



# **NATIONAL AND SUBNATIONAL EXPERIENCE WITH ESTIMATING THE EXTENT AND TREND IN COMPLETENESS OF BIRTH REGISTRATION IN SOUTH AFRICA**

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# BACKGROUND

- SA has an established CRVS, functioning for selected sub-groups since 1926
- With democracy in 1994, the system was extended to incorporate all South Africans
- Birth registration is essential for ensuring rights to a name, nationality and heritage – but is also needed for statistical purposes for the denominator of childhood mortality rates
- Unlike death registration, efforts to measure the completeness of birth registration have been minimal

# BACKGROUND

## Household Surveys

- the National Income Dynamics Survey (2009) found 11% of children <3 did not have a birth certificate
- the General Household Survey (2011) found 11% of children <3 had not had their births registered

## Reporting of births

- the Department of Home Affairs monitors the proportion of registrations which are births in the same year, which was 90% in the 2011/2012
- UNICEF (2013) using VR observed that in 2011 SA achieved 95% completeness of births registered within the first year of life
- Since 2006 VR has recorded approx 1 million births annually



# AIM

The aim of this study is to assess the completeness of birth registration in South Africa and at a provincial level and to identify a method for annual assessment



# DEFINITION OF COMPLETENESS

“a measure of the extent to which births and deaths that occur in a country in a given year are registered by the civil registration system”

*WHO 2010*



# DATA SOURCES AND METHODS

- Registered VR births are compared with independent estimates of births based on:
  - ASFR's applied to population estimates from census and more recent estimates (Dorrington & Moultrie 2015)
  - number of births represented in census 2011 (reverse survival)
  - alternative source of data from public sector health information (DHIS)

# ADJUSTMENT OF DHIS BIRTHS

- 1. Births occurring in private facilities**
  - General Household Survey
    - the proportion of children under-1 covered by medical aid schemes
    - the average for 2004 to 2012 was 11.9%
- 2. Estimated % home births based on proportion of women in rural areas**
  - South African Demographic and Health Surveys
    - adjusted for change in proportion of women living in rural areas

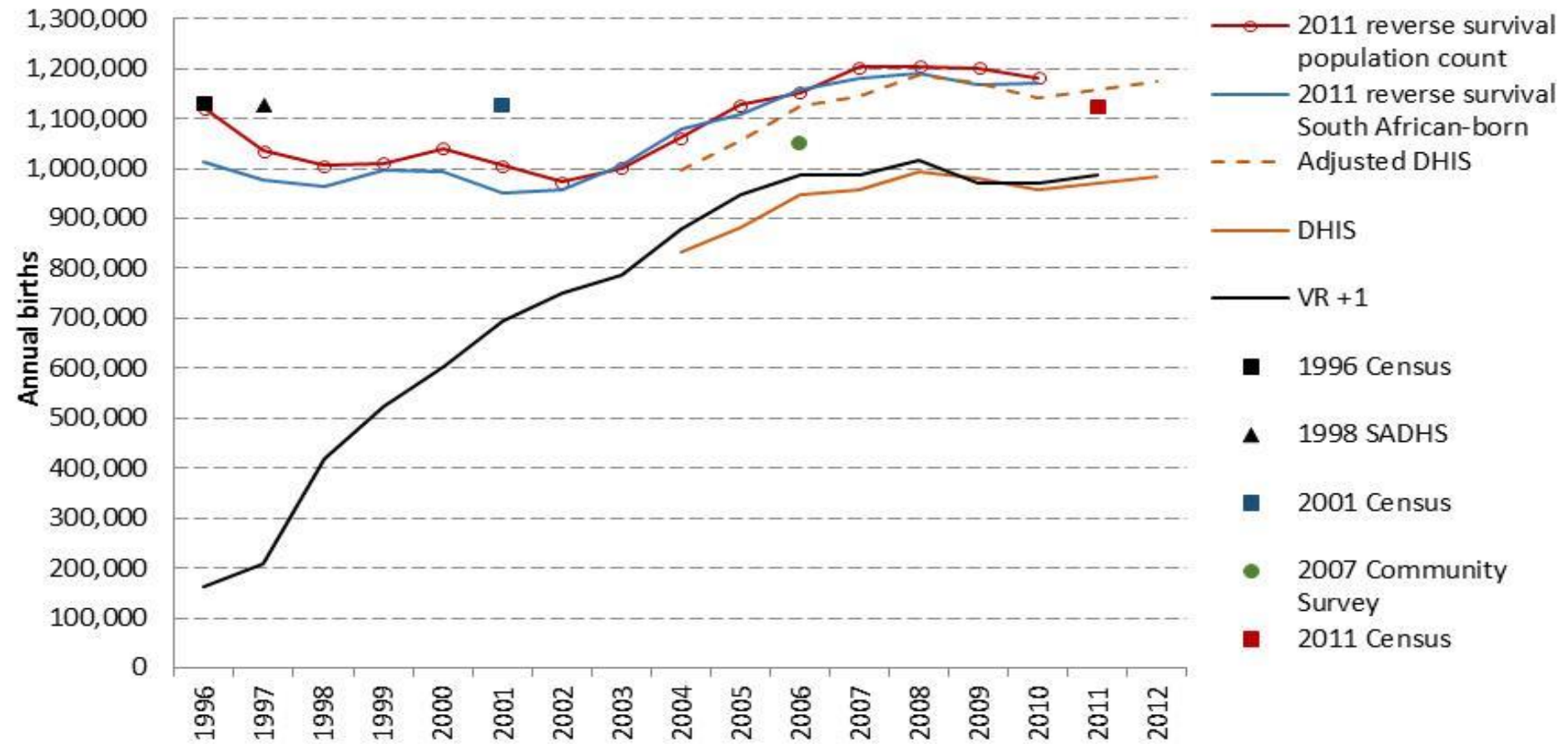
$$hb_i = HB \left( a \frac{r_i}{R} + b \right)$$

