



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive



Changing Epidemiology of Hib in Ireland and Hib Booster Campaign 2005-2006

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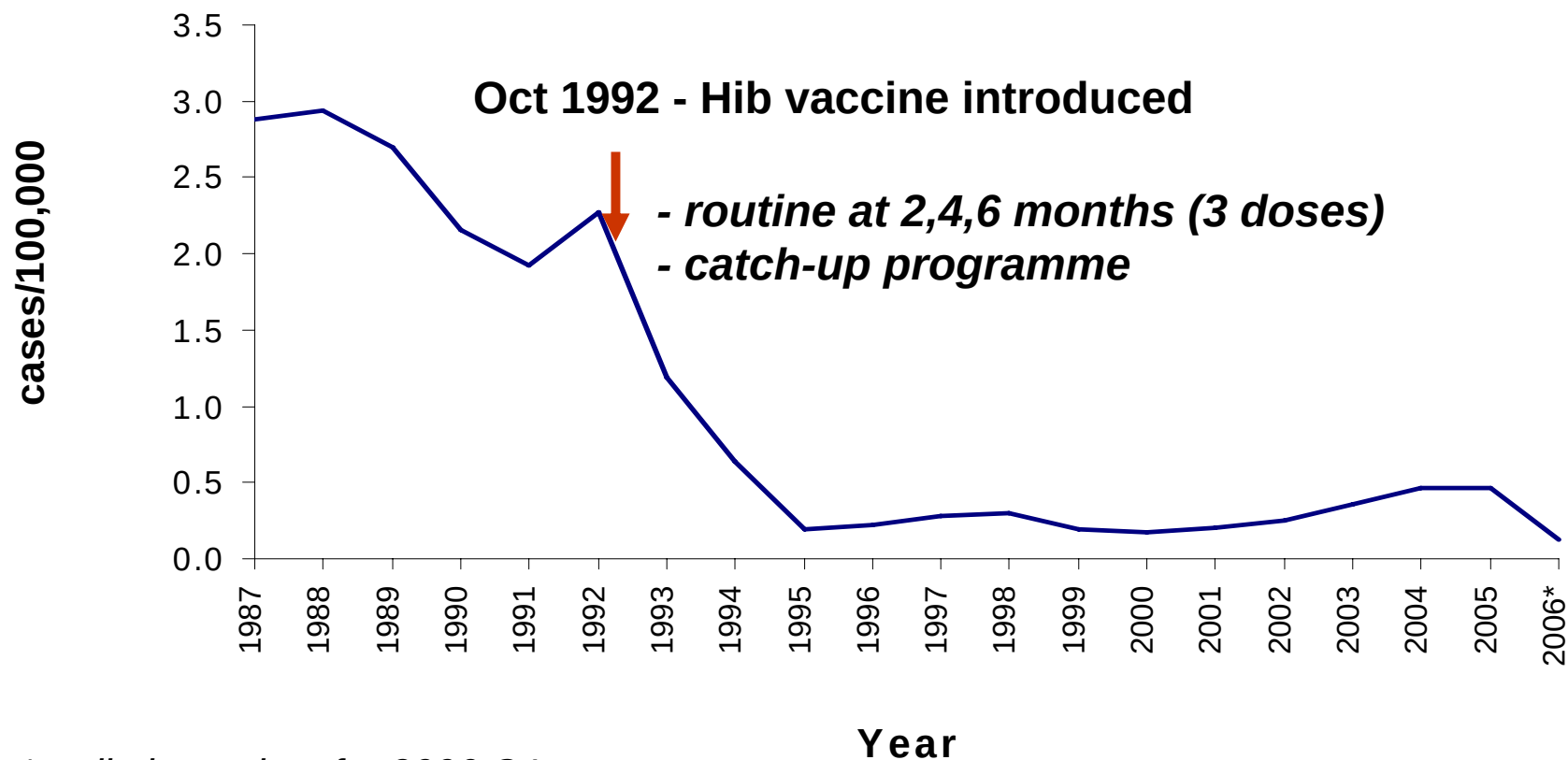
Dr. Margaret Fitzgerald, Dr. Darina O'Flanagan,
Health Protection Surveillance Centre, Dublin.

