



Prevention of mother-to-child HIV transmission in Australia, 1982 - 2005

**McDonald A¹, Zurynski Y², Nadew K³, Elliott E², Kaldor J¹ and Ziegler J³
for contributors to the Australian Paediatric Surveillance Unit**

1 National Centre in HIV Epidemiology and Clinical Research, Sydney, NSW

2 Australian Paediatric Surveillance Unit, Westmead, NSW

3 Sydney Children's Hospital, Randwick, NSW

Perinatal exposure to HIV in Australia



- **Small number of women with diagnosed HIV infection**
- **Perinatally acquired infection rare**
- **Perinatal surveillance through APSU**
 - **Describe perinatal exposure**
 - **Use of interventions**

Perinatal HIV surveillance



- **Cases of perinatal HIV exposure**
 - 1982: Sydney Children's Hospital
 - 1993: Australian Paediatric Surveillance Unit
 - 1995: Follow up of women with HIV

- **Cases of newly diagnosed HIV infection**
 - State/Territory health authorities

- **Information sought**
 - Date of mother's HIV diagnosis
 - Reported source of exposure to HIV
 - Use of interventions
 - Use of antiretroviral therapy in pregnancy
 - Mode of delivery
 - Mode of infant feeding

Perinatal HIV surveillance



- **1982 - 2005**
 - **367 exposed children**

- **79 with HIV infection**
 - **16 indeterminate**
 - **268 HIV negative**
 - **4 not known**

Perinatal exposure to HIV in Australia, 1982 - 2005



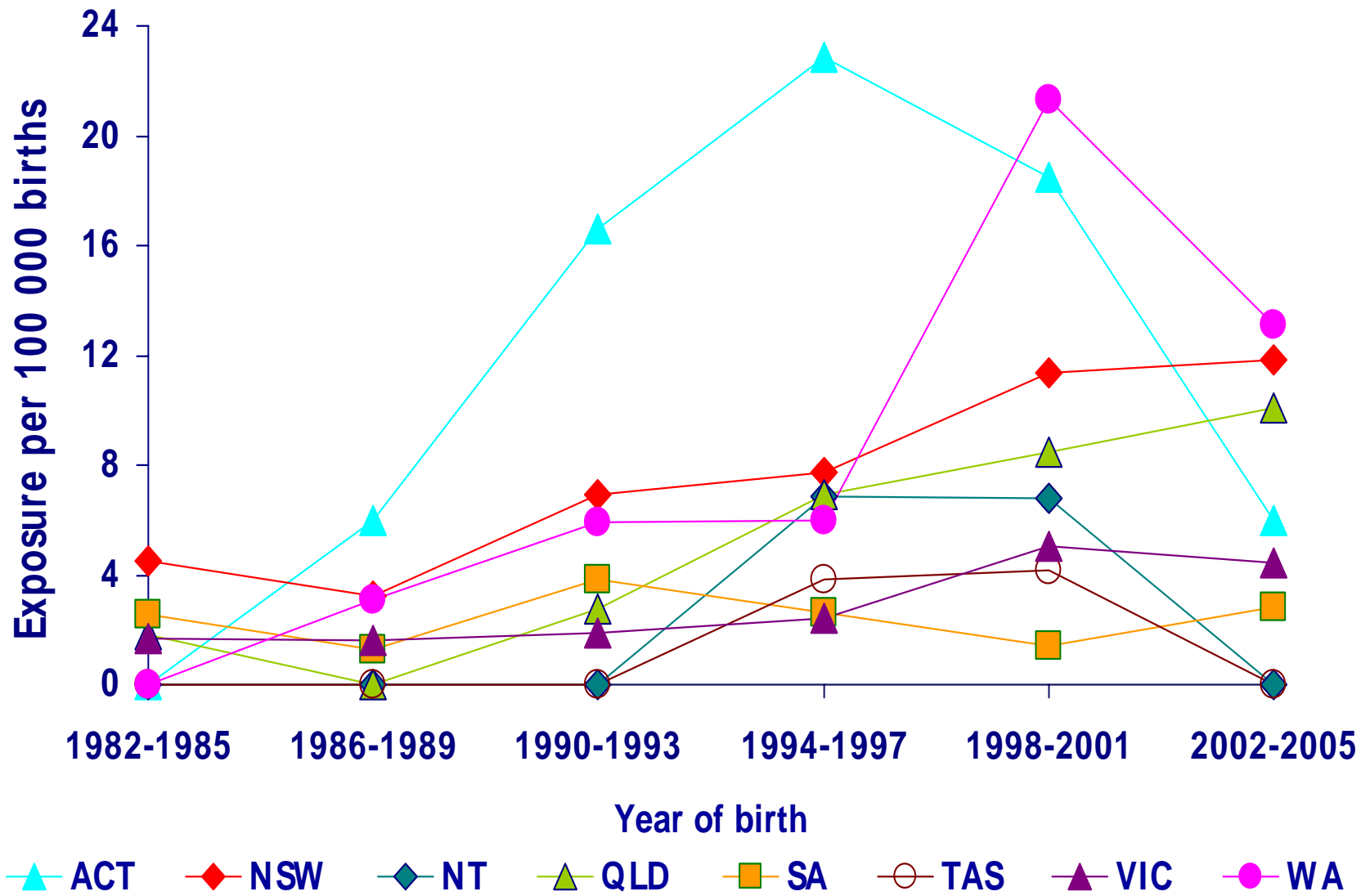
Country of birth	Exposed children	Children with infection
Australia	333	57
Other Oceania	4	3
United Kingdom	3	3
Other Europe	1	0
Sub-Saharan Africa	11	10
Asia	5	5
South/Central America	1	0
Not reported	9	1
Total	367	79

