

# Incidence of invasive *Haemophilus influenzae* disease in children <10 years in South Africa, 2010 – 2022

Poster  
P3-Q5

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## Invasive *Haemophilus influenzae* type-b and Non-typeable disease occur frequently in children <1 year.

### BACKGROUND

- *Haemophilus influenzae* (Hi) serotype b (Hib) conjugate vaccine (HibCV) was added to the expanded programme for immunisation (EPI) in 1999
- HibCV booster dose added to EPI in 2009
- Early declines in national incidence of invasive Hi disease in children <10 years of age were documented in 2006

### AIM

- Describe Hi incidence in children <10 years of age post introduction of HibCV booster dose

### METHODS

- Cohort study using GERMS-SA laboratory-based surveillance data for invasive Hi disease from 2010 to 2022
- We included every individual < 10 years of age with a laboratory-confirmed Hi disease result from 2010 to 2022
- Incidence proportions for invasive Hi disease were calculated (number of Hi cases / total population at risk x 100,000)

### RESULTS

- Nationally, 4129 cases of invasive Hi were reported on GERMS-SA surveillance system
  - Of the 3952 with known age, 51% (1994/3592) were aged <10 years
  - The median age was 9 months (IQR 3-23 months) among children aged <10 years

- Of the 1285/1994 (64%) serotyped cases;

- 496/1285 (38%) were Hib
- 242/1285 (19%) were non-Hib
- 547/1285 (43%) were non-typeable (NTHi)

- Hib incidence in children <10 years was 0.35 per 100,000 persons (95% CI 0.32–0.39)
- NTHi incidence in children < 10 years was 0.39 per 100,000 persons (95% CI 0.36-0.42)