National Immunisation
Conference- Cork May 2006

Hib Surveillance in Ireland (1996-current)

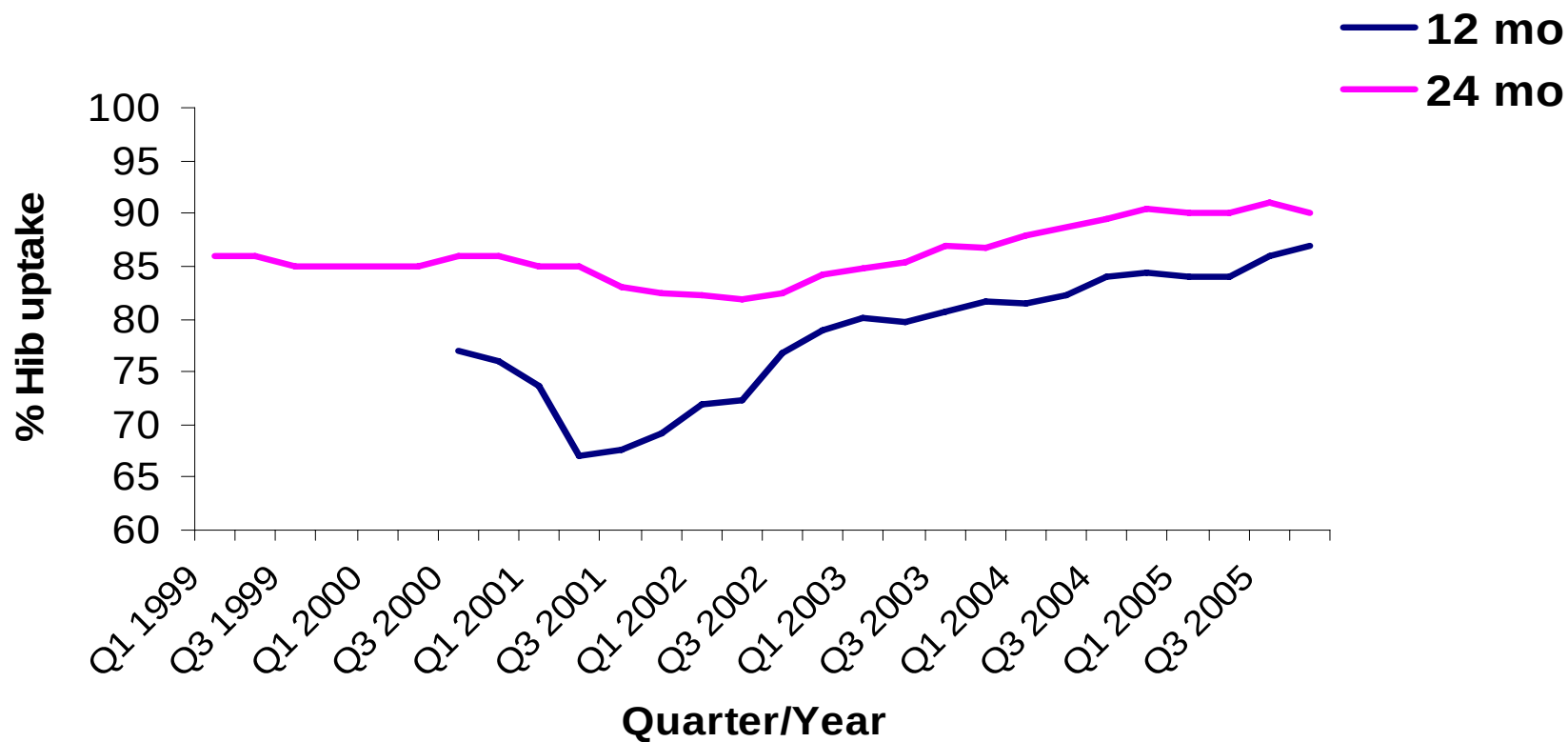
- Since 1996
 - All invasive *H. influenzae* cases (DoHC,1996; HPSC,1999)
- Data sources
 - Bacterial meningitis notifications
 - *Ad hoc* laboratory reports Public Health
 - Annual laboratory surveys
 - Regular updates from HPA Haemophilus influenzae reference laboratory
 - Since Jan 2004, laboratories became notifiers
 - Weekly notifications of all Hi cases to HPSC
- Enhanced surveillance system on all cases reported
 - since 2000

