Immunization Coverage for 1, 2, & 7 Year Olds
CHA REPORT 2004

Definition/Description:

Childhood Immunization Rates
This is the percentage of children with the complete set of recommended immunizations (children must have lived in Manitoba for the entire period). There may be under recording of immunizations into the Manitoba Immunization Monitoring System (MIMS) for some remote northern communities and First Nations communities, which may result in slightly lower rates.

Immunization
An intervention to initiate or increase resistance against infectious disease. The recommended immunization schedule for children under two years of age includes:

(a) Four Diphtheria, tetanus, pertussis (DTP or DTaP) shots. These are given at two, four, six, and 18 months of age. Prior to 1997 the DPT vaccine used whole cell pertussis, and after that, the vaccine used acellular pertussis (DPaT)
(b) Three to four inactivated Polio (IPV) shots. These are given at two, four, and 18 months of age, with an optional shot at six months of age
(c) Four Haemophilus influenzae type b (Hib) shots. These are given at two, four, six, and 18 months of age (Hib is only required for children born after May 1, 1992)
(d) The Hepatitus B (Hep B) vaccine may be given. The recommended schedule for Hep B consists of three doses at zero, one, and six month intervals, where the second dose is given at least one month after the first, and the third dose is given at least four months after the first and two months after the second.

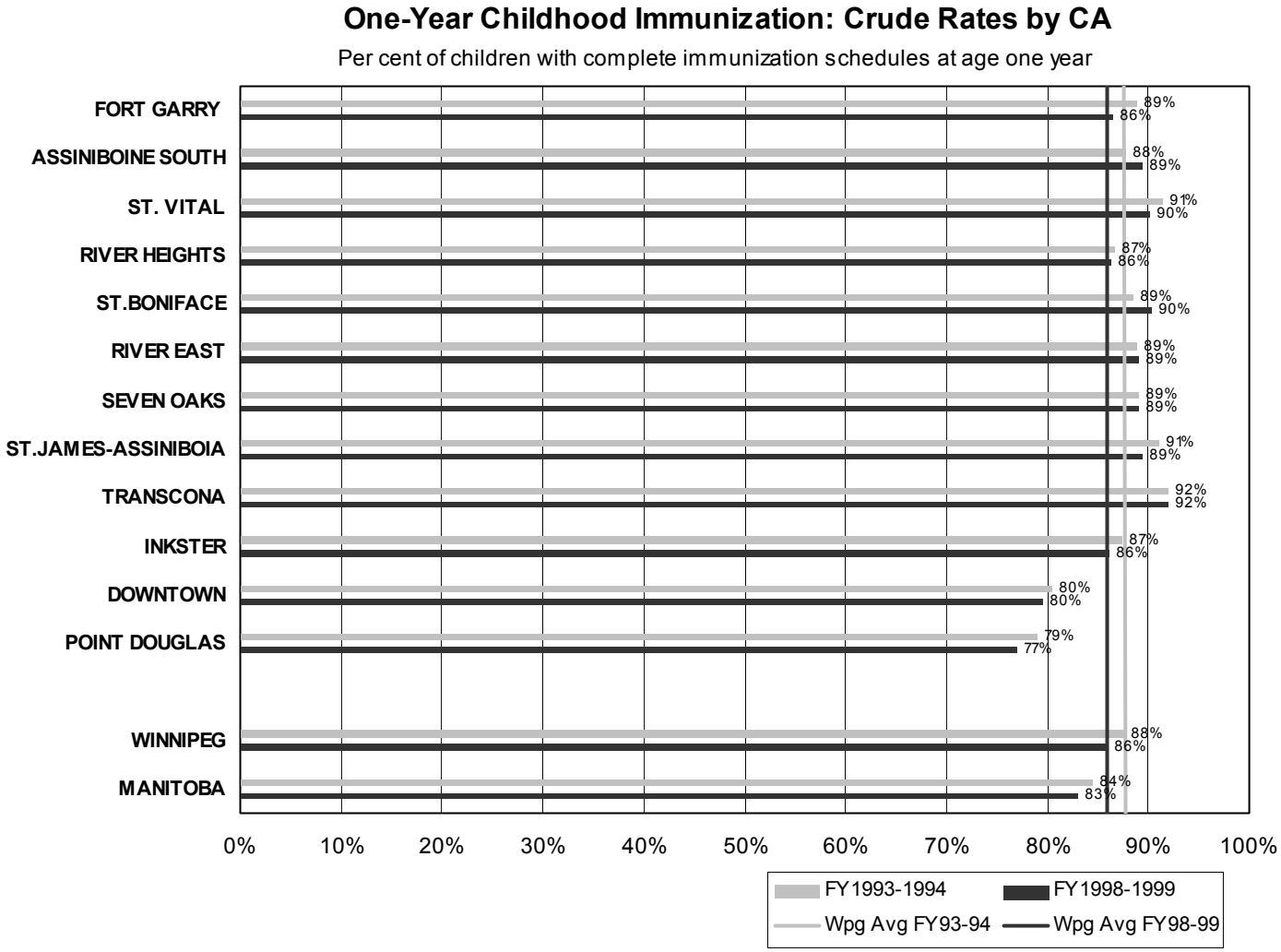
In this report, both 1-year and 2-year rates were calculated for the following:
1-year (365-day) required doses: 3 DTP, 2 IPV, 3 HIB.
2-year (730-day) required doses: 4 DTP, 3 IPV, 1 MMR, 4 HIB.
7-year (2557-day) required doses: 5 DTP, 4 OPV, 1 MMR (Time Period1); 5 DTP, 4 OPV, 2 MMR, 4 HIB (Time Period 2).

