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# **Prevention of mother-to-child HIV transmission in Australia, 1982 - 2006**

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# Paediatric HIV infection in Australia

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- **Routes of transmission**
  - **Blood, blood products or tissue**
  - **Mother-to-child**
- **Universal screening of blood and tissue 1985**
- **HIV infection relatively rare in Australian women (100-120 diagnoses p.a.)**
- **Major advances in preventing perinatal prevention**

# Prevention of perinatal HIV infection

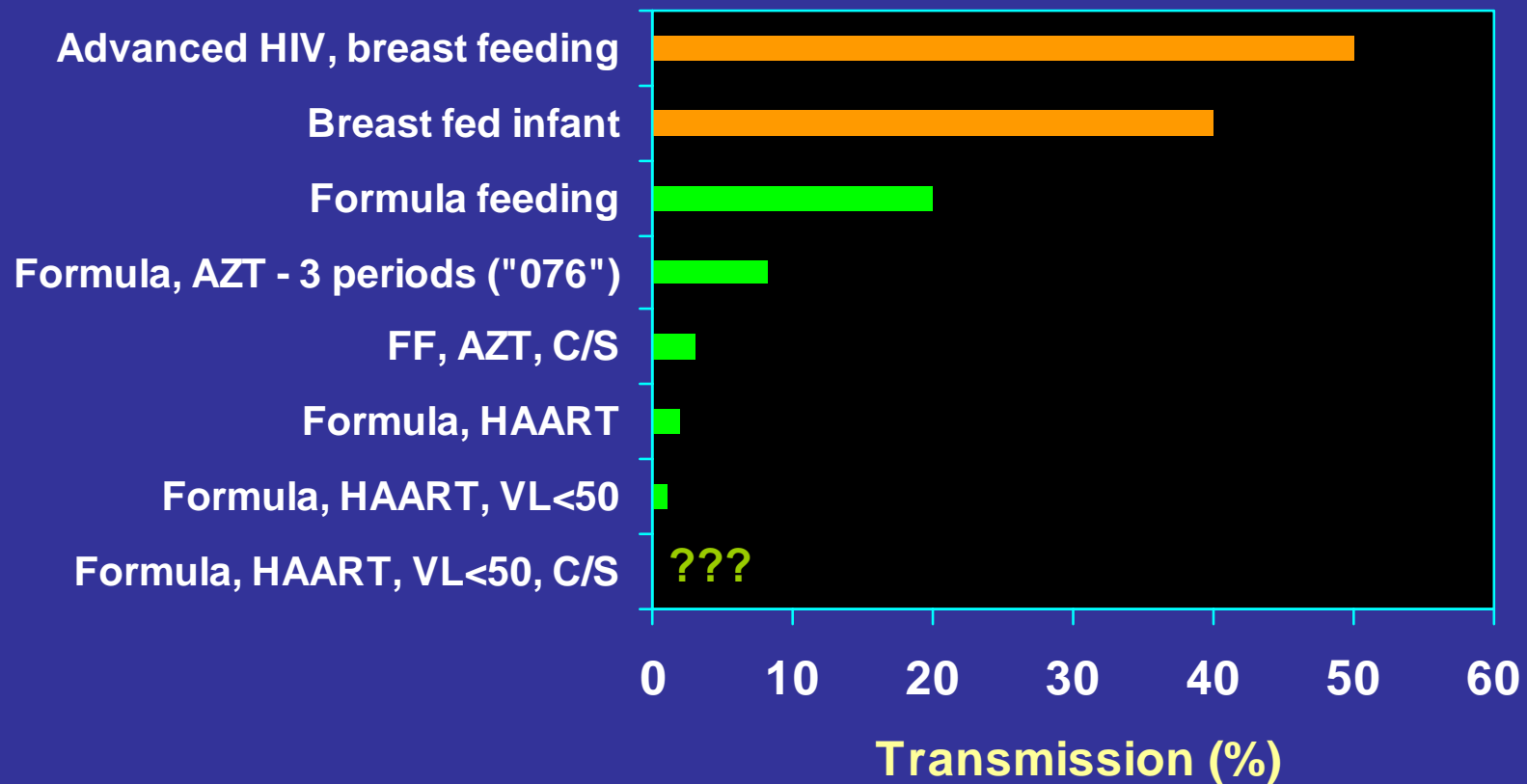
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- **Avoidance of breastfeeding**
- **Antiretroviral therapy for mother and infant**
- **Caesarean delivery**

# Perinatal HIV transmission

## Setting



# **National reporting of perinatal HIV**

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## **Reports via States and Territories**

- **HIV diagnosis in children**
- **HIV diagnosis in women**
- **Follow up to ascertain perinatal HIV cases**

## **Reports via APSU (from 1993)**

- **Children born to women with HIV infection**
- **Children with HIV**

**Cross referencing of the two sources**

## Information collected via APSU

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- **Date of mother's HIV diagnosis**
- **Route of exposure to HIV**
- **Clinical and lab characteristics**
- **Preventive interventions for perinatal transmission**

# Antenatal HIV testing in Australia

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- **1991 – 1992: national survey of RACOG obstetricians, GPs**
  - **20% women tested antenatally**
  
- **1999: national survey of RANZCOG obstetricians, GPs**
  - **33% women tested antenatally**
  
- **2002 – 2003: national survey of RANZCOG obstetricians**
  - **51% “always screen for HIV”**
  
- **2004 follow up survey of RANZCOG obstetricians**
  - **59% “always offer screening for HIV”**