Hib incidence per 100,000, ROI 1987-2006*

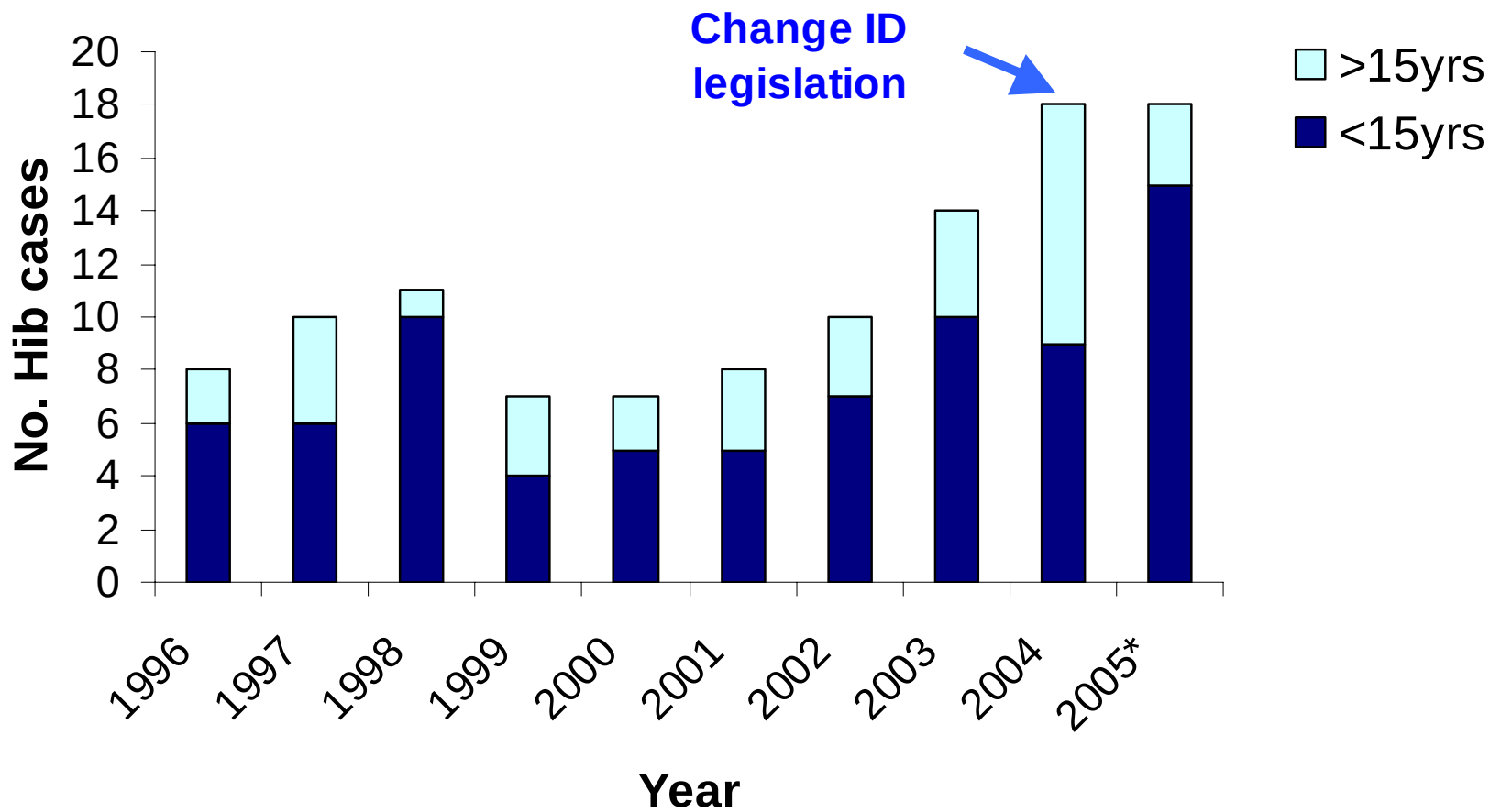


*preliminary data for 2006 Q1