where  $hb_i$  = % home-births in province  $i$ , and  $HB$  = % home-births nationally in 2012

$r_i$  = % rural in province  $i$  from 2011 census

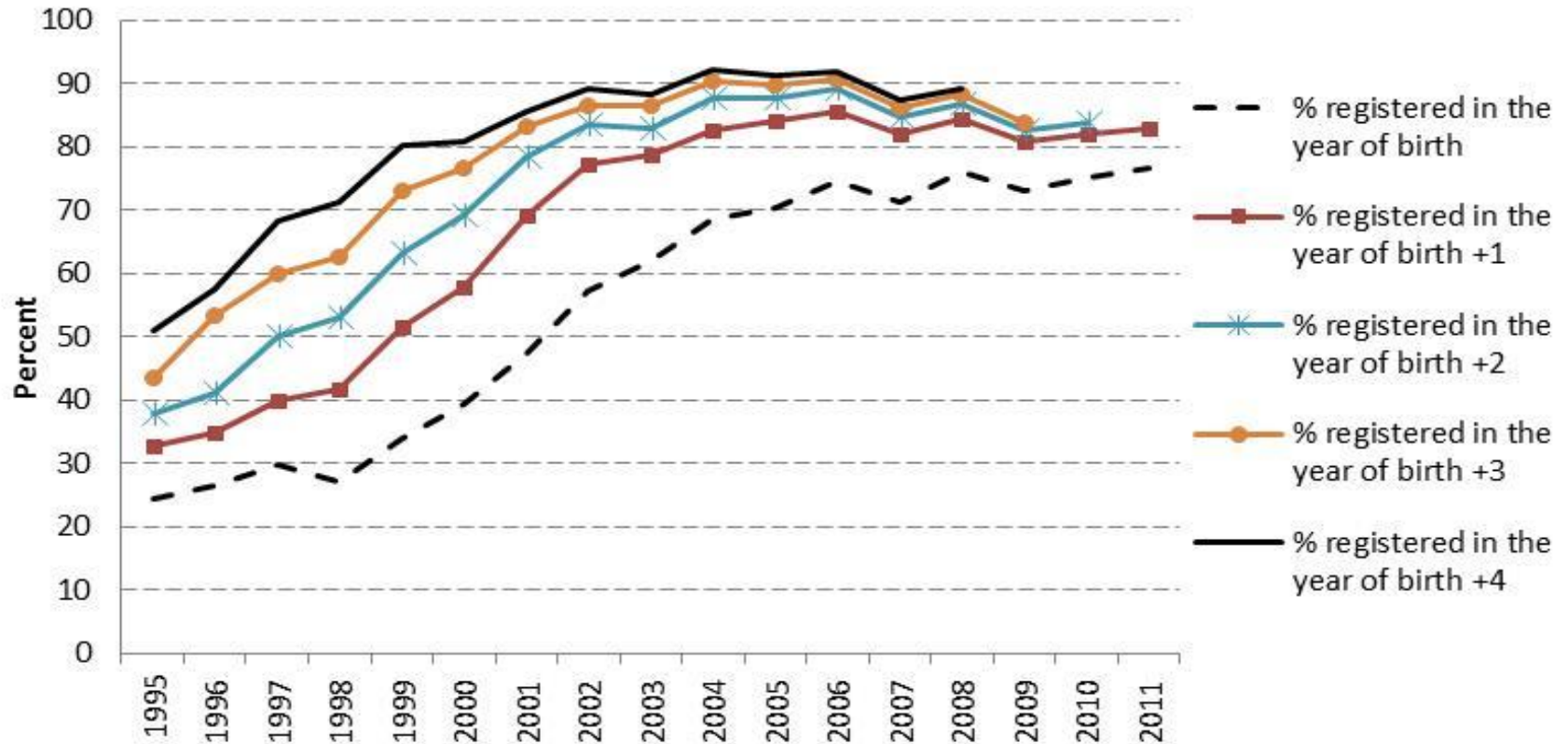
$R$  = % rural nationally from the 2011 census