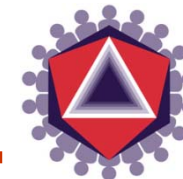
## **Perinatal exposure, Australia**

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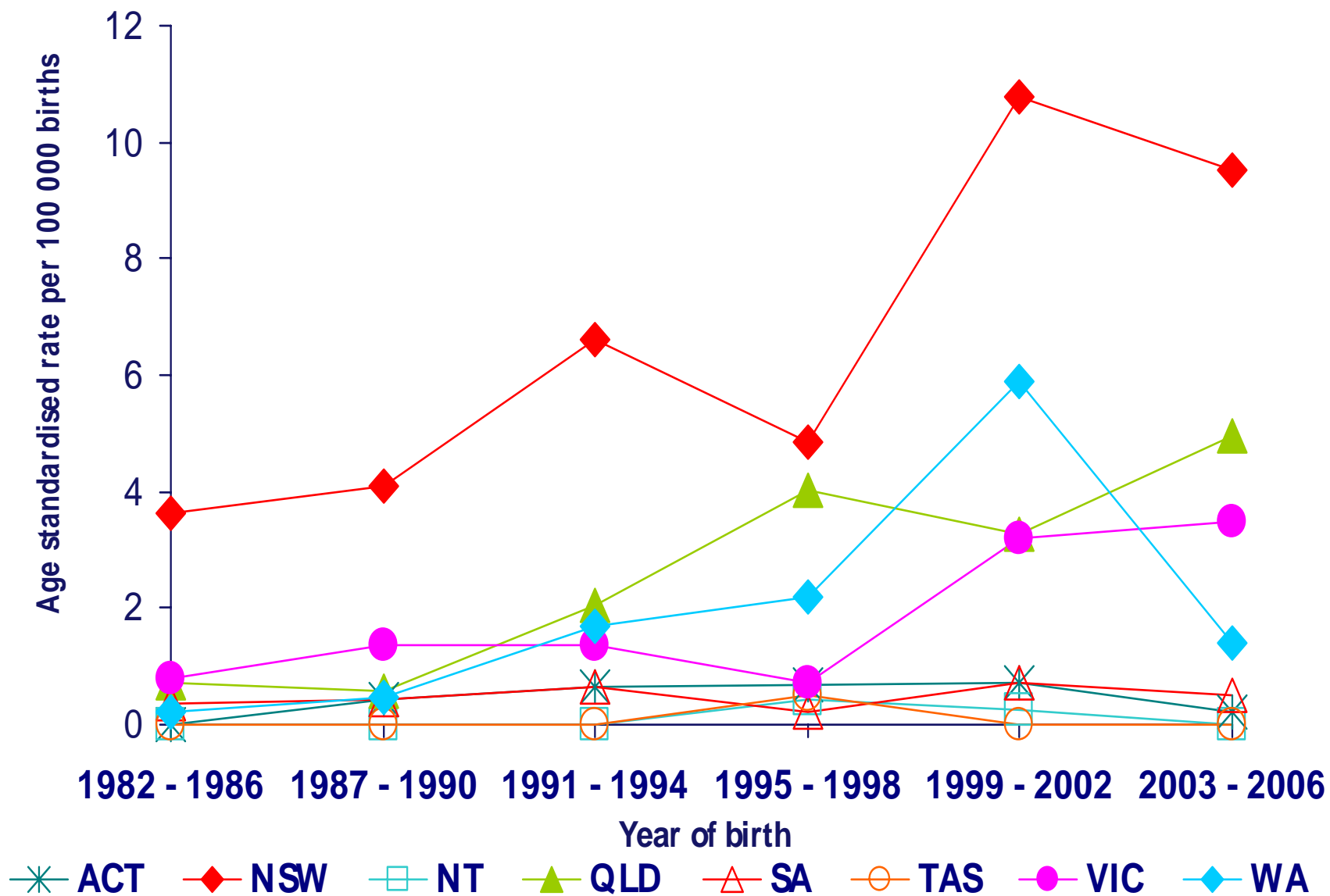
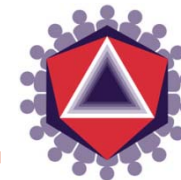
- **392 children born to 304 women with HIV**
- **354 births in Australia to 273 women with HIV**
  - **61 with HIV infection**
  - **268 HIV negative**
  - **22 indeterminate**
  - **3 not known**