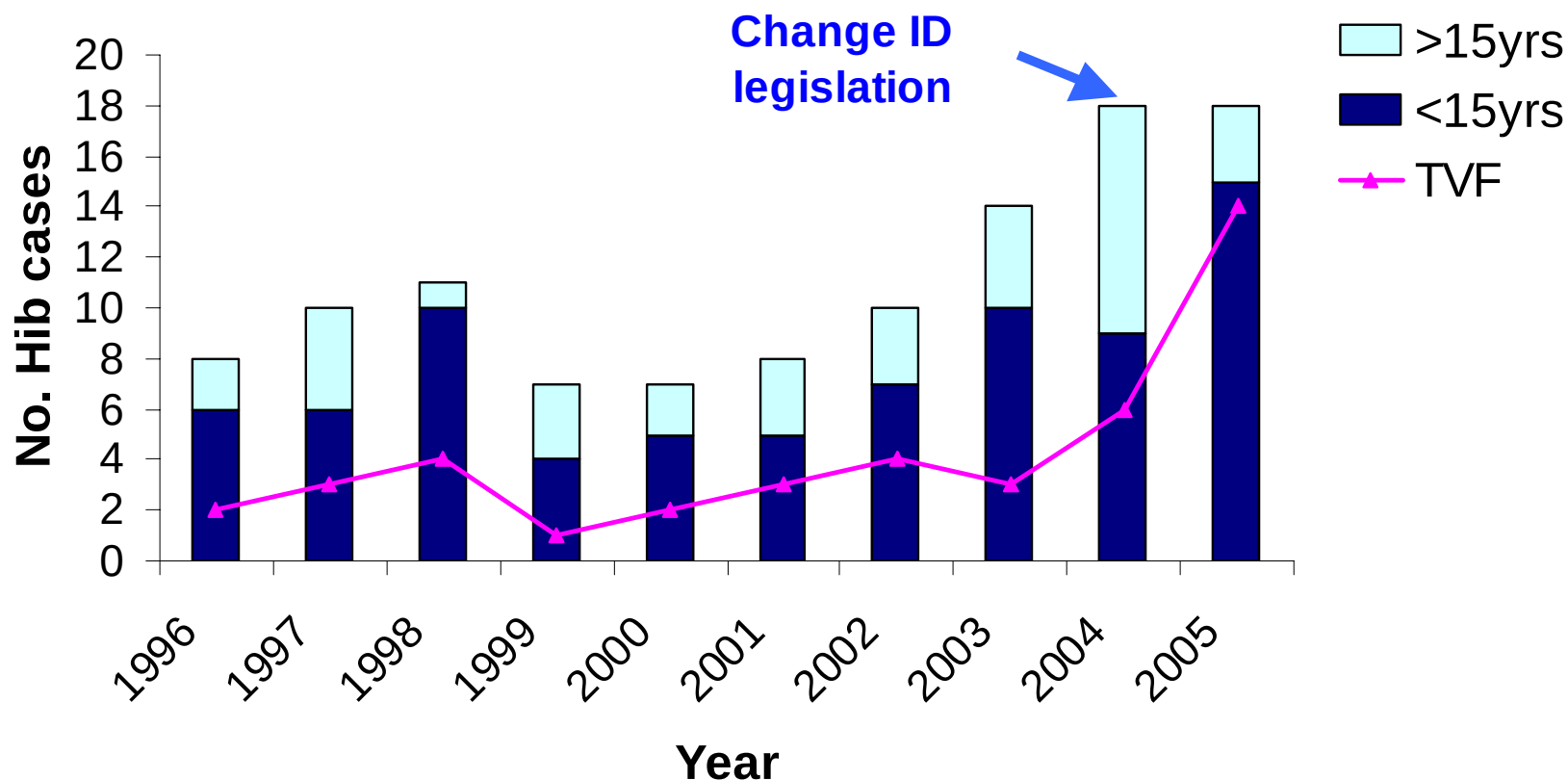
Hib vaccine uptake, at 12 and 24 months of age, 1999-2005