Perinatally exposed children, 1982 - 2005



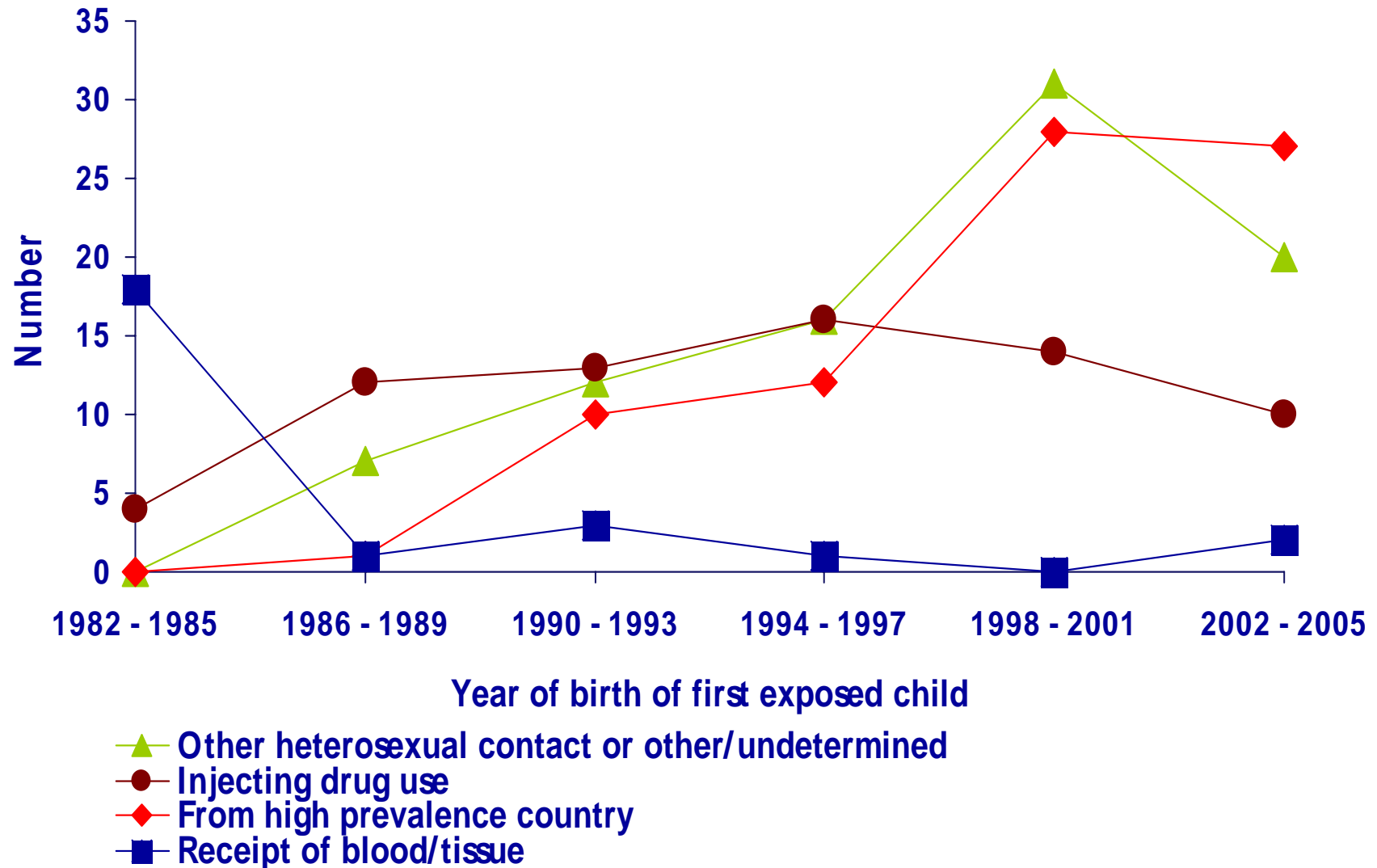
State/ Territory	Exposed children	Children with infection
ACT	12	3
NSW	158	29
NT	2	1
QLD	57	5
SA	11	3
TAS	2	0
VIC	42	10
WA	49	6
Total	333	57