## Children born to women with HIV, Australia

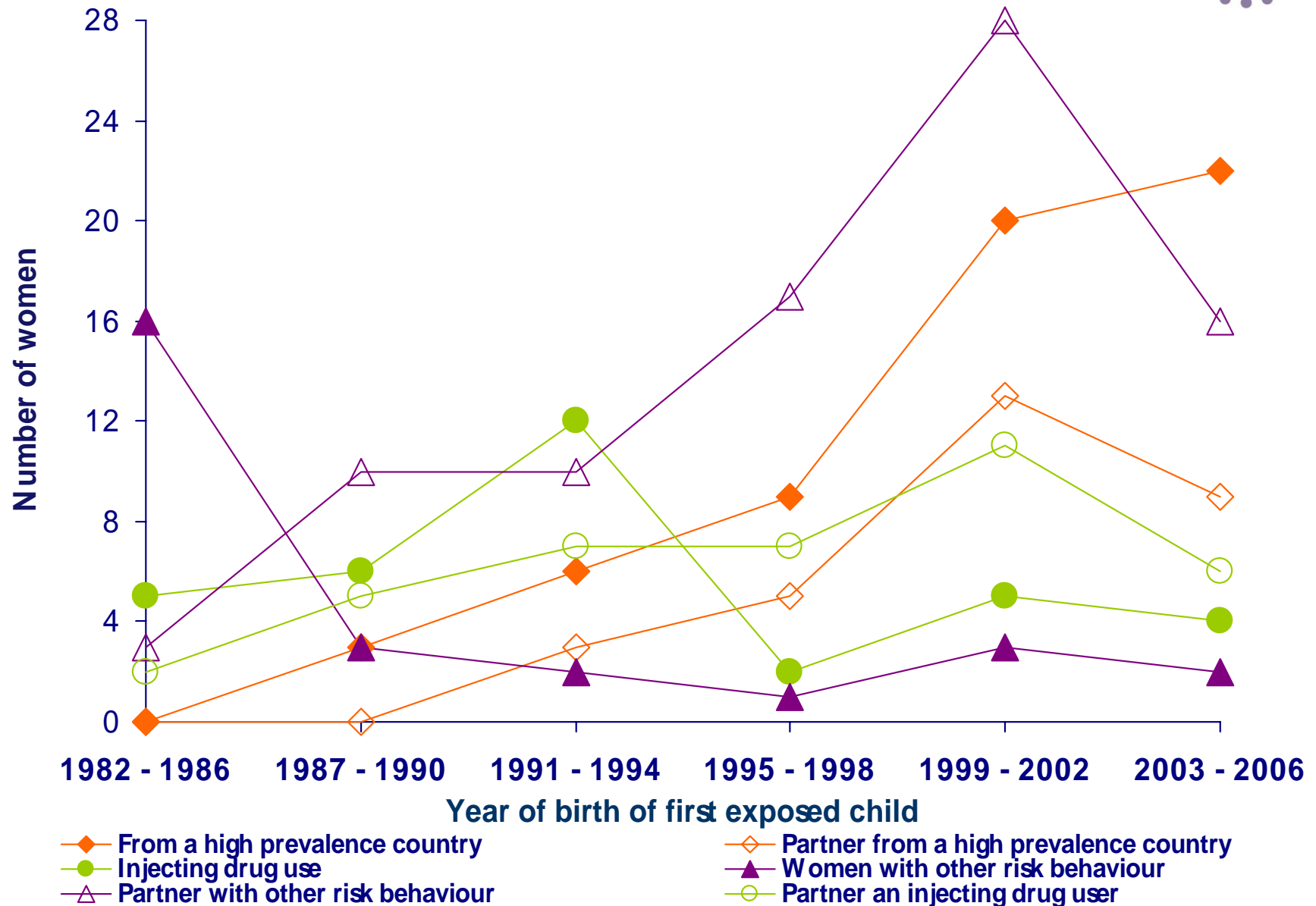


<b>State/ Territory</b>	<b>Total births</b>	<b>HIV + child</b>
<b>ACT</b>	<b>12</b>	<b>3</b>
<b>NSW</b>	<b>166</b>	<b>31</b>
<b>NT</b>	<b>2</b>	<b>1</b>
<b>QLD</b>	<b>63</b>	<b>7</b>
<b>SA</b>	<b>13</b>	<b>3</b>
<b>TAS</b>	<b>2</b>	<b>0</b>
<b>VIC</b>	<b>47</b>	<b>10</b>
<b>WA</b>	<b>49</b>	<b>6</b>
<b>Total</b>	<b>354</b>	<b>61</b>

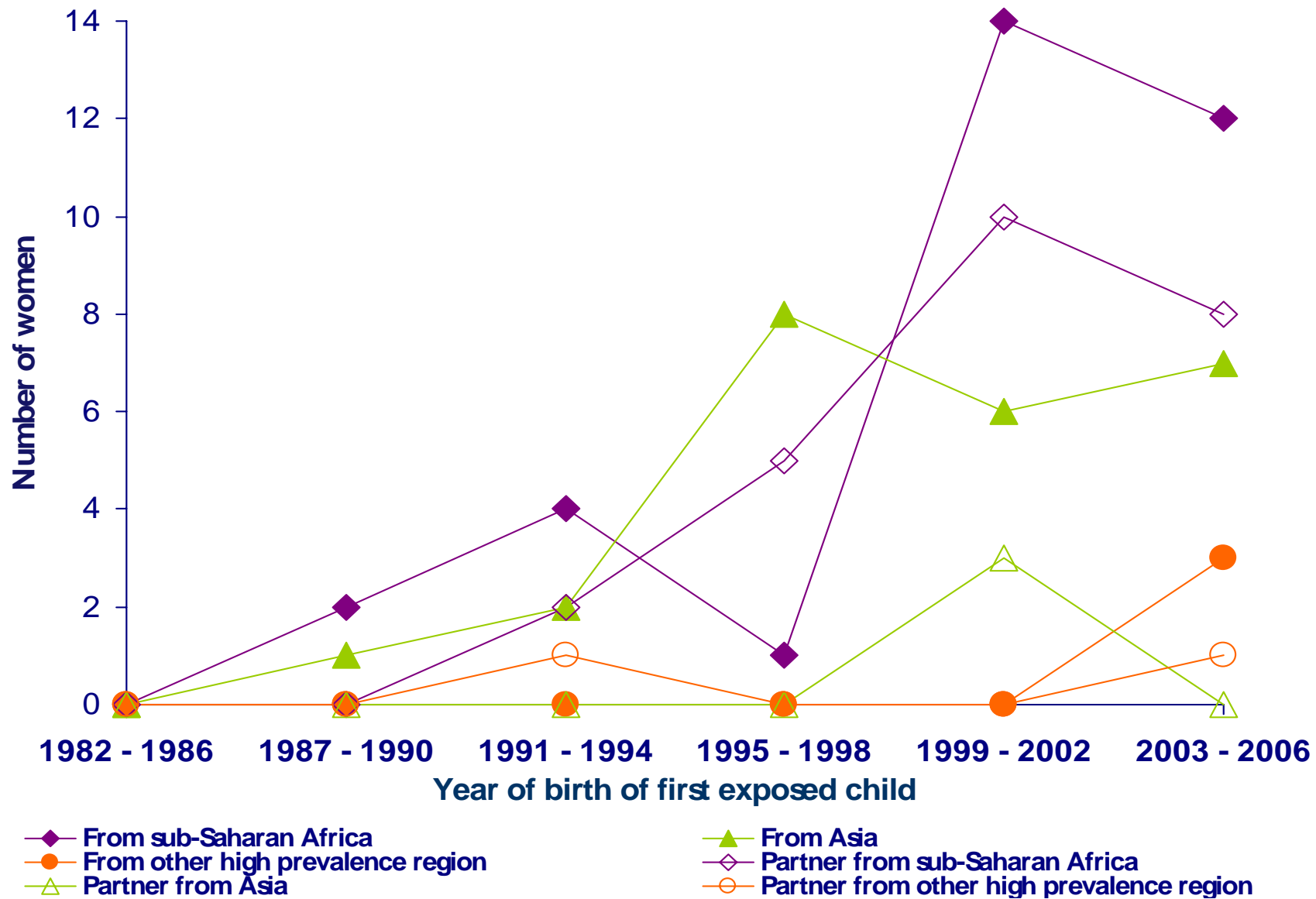
# Perinatal HIV exposure in Australia, by State/Territory and year