Number of Hib cases, by age group 1996-2005

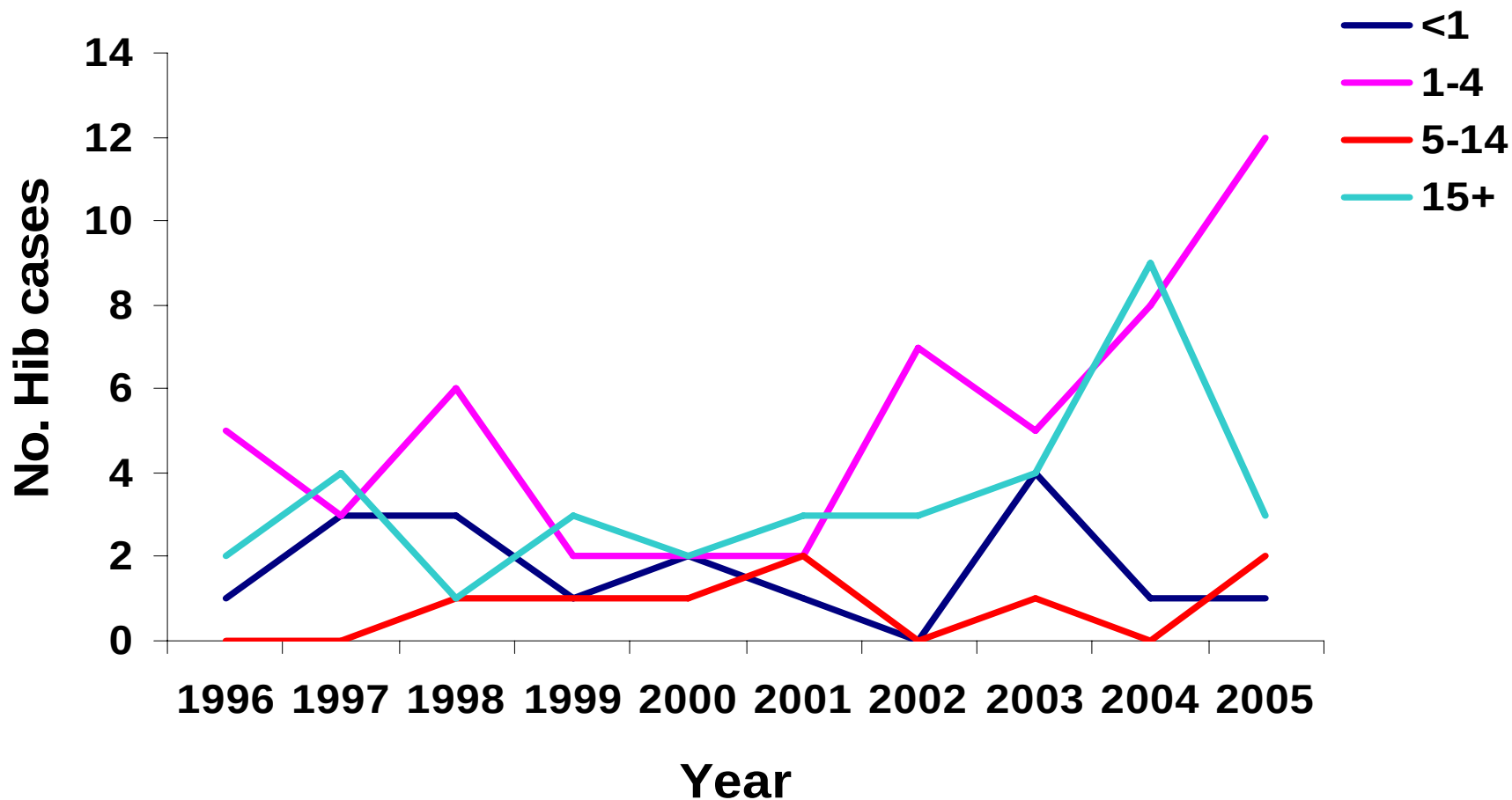


Number of Hib cases and TVFs*, by age group 1996-2005

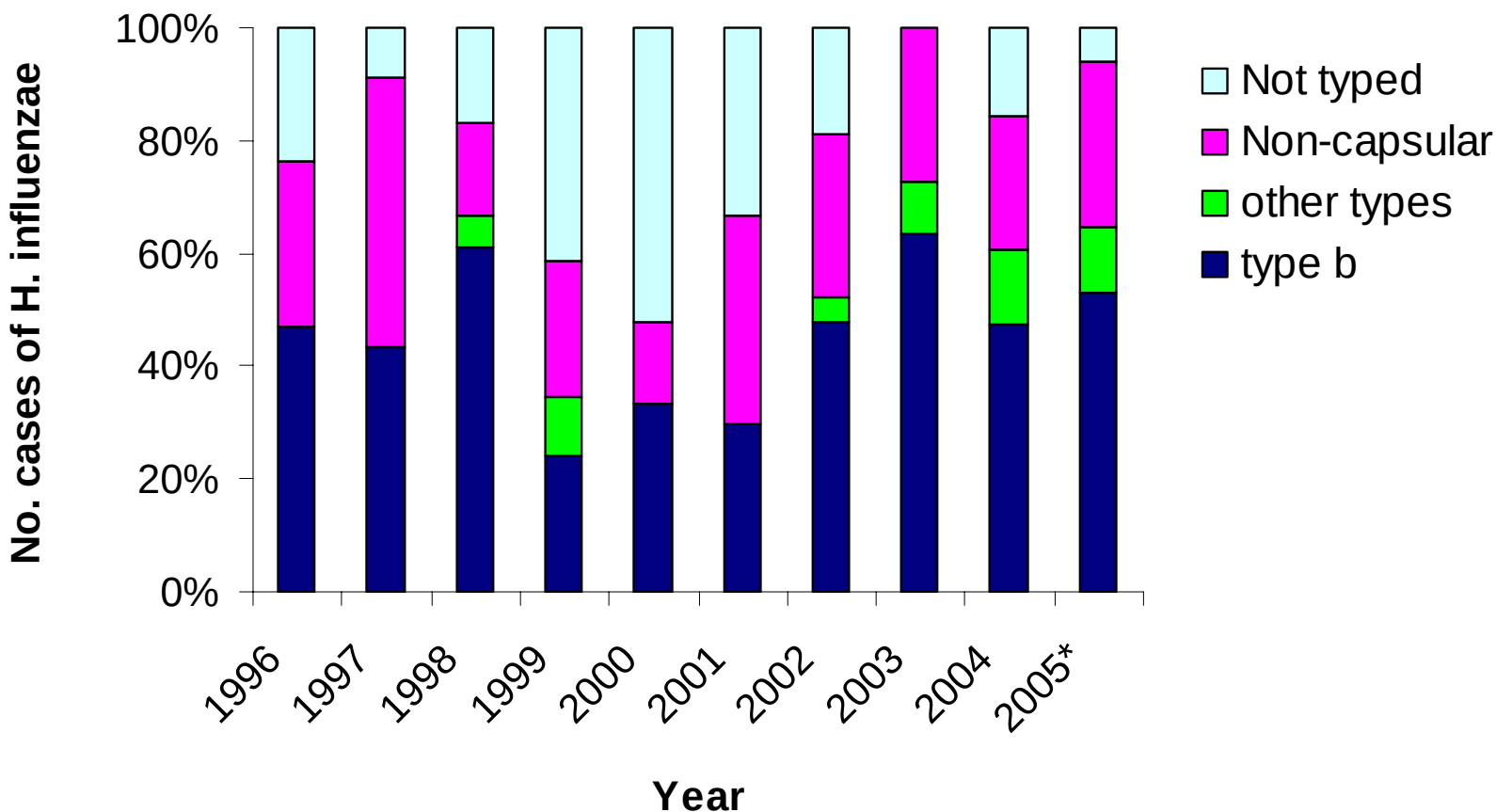