Perinatal exposure to HIV, 1982 – 2005, by State/Territory and year of birth



Source: Australian Paediatric Surveillance Unit; State and Territory health authorities

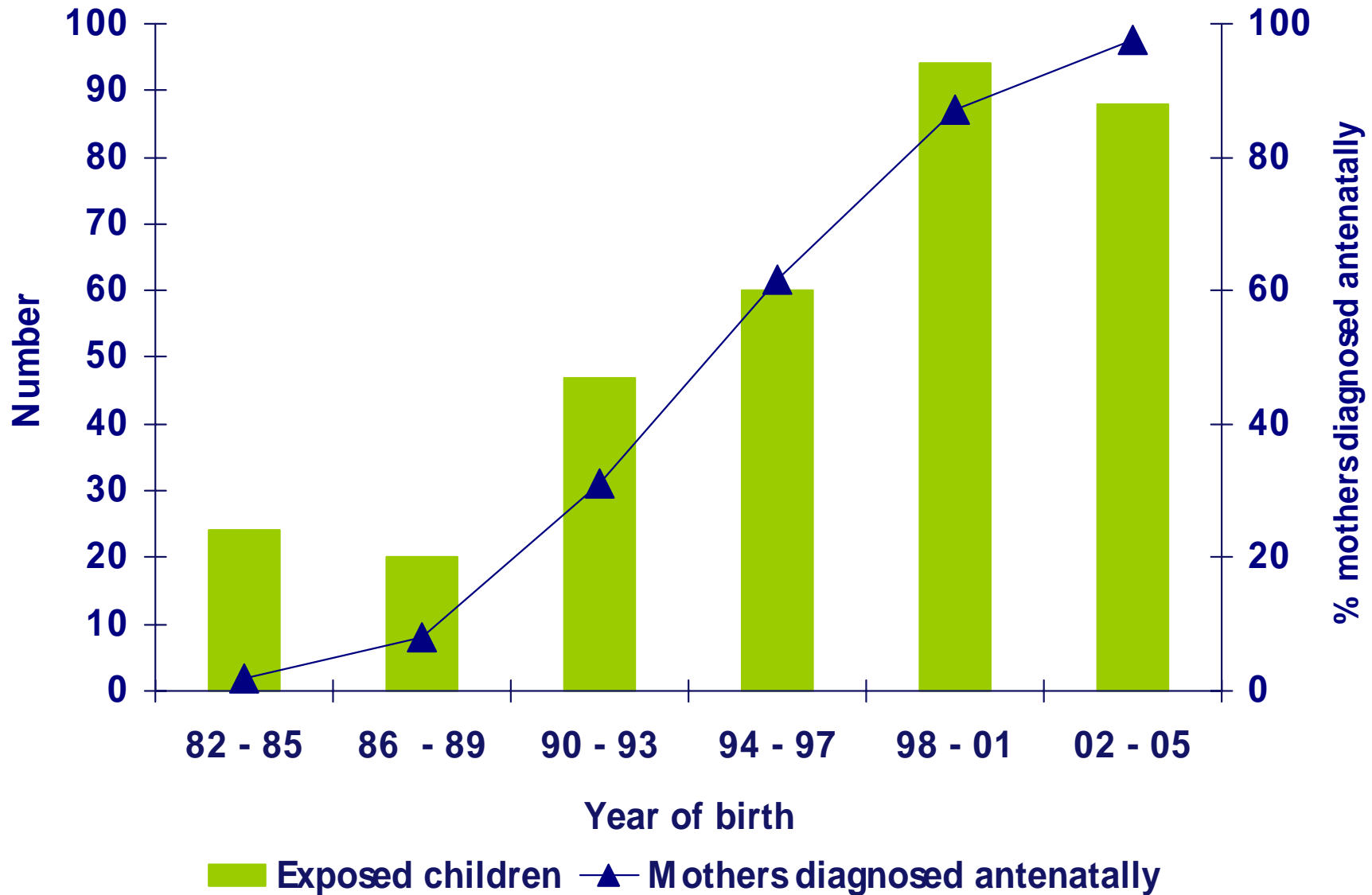
Women with HIV infection who have had children by year and exposure category¹