# COMPARISON OF EMPIRICAL ESTIMATES OF BIRTHS



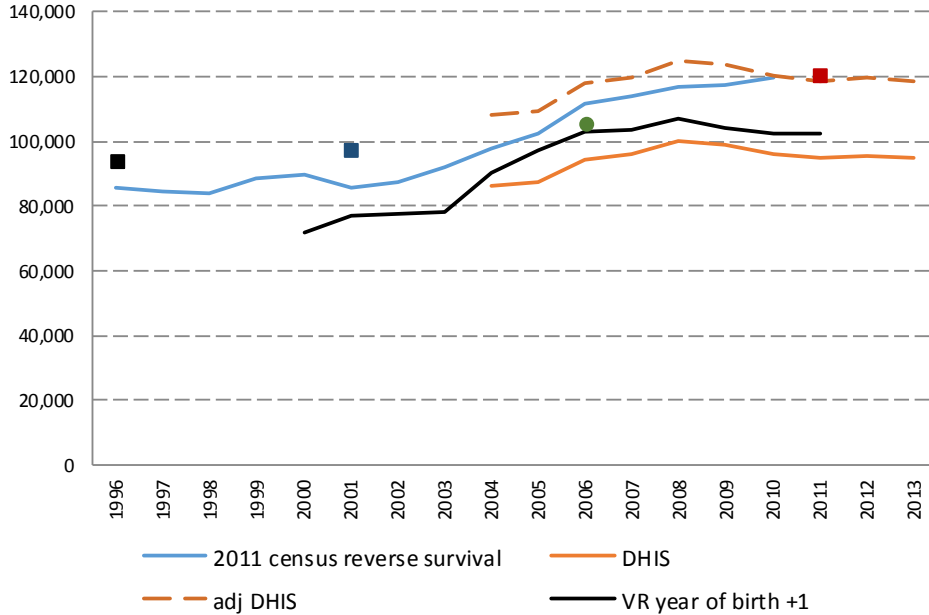


## TRENDS IN COMPLETENESS BY AGE OVER TIME

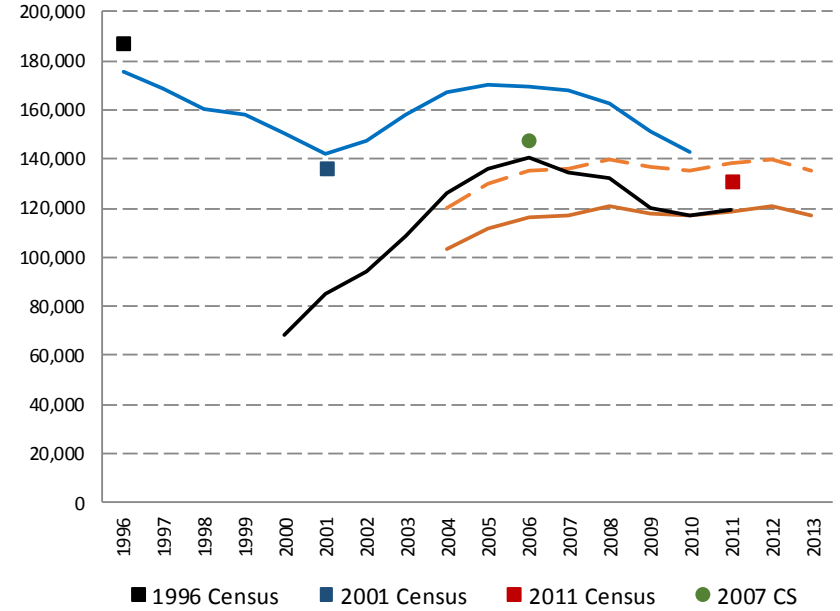


# PROVINCIAL DIFFERENCES

## Western Cape



## Eastern Cape



# KEY FINDINGS

- Improvement since 1995 associated with legislation, government commitment, child grant
  - 1996 - 25% of registrations by first b'day and 33% by 2nd birthday
  - 2011 - 77% of children <1 and 83% of children <2 were registered
- RS interpretation challenges at provincial level due to migration
- DHIS is valuable source of birth data during the inter-censal period, worthy of investment
- It is important that global comparisons of individual countries use defined assessment criteria and methods of evaluation
- assessment of completeness by age appears to be a useful method of evaluation

# FUTURE RESEARCH

- investigation into the performance of linkage of birth and death register information to assess completeness and monitor child mortality
- what are the obstacles preventing certain communities from registering births?