Method
Manitoba Immunization Monitoring System (MIMS) data were used, with children born in those years used as the denominator. One-year, two-year, and seven-year immunization schedules were examined. For one-year, children born 1993/94-1994/95 and 1998/99-1999/2000 were selected. For two-year, children born 1992/93-1993/94 and 1997/98-1998/99 were selected. For seven-year, children born 1987/88-1988/89 and 1992/93-1993/94 were selected. The data were not sex- or age-adjusted.

Source:

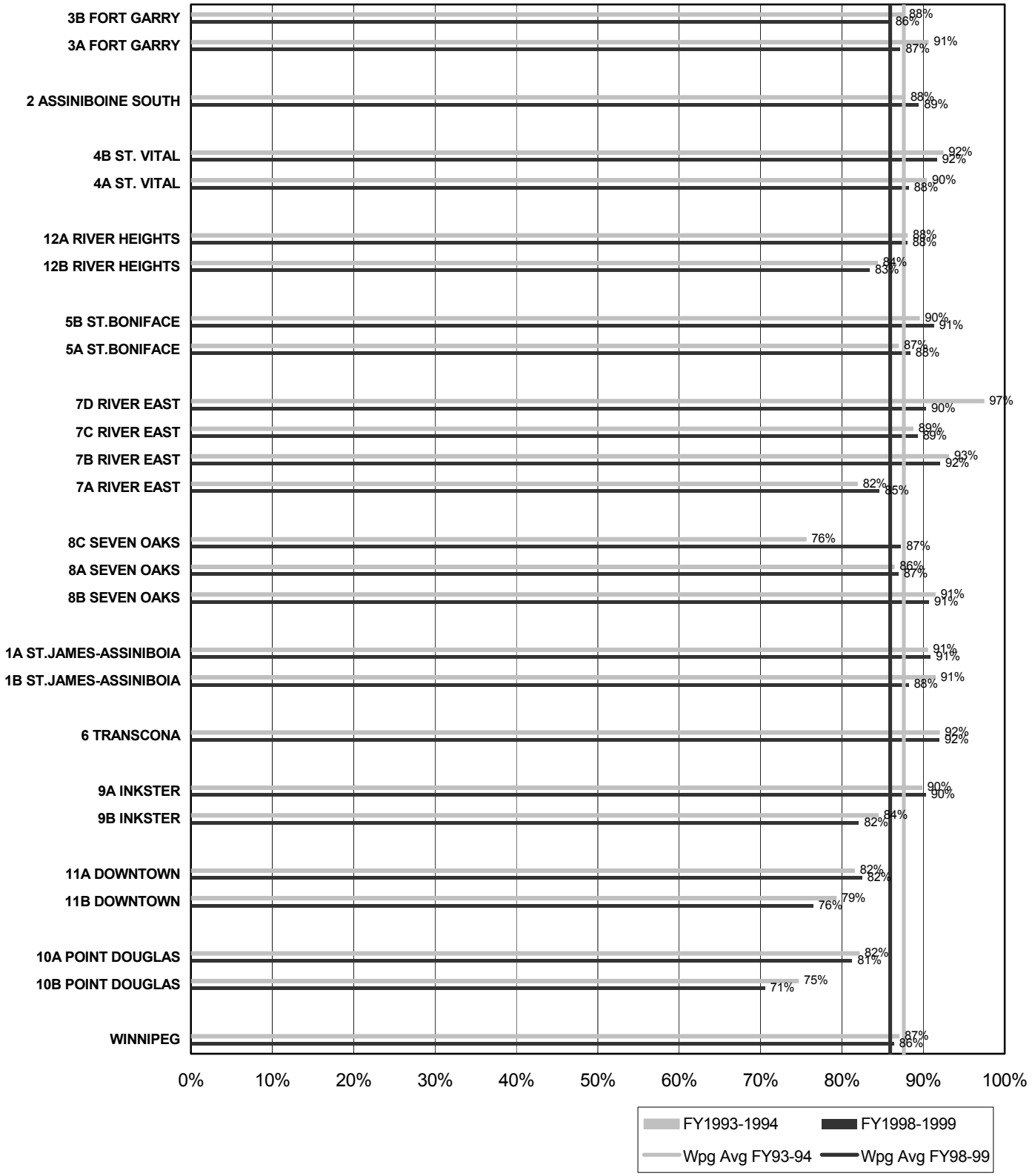
The Need to Know Project, Manitoba Centre for Health Policy, 2003

