

APPENDIX B: Estimating intended and unintended pregnancies

Methods

We estimated zonal and national numbers of unintended pregnancies by combining the number of induced abortions, unintended births, and miscarriages resulting from unintended pregnancies. We assumed that all abortions were the result of unintended pregnancy. Nationally and by zone, we estimated unintended births by multiplying the number of births (as per the 2017 MHS) by the proportion of all births that were unintended. We estimated the latter from the 2014 Ghana DHS birth history file: among women who were currently pregnant or had a last birth in the past two years, we calculated the proportion who reported that their current (or most recent) pregnancy was mistimed or unwanted at the time of conception. Based on clinical studies on pregnancy lossⁱ, we estimated miscarriages of any gestational age as 20% of live births plus 10% of abortions. We calculated the number of intended pregnancies by summing intended births with miscarriages from intended pregnancies (assumed to equal 20% of intended births). Combining all live births, abortions and miscarriages (from intended and unintended pregnancies) yielded the total number of pregnancies, which we used to calculate the overall pregnancy rate, the unintended pregnancy rate, and the proportion of pregnancies that are unintended in Ghana and each zone.

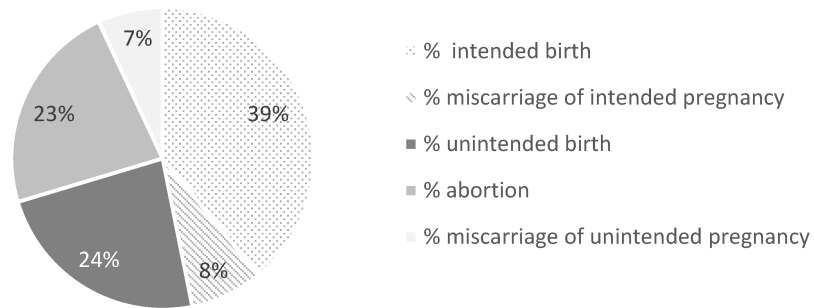
Results

In 2017, Ghanaian women had an estimated 1,441,845 pregnancies, translating to an overall pregnancy rate of 194 pregnancies per 1,000 women aged 15-49 (**Table B1**). By zone, the pregnancy rate ranged from 183 (Coastal) to 215 (Northern). Nationally, we estimate an unintended pregnancy rate of 103 per 1,000 women aged 15-49; lowest in the Northern Zone (50) and highest in the Middle zone (131). Nationally, we estimate that 53% of pregnancies annually are unintended; highest in the Middle Zone (66%) and lowest in the Northern Zone (23%). Among all pregnancies in Ghana, an estimated 23% end in induced abortion (**Figure B1**).

Table B1. Estimated pregnancies (overall and unintended) in Ghana, 2017

	# pregnancies	Pregnancy rate	Unintended pregnancy rate	% of pregnancies that are unintended
National	1,441,845	194	103	53%
Northern	208,931	215	50	23%
Middle	691,819	199	131	66%
Coastal	550,964	183	94	51%

Rates are number of events per 1,000 women aged 15-49.

Figure B1. Estimated distribution of pregnancy outcomes in Ghana, 2017

ⁱ Bongaarts J, Potter RG. Fertility, biology, and behavior: an analysis of the proximate determinants. New York: Academic Press; 1983