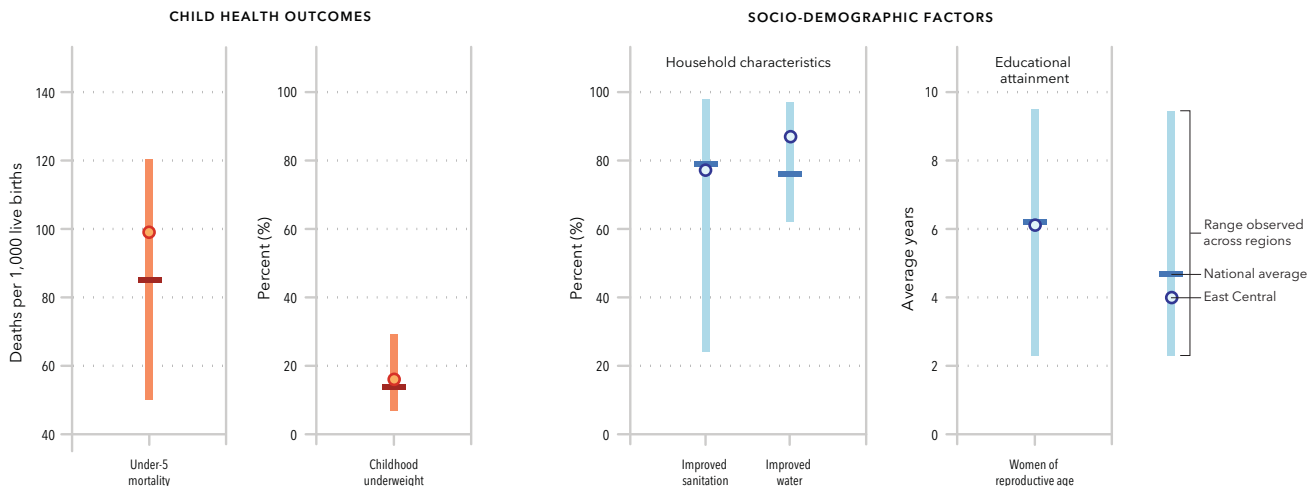
All-cause under-5 mortality in East Central substantially declined between 1990 and 2011, but still remained above the national average in 2011. Less progress was made for the prevalence of childhood underweight, with the region's levels only slightly decreasing since the 1990s. Prioritizing efforts to accelerate gains in child health outcomes, especially childhood underweight, should be considered.

ITNs and the receipt of ACTs were quickly scaled up in East Central but trailed behind the national trend. In 2011, East Central documented some of the lowest levels of IPTp2 coverage in Uganda. While the region recorded gradual improvement in immunization coverage, East Central still had polio and pentavalent immunization rates below the national average. Skilled birth attendance continuously increased over time, whereas the proportion of women who received at least

four antenatal care visits (ANC4) declined. This downward trend in antenatal care is cause for concern.

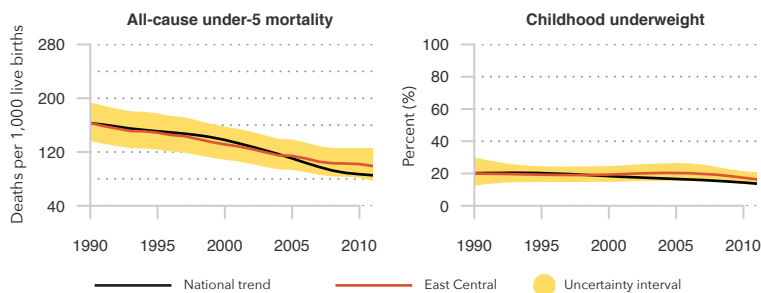
The region documented sizeable gains for household access to improved sanitation, but remained slightly lower than the national average in 2011. In comparison to the national trend, East Central consistently averaged higher levels of household access to improved water sources. Educational attainment among women of reproductive age in East Central followed a very similar trend to that of the national average.

In 2011, East Central largely fell below the national average across interventions, with skilled birth attendance as the primary exception. For socio-demographic factors, the region had a more mixed performance. In comparison with the national average, East Central showed higher levels of under-5 mortality and slightly higher levels of childhood underweight.



Note: Estimates of child health outcomes and socio-demographic factors are for 2011. Better performance is shown by lower levels of child health outcomes and higher levels for socio-demographic factors.