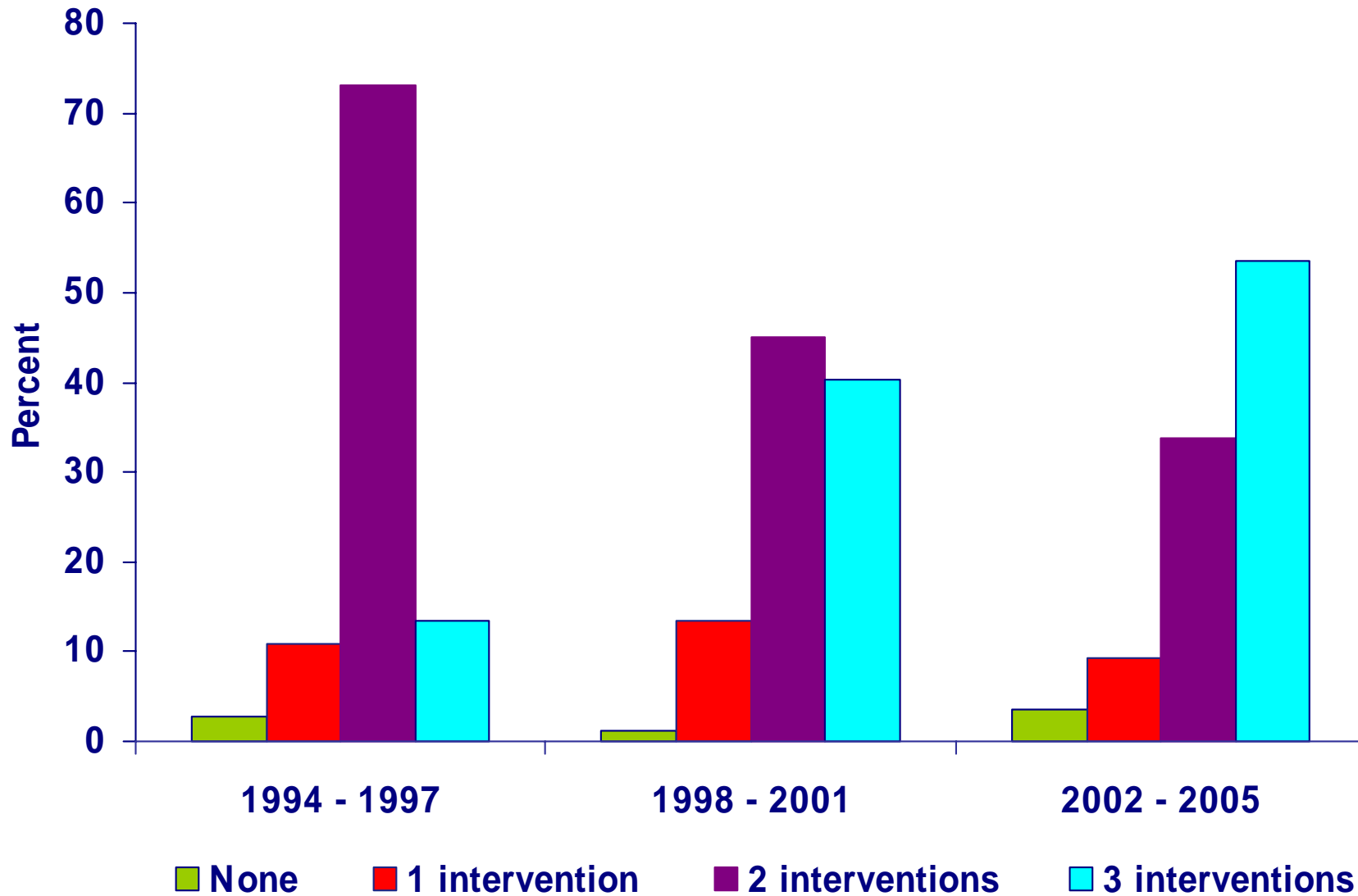
¹ Includes women who reported heterosexual contact with men with the specific HIV exposure

Source: Australian Paediatric Surveillance Unit; State and Territory health authorities