*TVF= Total vaccine failure

Invasive Hib infections by age group 1996-2005



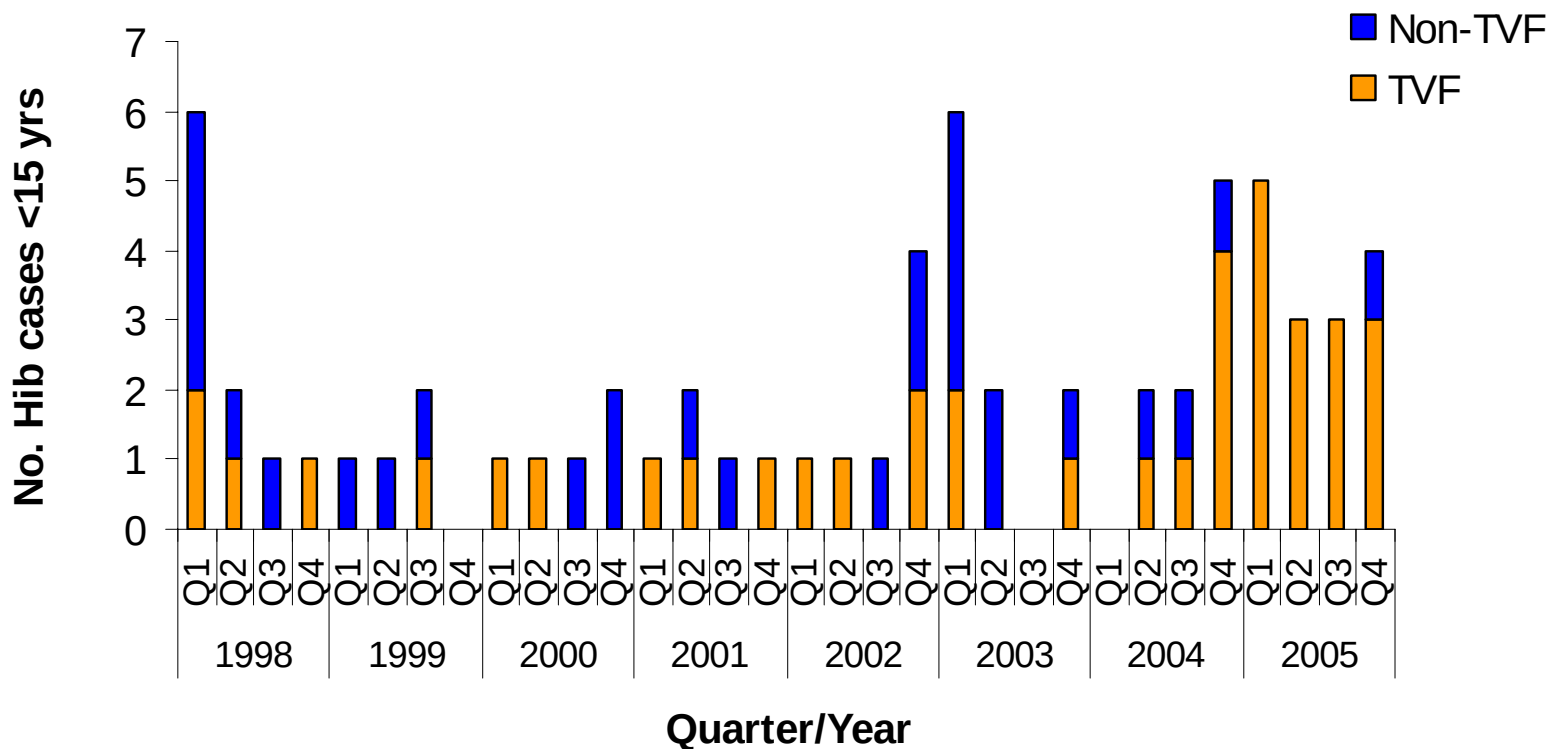
Hi reports by serotype (%), all ages (1996-2005*)