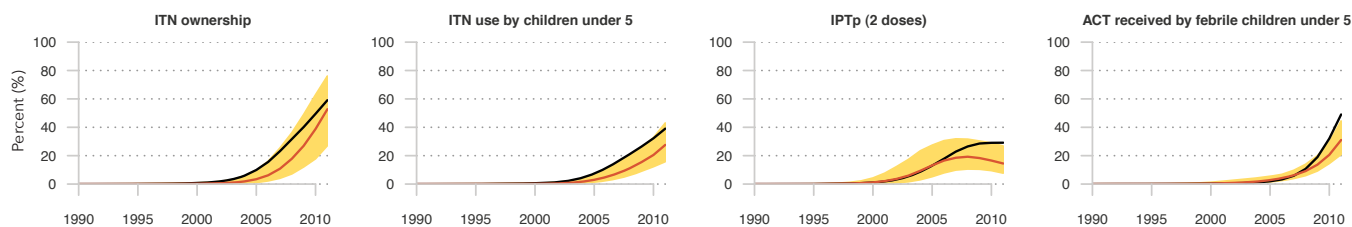
CHILD HEALTH OUTCOMES



From 1990 to 2011, the region of East Central recorded a significant reduction in all-cause under-5 mortality, dropping 39% from 163 deaths per 1,000 live births in 1990 (95% CI: 138, 192) to 99 in 2011 (95% CI: 79, 124). Despite this progress, the region's under-5 mortality was higher than the national average of 85 deaths per 1,000 live births in 2011 (95% CI: 79, 93).

The proportion of children who were underweight in East Central remained around 20% through 2007, after which prevalence declined slightly to 16% in 2011 (95% CI: 13%, 20%). This level of childhood underweight was slightly higher than the national average of 14% (95% CI: 12%, 15%).

MALARIA INTERVENTIONS



ITN ownership remained below 10% until 2007, after which coverage rose to 53% in 2011 (95% CI: 27%, 76%). This level of ITN ownership was lower than the national average of 59% in 2011 (95% CI: 36%, 79%).

The use of ITNs by children under 5 years old moderately increased from 8% in 2007 (95% CI: 4%, 15%) to 28% in 2011 (95% CI: 16%, 43%). This level of ITN use was much lower than the national average of 39% (95% CI: 27%, 53%) and was among the lowest in Uganda. In this region, the difference between ITN ownership and ITN use by children under 5 (25 percentage points) was higher than what was observed nationally (20 percentage points) in 2011.

No districts in the East Central region had formally implemented IRS as of 2011.

ACTs formally became Uganda's first-line treatment for uncomplicated malaria in 2006, and the proportion of children in East Central who received ACTs in response to experiencing a fever moderately increased thereafter. Receipt of ACTs

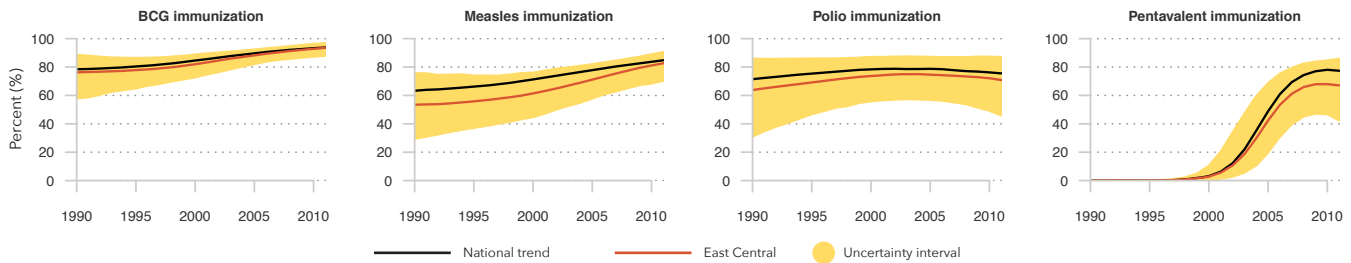
among febrile children under 5 rose from 9% in 2008 (95% CI: 6%, 14%) to 31% in 2011 (95% CI: 21%, 44%), which was far lower than the national average of 49% (95% CI: 34%, 65%) and among the lowest in Uganda for that year. The region's relatively low uptake of ACTs warrants further investigation.

The proportion of pregnant women who received IPTp2 remained below 10% until 2005, after which coverage increased to 19% in 2007 (95% CI: 10%, 32%). IPTp2 coverage dipped to 14% in 2011 (95% CI: 8%, 27%), which was well below the national average of 29% (95% CI: 15%, 50%) and among the lowest in the country. While the national uptake of IPTp2 remained fairly low throughout Uganda in 2011, the region's exceedingly low levels of IPTp2 coverage is cause for concern.

Overall, East Central recorded some of the country's lowest levels of coverage across malaria intervention indicators. Addressing the region's challenges in increasing access to and the use of these interventions ought to be prioritized.

EAST CENTRAL, continued

IMMUNIZATIONS



The proportion of children who received the BCG vaccine steadily rose from 76% in 1990 (95% CI: 58%, 89%) to 94% in 2011 (95% CI: 88%, 97%), equaling the national average for that year.