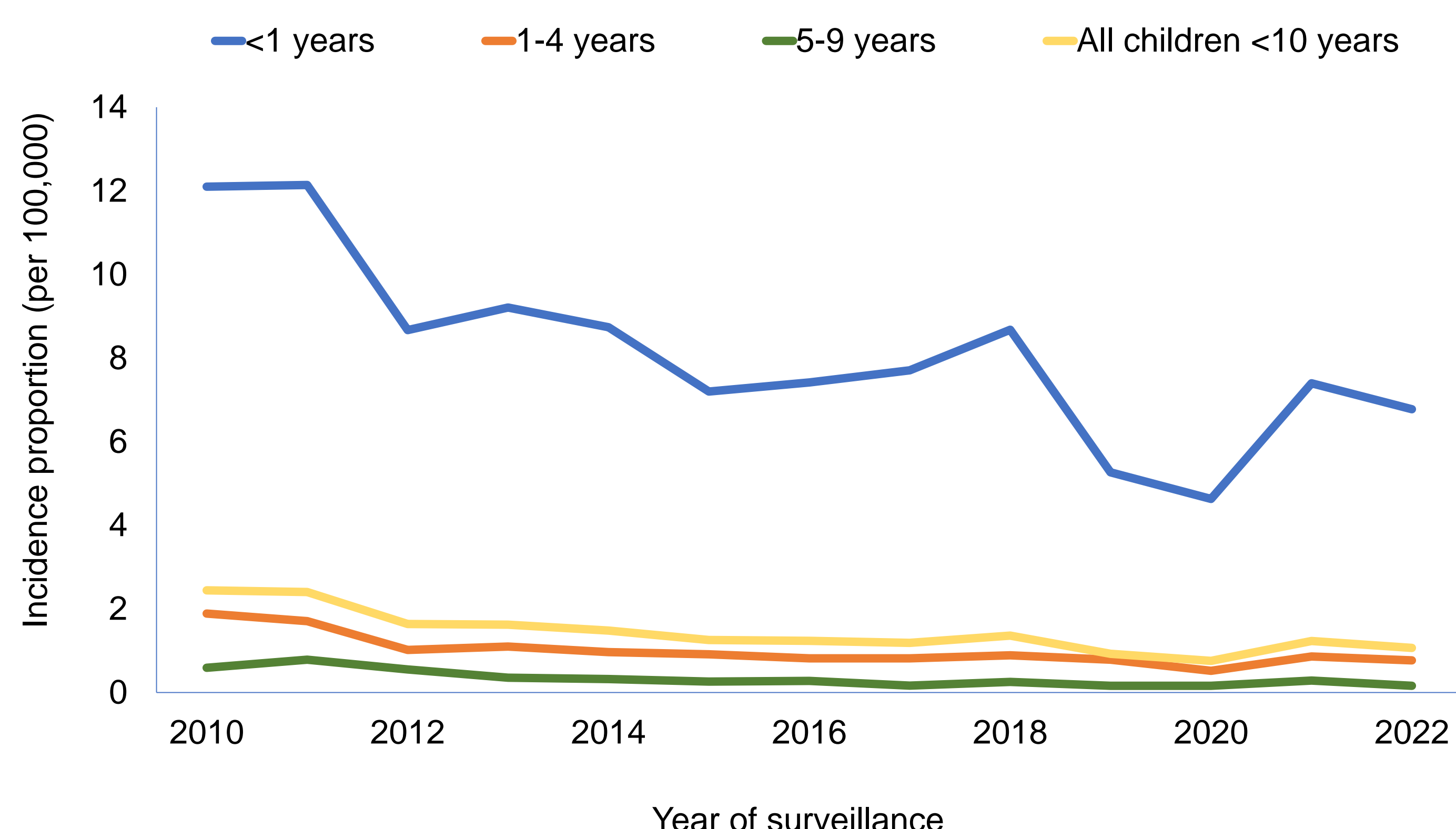


Figure 1: Incidence proportion of all *Haemophilus influenzae* disease among children <10 years by age group in South Africa, 2010-2022

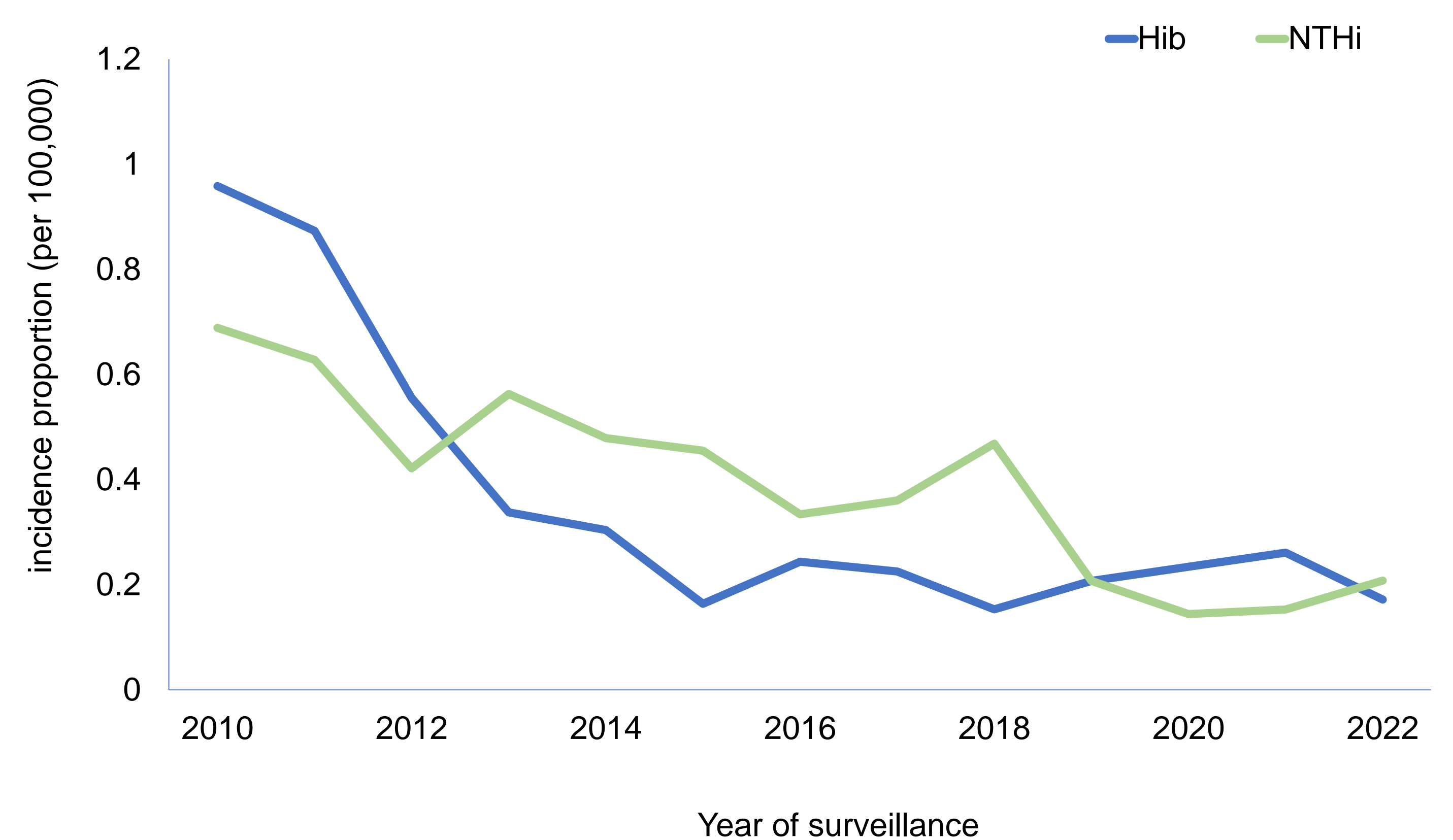


Figure 2: Incidence proportion of invasive NTHi and Hib disease among children <10 years in South Africa, 2010-2022