Findings:


One-Year Childhood Immunization: Crude Rates by CA
Per cent of children with complete immunization schedules at age one year
FORT GARRY
ASSINIBOINE SOUTH
ST. VITAL
RIVER HEIGHTS
ST.BONIFACE
RIVER EAST
SEVEN OAKS
ST.JAMES-ASSINIBOIA
TRANSCONA
INKSTER
DOWNTOWN
POINT DOUGLAS
WINNIPEG
MANITOBA
89%
86%
88%
89%
91%
90%
87%
86%
89%
90%
89%
89%
89%
89%
91%
89%
92%
92%
87%
86%
80%
80%
79%
77%
88%
86%
84%
83%
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
FY1993-1994
FY1998-1999
Wpg Avg FY93-94
Wpg Avg FY98-99

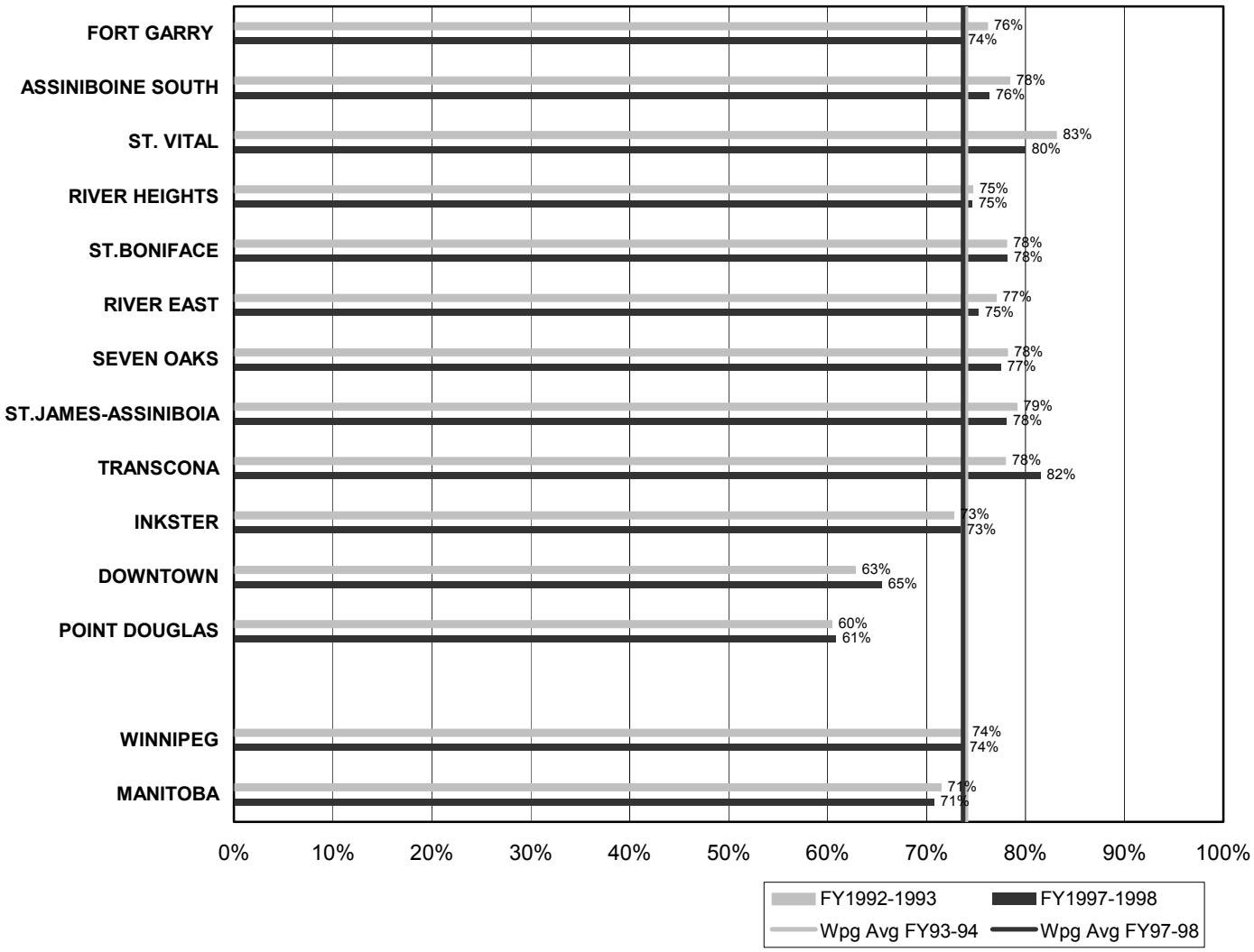
One-Year Childhood Immunization: Crude Rates by NC