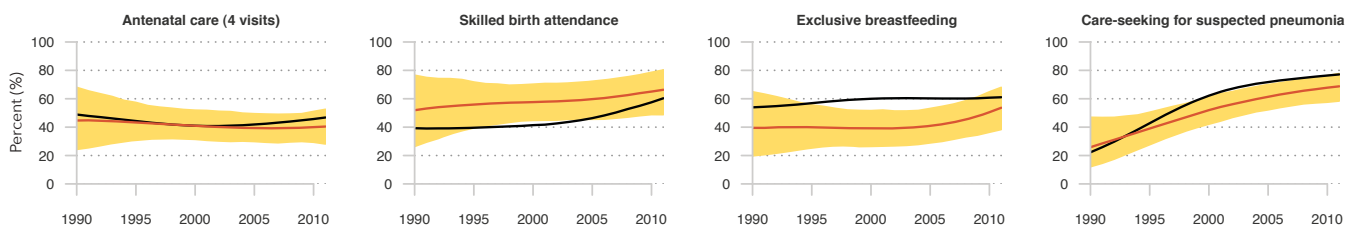
Measles immunization substantially increased from 53% in 1990 (95% CI: 29%, 76%) to 83% in 2011 (95% CI: 70%, 91%), which was similar to the national average of 85% (95% CI: 75%, 91%). East Central's progress in elevating measles immunization coverage is particularly noteworthy given its very low levels of coverage during the 1990s.

Coverage of polio immunization remained relatively consis-

tent from 1990 to 2011, generally hovering between 65% and 75% during this time. In 2011, polio immunization coverage was 71% in East Central (95% CI: 46%, 87%), which was slightly lower than the national average of 76% (95% CI: 52%, 90%).

The pentavalent vaccine was formally introduced in Uganda in 2002, after which coverage in East Central increased from 30% in 2004 (95% CI: 11%, 60%) to 68% in 2009 (95% CI: 47%, 84%). Pentavalent vaccine coverage dipped to 67% in 2011 (95% CI: 42%, 86%), which was lower than the national average of 77% (95% CI: 51%, 92%) and among the lowest in Uganda for that year.

MATERNAL AND CHILD HEALTH INTERVENTIONS



ANC4 coverage remained fairly low between 1990 and 2011, hovering around 40% to 45% for that period of time. In 2011, ANC4 coverage was at 40% (95% CI: 28%, 53%), which was lower than the national average of 47% (95% CI: 41%, 54%).

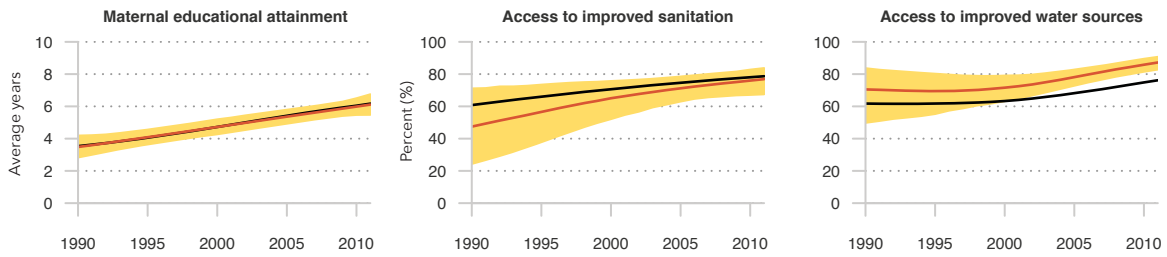
Skilled birth attendance gradually increased from 52% in 1990 (95% CI: 26%, 77%) to 66% in 2011 (95% CI: 49%, 80%), which was slightly higher than the national average of 60% (95% CI: 47%, 73%).

The proportion of children who were exclusively breastfed hovered around 40% until 2005, after which coverage increased

to 54% in 2011 (95% CI: 38%, 68%). This level of exclusive breastfeeding was lower than the national average of 61% (95% CI: 54%, 67%).

Serving as proxy for health system access, the proportion of children under 5 who sought care for suspected pneumonia rose from 26% in 1990 (95% CI: 12%, 47%) to 69% in 2011 (95% CI: 58%, 78%). This level of health-care-seeking behavior was lower than the national average of 77% (95% CI: 76%, 78%).

SOCIO-DEMOGRAPHIC FACTORS



Among women of reproductive age (15 to 44 years old) in East Central, the average years of education attained increased 74% between 1990 and 2011, rising from 3.5 years in 1990 (95% CI: 2.8, 4.2) to 6.1 years in 2011 (95% CI: 5.5, 6.8). This level of educational attainment was similar to the national average in 2011, which was 6.2 years (95% CI: 5.9, 6.4).

Household access to improved sanitation (a flush toilet or covered pit latrine) substantially rose from 47% of households with improved sanitation in 1990 (95% CI: 24%, 71%) to 77% in 2011 (95% CI: 67%, 84%). This level of improved sanitation was comparable to the national average, which was 79% in

2011 (95% CI: 76%, 81%). East Central's progress in improving household access to improved sanitation was particularly notable, as the region's levels were much lower than the national average in 1990 (61% [95% CI: 44%, 76%]).

The proportion of households with access to improved water sources (e.g., piped water, protected wells, protected springs) continuously increased in East Central, rising from 71% in 1990 (95% CI: 50%, 84%) to 87% in 2011 (95% CI: 83%, 91%). The region consistently recorded higher levels of improved water access than the national average between 1990 and 2011.