**Preliminary data 2005*

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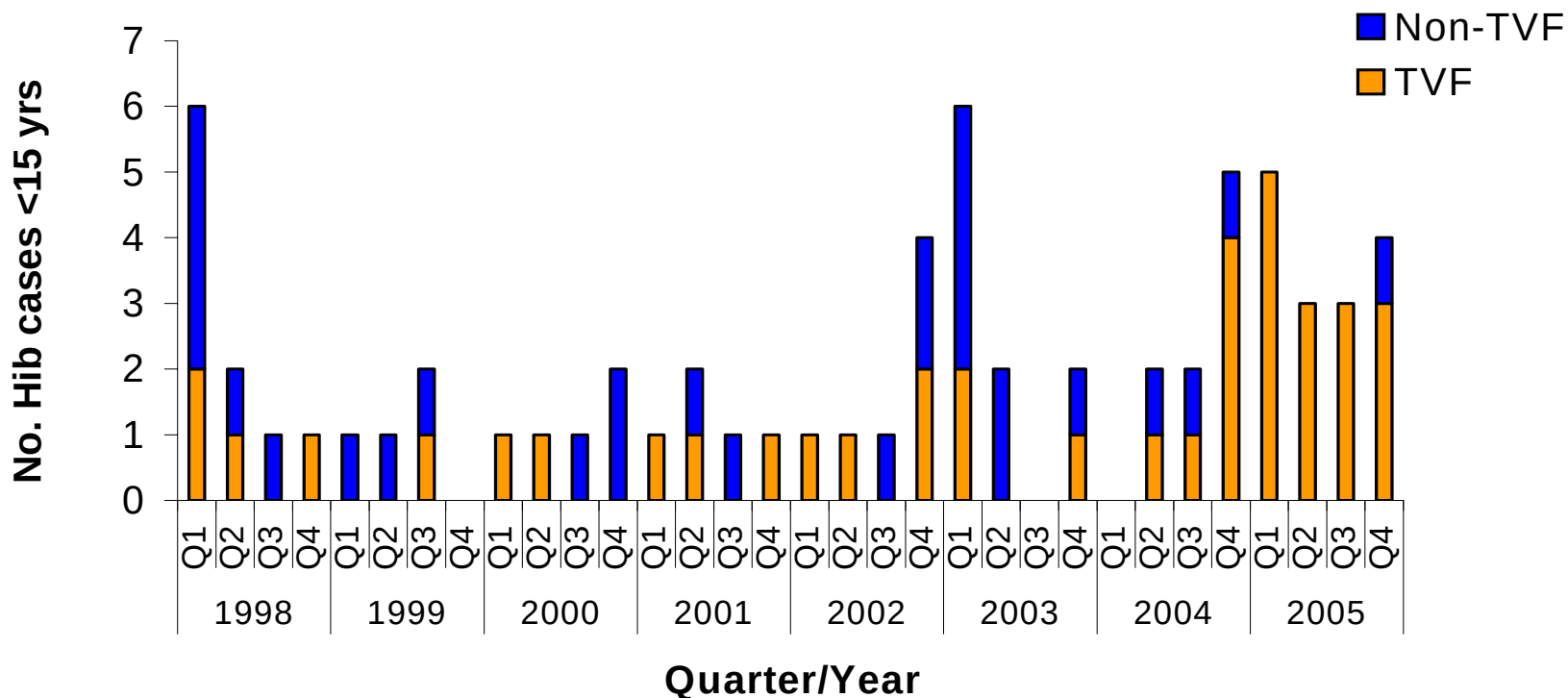
Hib disease in children < 15 years, by TVF or non-TVF (1998-2005)