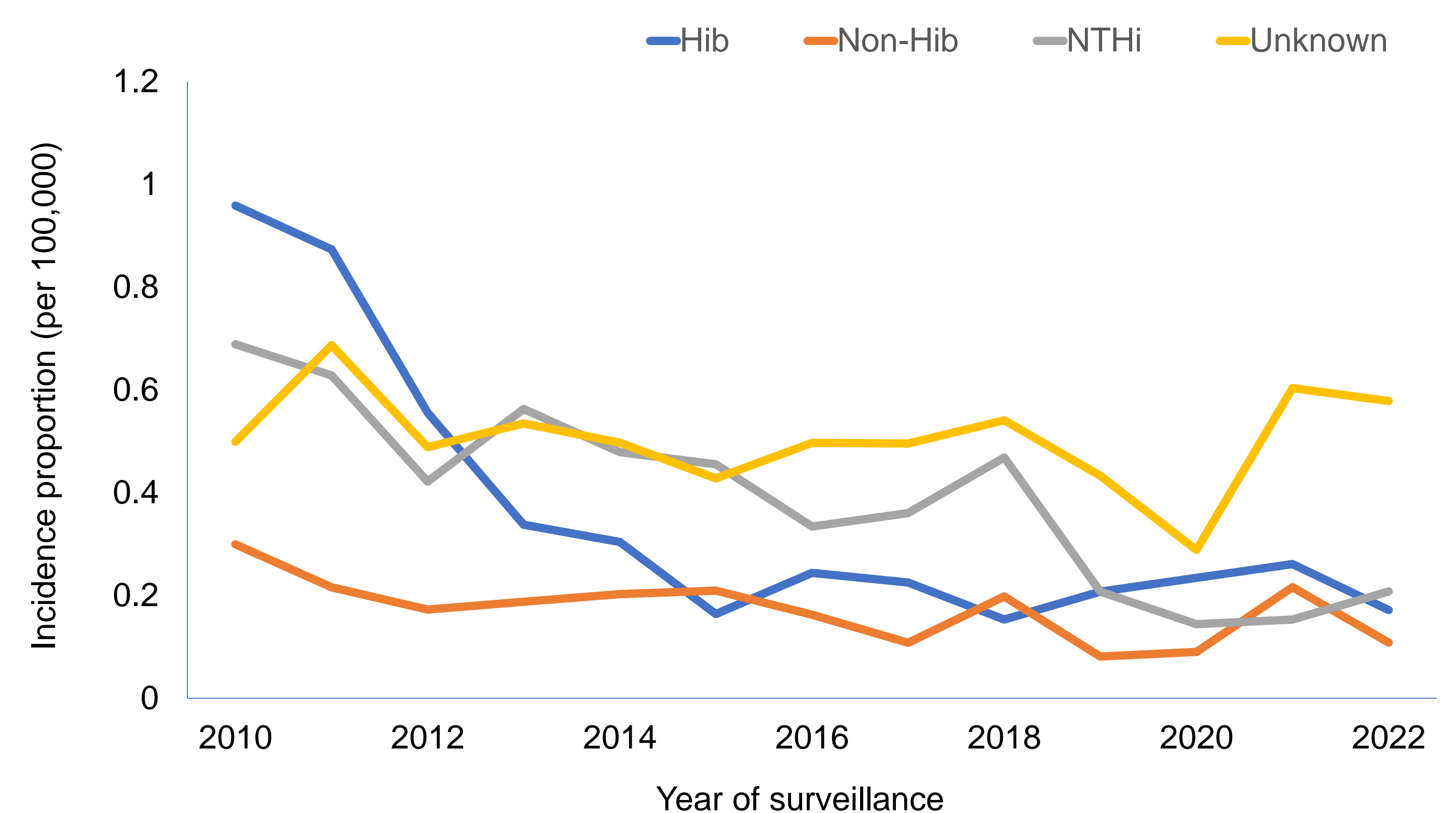


Figure 3: Incidence proportion of *Haemophilus influenzae* disease among children <10 years by serotype in South Africa, 2010-2022

### CONCLUSIONS

- Majority of Hib invasive disease occurred in children <1 year
- NTHi is now an equally common cause of invasive disease as Hib in children <10 years of age
- Introduction of HibCV booster dose was effective
- Continued monitoring of invasive Hi is important and all laboratories are encouraged to submit isolates for serotyping

### ADDITIONAL KEY INFORMATION

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