# Women with HIV who had children, Australia



# Region of birth for women or partners with HIV

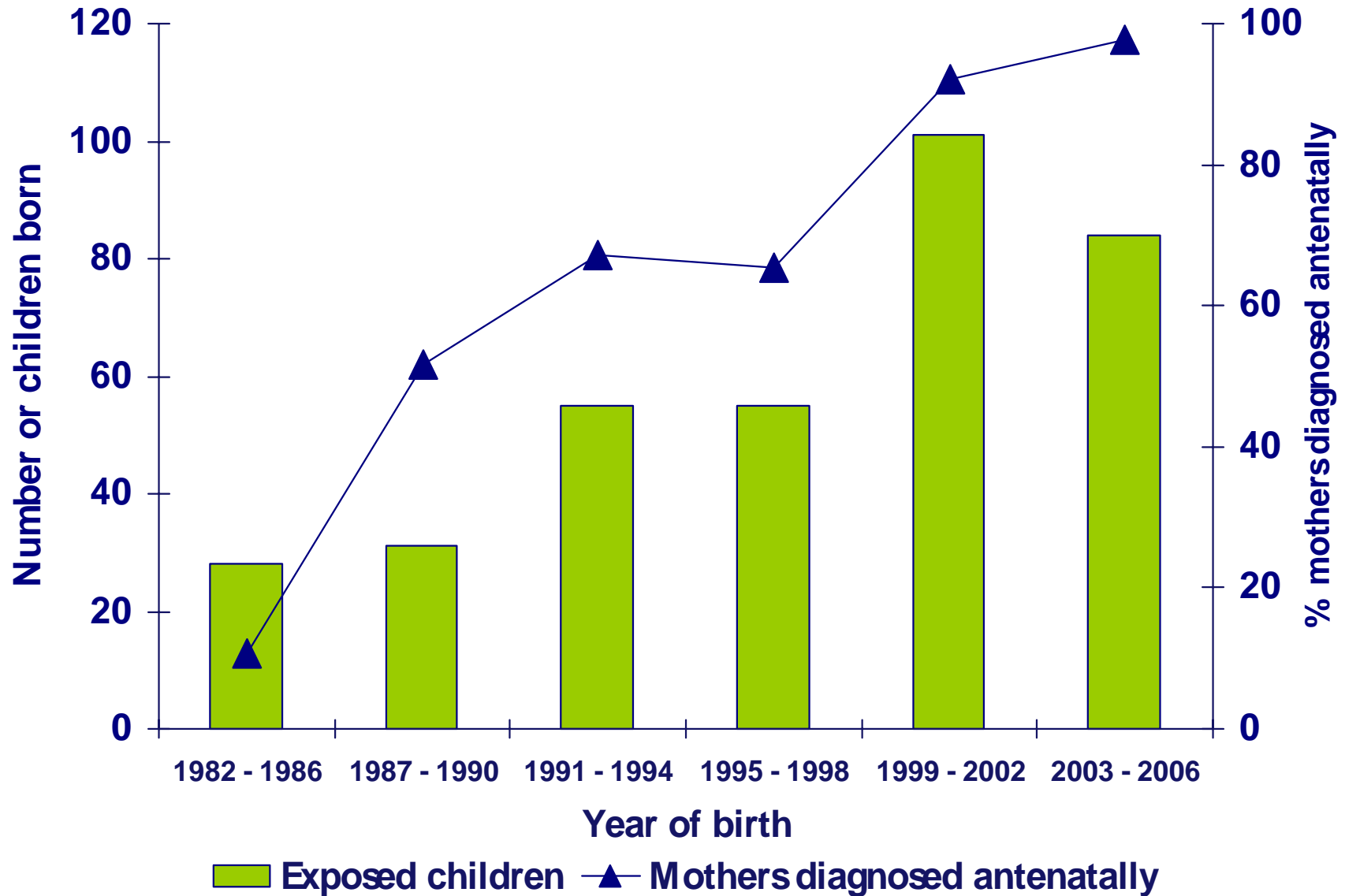


## Children born in Australia to women with HIV

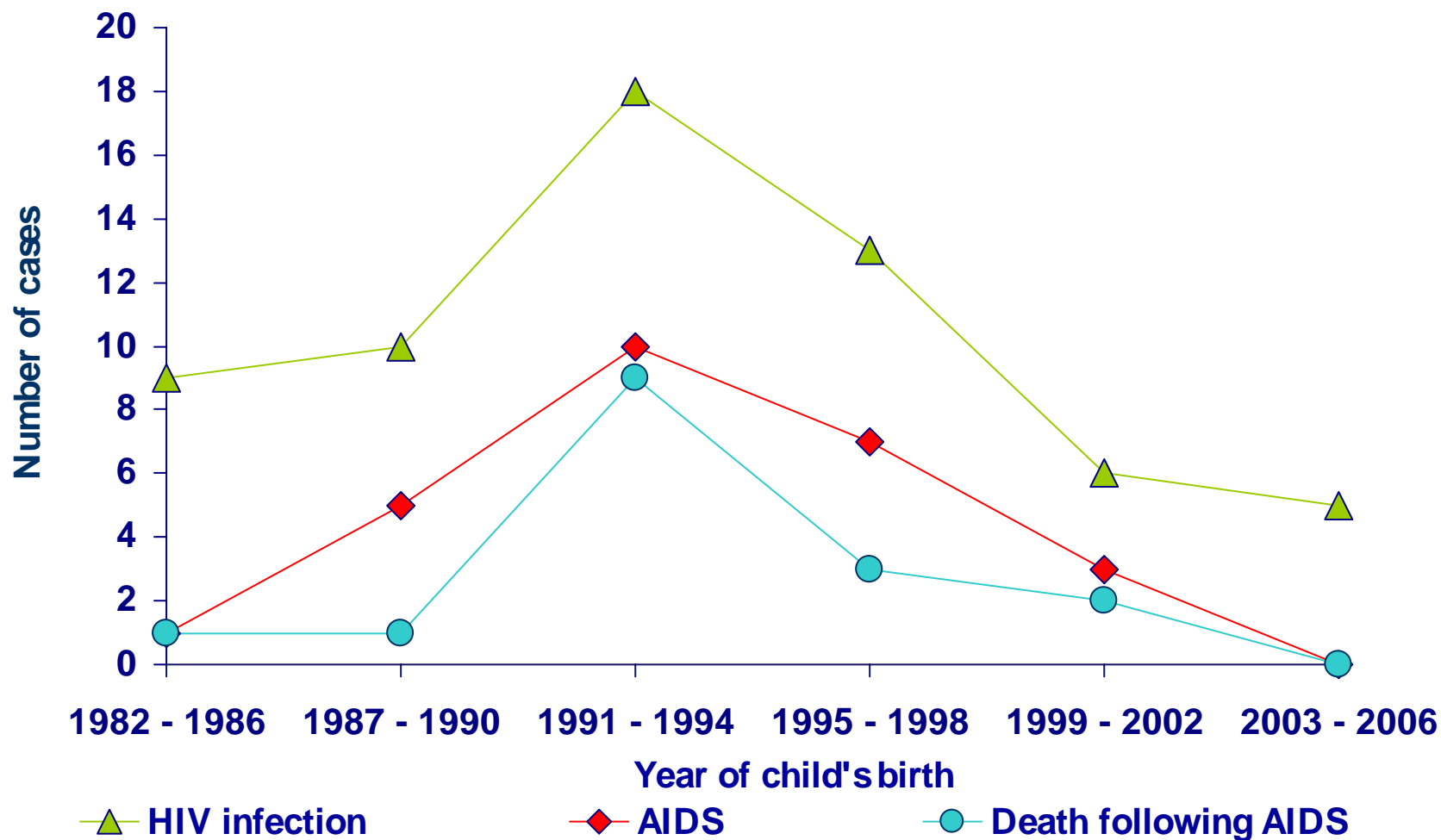
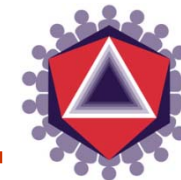