TVF- total vaccine failure

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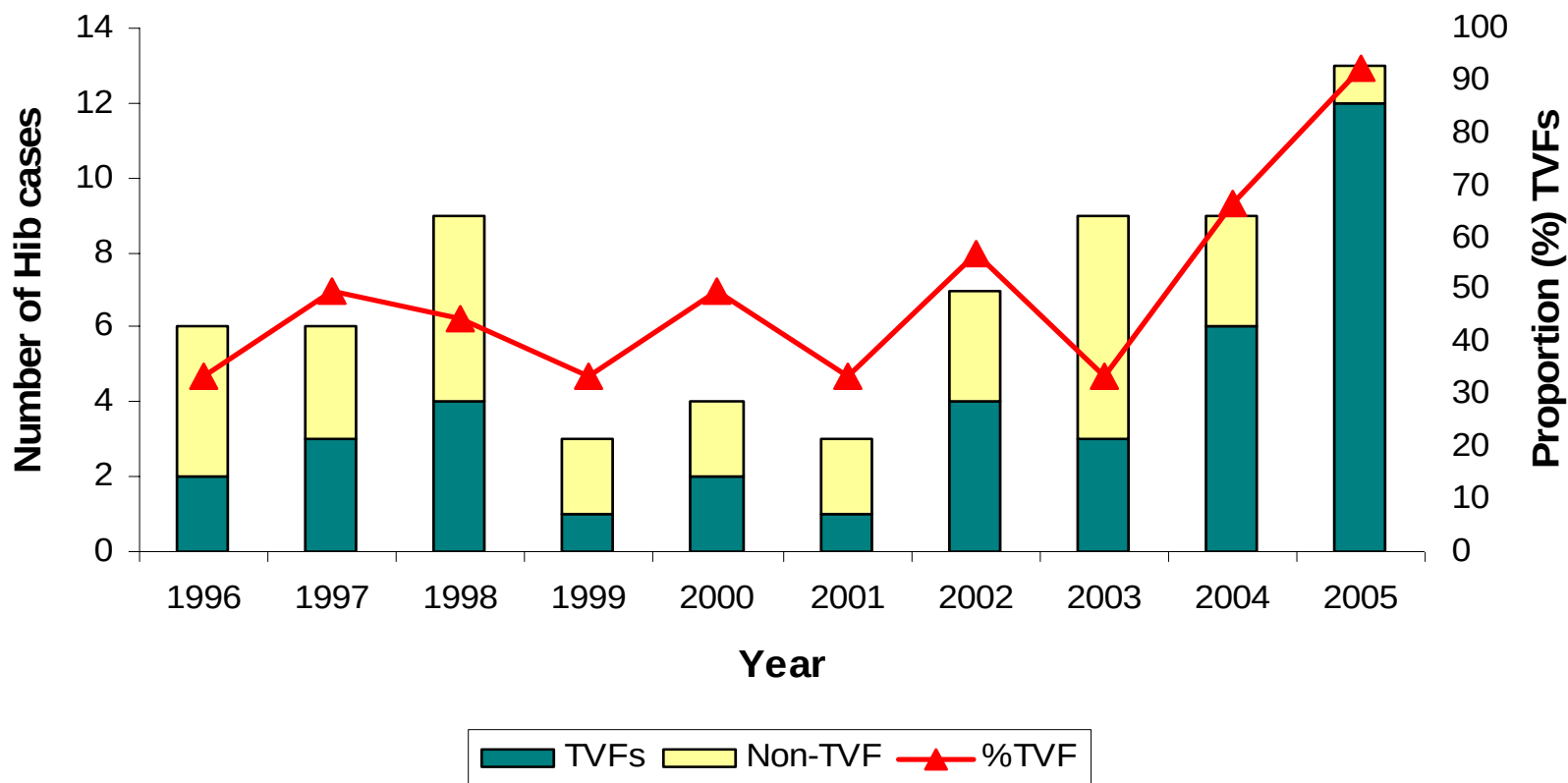
Hib disease in children < 15 years, by TVF or non-TVF (1998-2005)



TVF- total vaccine failure

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Hib cases and Hib VFs, among children < 5 years of age, 1996-2005



Summary of Hib Epidemiology

- 1992-2003
 - Dramatic and sustained decrease in Hib disease
- 2004- 2005
 - Increase in Hib
 - children 1-4 years of age mainly affected
 - Marked increase in TVFs, children aged 1-4 years
- Reasons for increase considered
 - Change reporting?, herd immunity?, vaccine efficacy?

Experience in other countries

- UK
 - Increase Hib disease (vaccinated and unvaccinated) in 1999 -
 - Children < 4 years (TVFs) and adults
 - Hib Booster campaign 2003
 - Routine booster introduced 2006
- Netherlands
 - Increase in Hib cases 1st seen in 2003
- Other countries
 - most with booster after 12 months, not seeing increase in Hib

Hib Booster catch-up campaign 21/11/2005 – 31/5/2006

- Mid-2005 - NAIC recommend Hib booster
 - Target all children between 1 and 4 years of age
 - Phased implementation
 1. Nov 2005: 12 - 23 months
 2. Jan 2006: 24 – 35 months
 3. March 2006: 36 – 47 months
 - Hib cases 2006
 - 3 TVFs (5, 6, 7 years of age)
 - 3 AVFs (2,4,7 months of age)
- Mid-term evaluation of Hib uptake phase 1
 - Presentation to follow

Acknowledgements

- Community Care, Depts. Public Health, and Hospitals staff
- Laboratories
 - Regional hospitals
 - H. influenza reference laboratory, Children's University Hospital, Temple St.
 - HRU HPA
- EU-IBIS