Number of exposed children by year of birth and timing of mother's HIV diagnosis



Use of interventions in pregnancy among women diagnosed antenatally

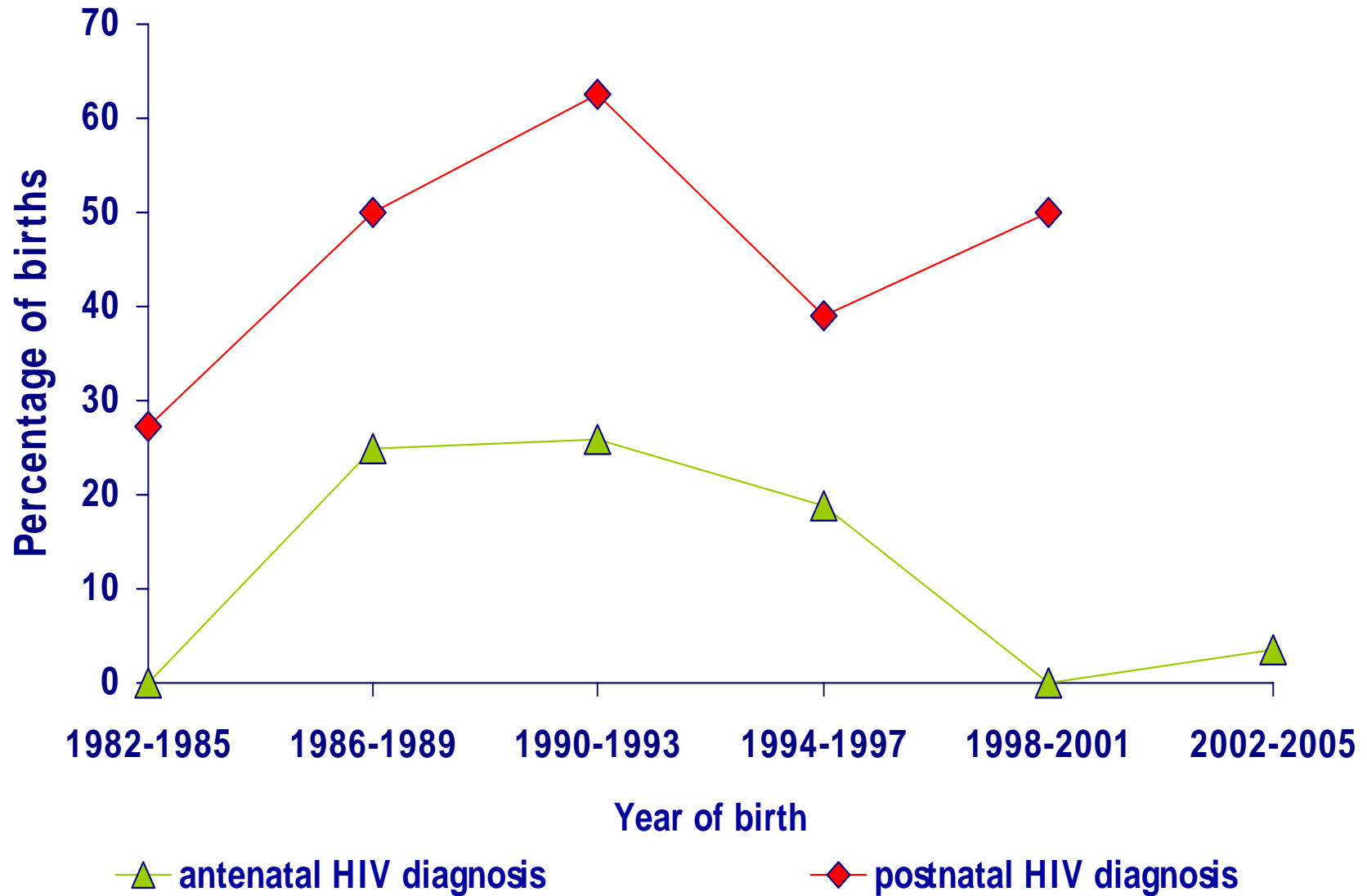


Mothers diagnosed antenatally, 1994 - 2005



Number of Interventions	Exposed children	Children with infection	%
0	5	1	20
1	23	4	17.4
2	93	4	4.3
3	84	1	1.2
Total	205	10	4.9

Perinatal HIV infection, 1982 – 2005, by year of birth and timing of mother's HIV diagnosis



Source: Australian Paediatric Surveillance Unit; State and Territory health authorities



Summary

- **Women with exposed children**
 - **Heterosexual contact, overseas or in Australia**

- **Women diagnosed antenatally**
 - **Antiretroviral treatment**
 - **Elective caesarean delivery**
 - **Avoided breastfeeding**

- **Use of interventions associated with reduced rate of perinatal infection**

- **Women diagnosed postnatally**
 - **Continuing mother-to-child HIV transmission**