State/ Territory	1994 – 2000		2001 – 2006	
	Exposed	HIV+	Exposed	HIV+
ACT	7	1	1	0
NSW	52	10	62	2
NT	2	1	0	0
QLD	25	3	30	2
SA	2	1	5	0
TAS	2	0	0	0
VIC	14	4	20	1
WA	20	1	20	2
<b>Total</b>	<b>124</b>	<b>21</b>	<b>138</b>	<b>7</b>

# Births to women with HIV in Australia

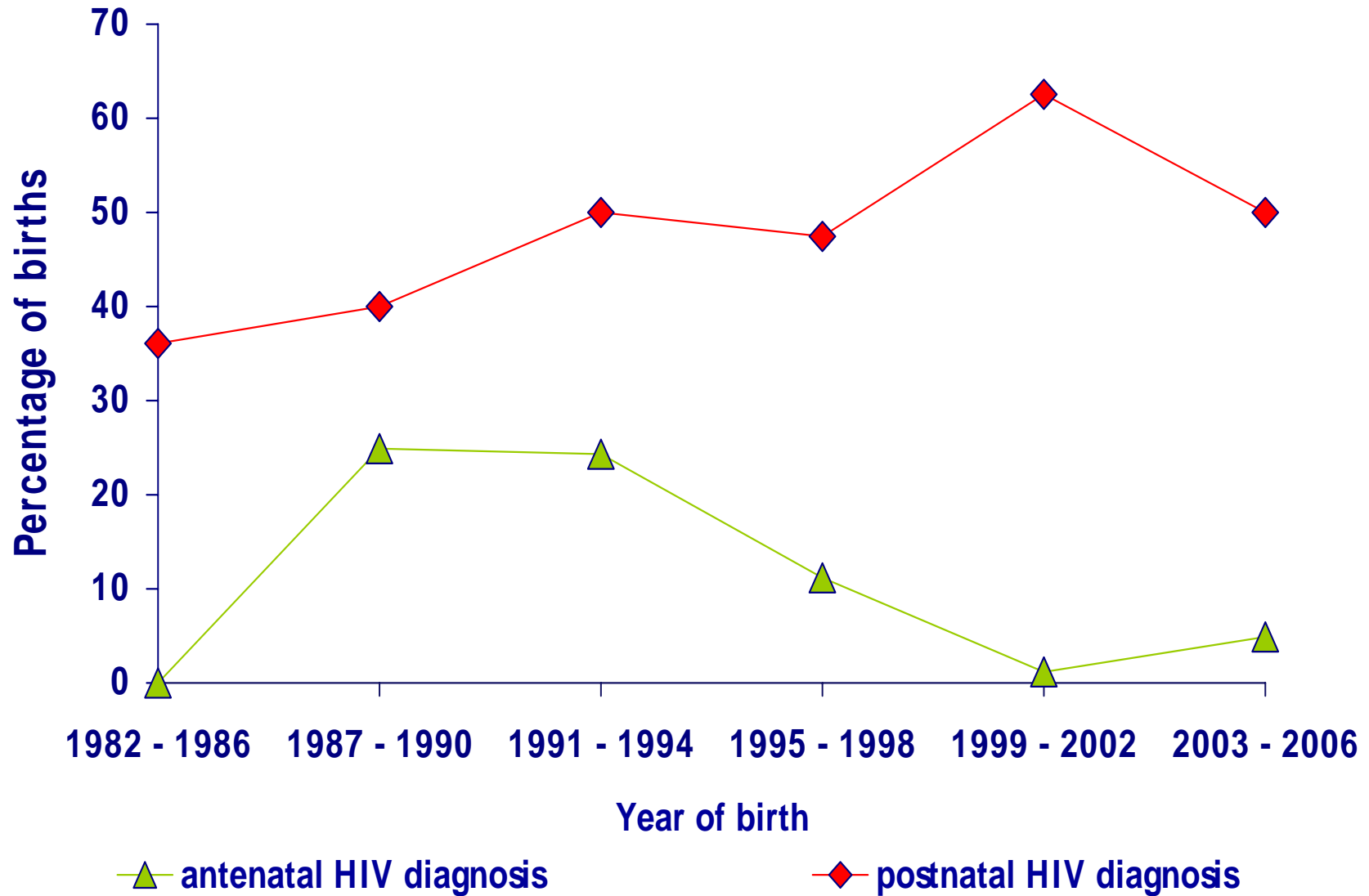


# Maternally acquired HIV infection, Australia



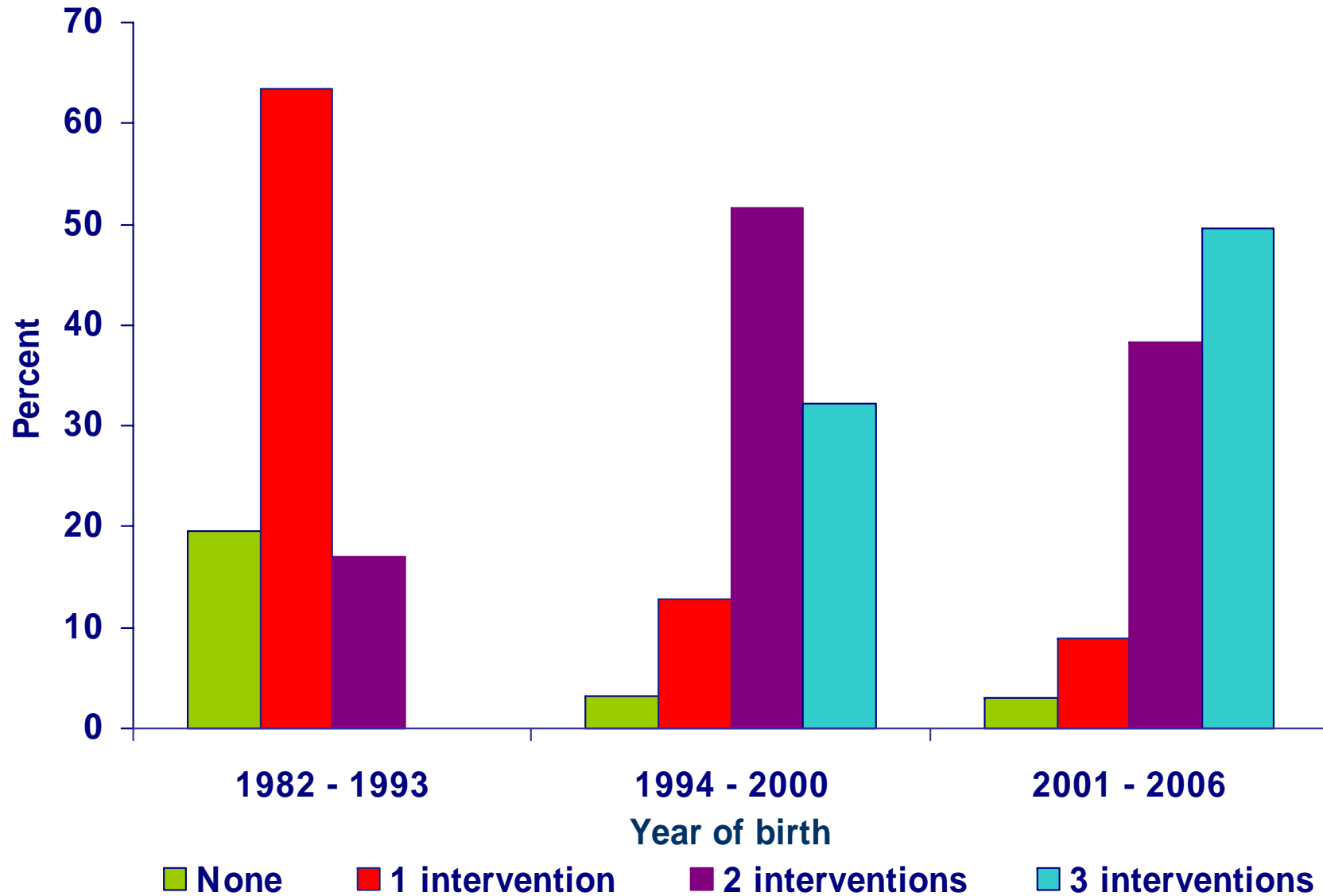
Source: Australian Paediatric Surveillance Unit; State and Territory health authorities

# Perinatal HIV transmission

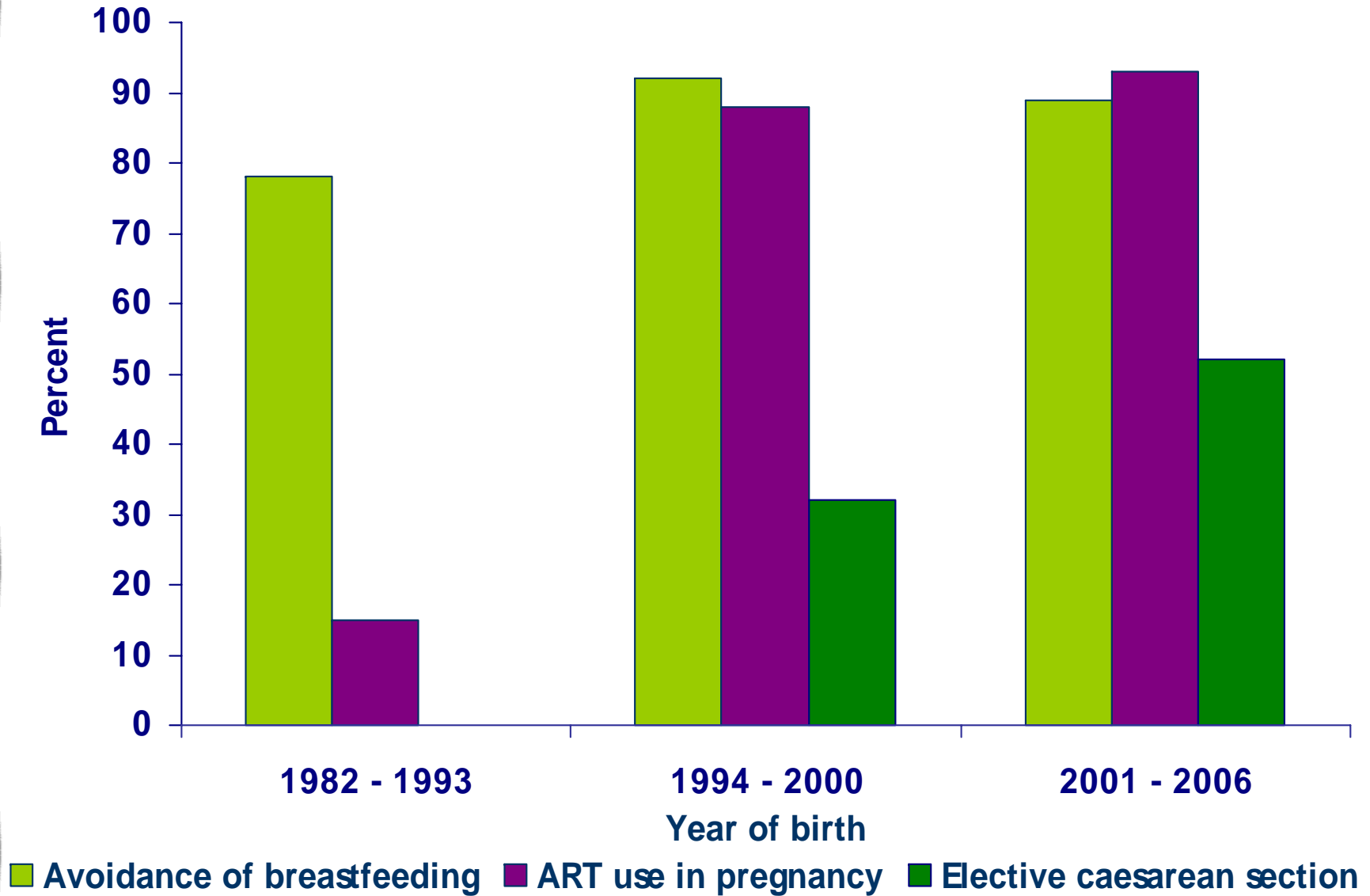


Source: Australian Paediatric Surveillance Unit; State and Territory health authorities

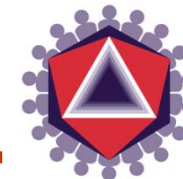
# Preventive interventions in pregnancy



# Preventive interventions in pregnancy

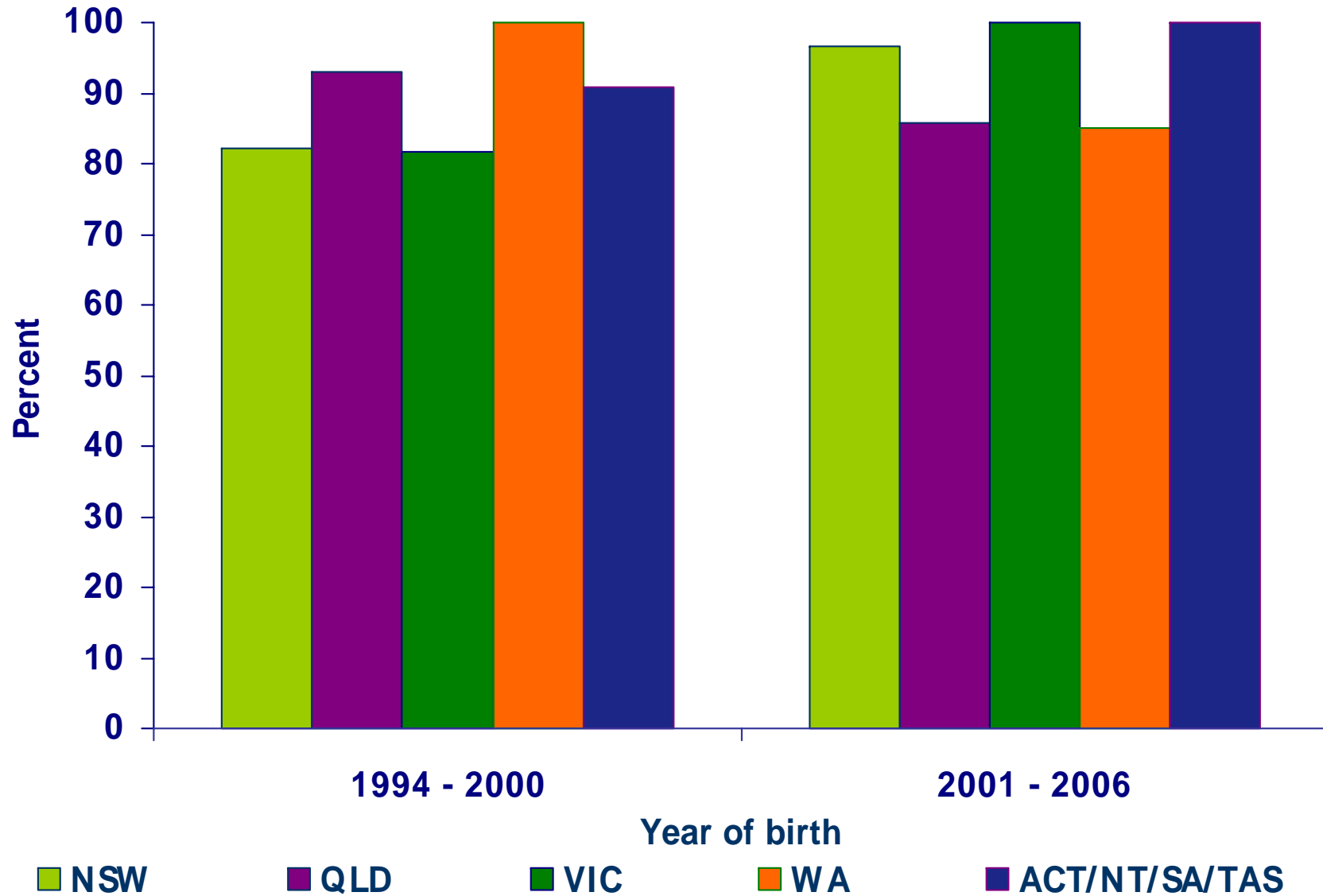


## Mothers with HIV diagnosed antenatally

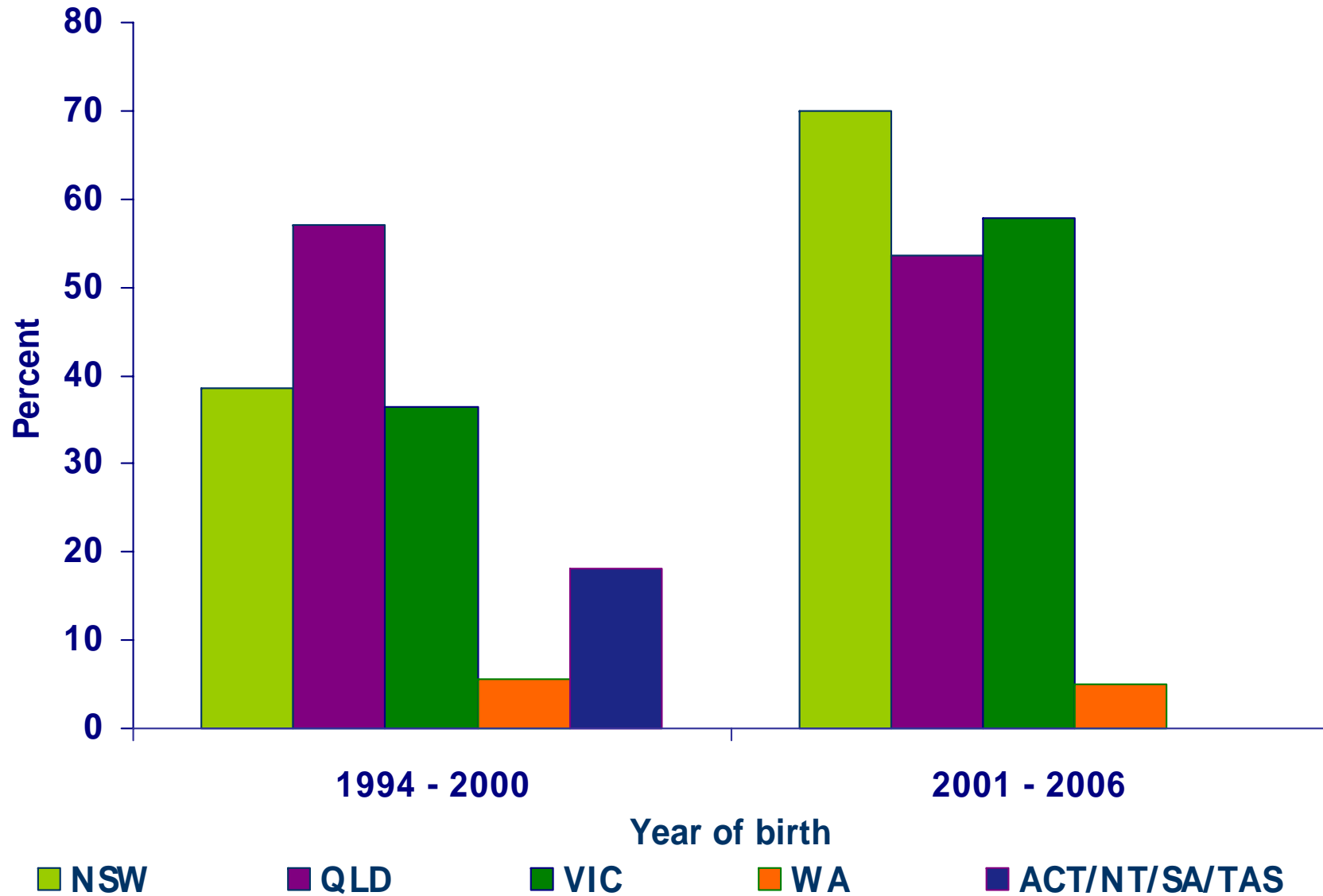


Number of Interventions	Exposed children	Children with infection	%
<b>1994 – 2000</b>			
0	3	0	0.0
1-2	60	7	11.7
3	30	0	0.0
<b>Total</b>	<b>93</b>	<b>7</b>	<b>7.5</b>
<b>2001 - 2006</b>			
0	4	2	50.0
1-2	63	1	1.6
3	66	2	3.0
<b>Total</b>	<b>133</b>	<b>5</b>	<b>3.8</b>

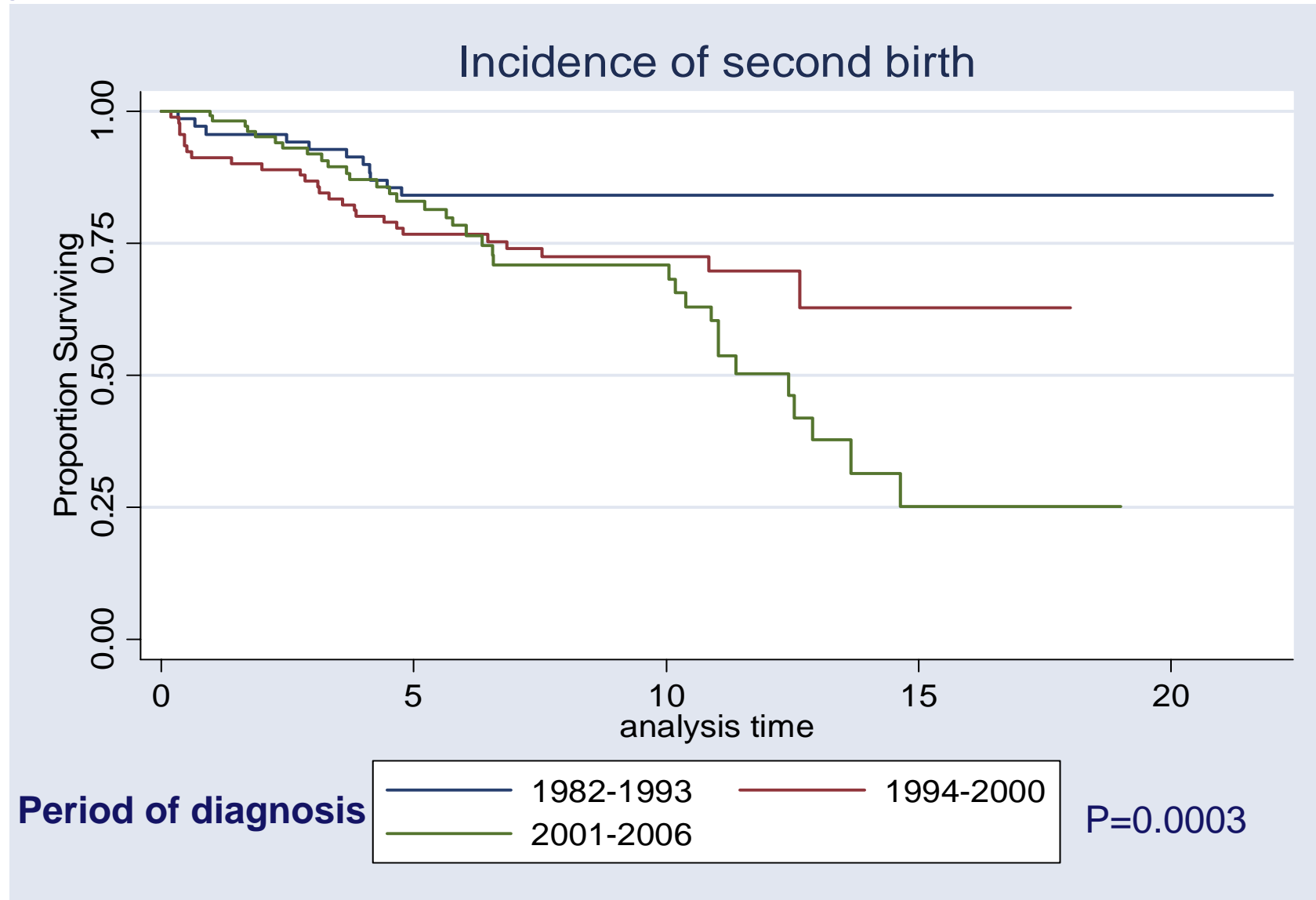
# HIV therapy in pregnancy



# Elective caesarean in women with HIV



# Time between first and second exposed birth, by year



# Summary

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- **Women with HIV having children in Australia**
  - **Acquired their infection by heterosexual contact, overseas or in Australia**
  - **Many from high prevalence countries**
- **Diagnosis of women is increasingly antenatal, but not yet universally so**
- **For women diagnosed antenatally, interventions have virtually eliminated perinatal transmission**
- **For women diagnosed postnatally, there is continuing transmission**