Per cent of children with complete immunization schedules at age one year



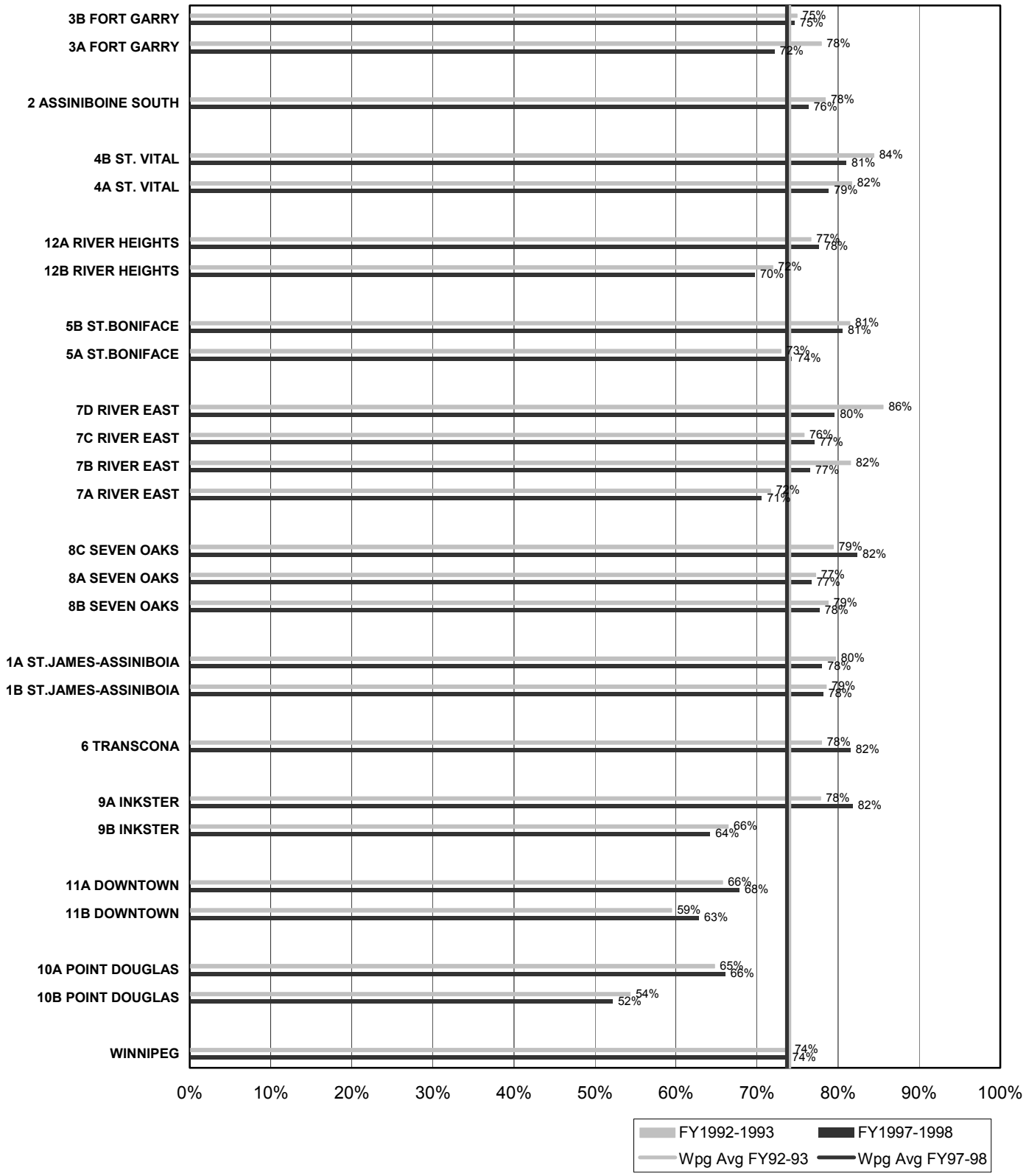
Two-year Childhood Immunization: Crude Rates by CA

Per cent of children with complete immunization schedule at age two years



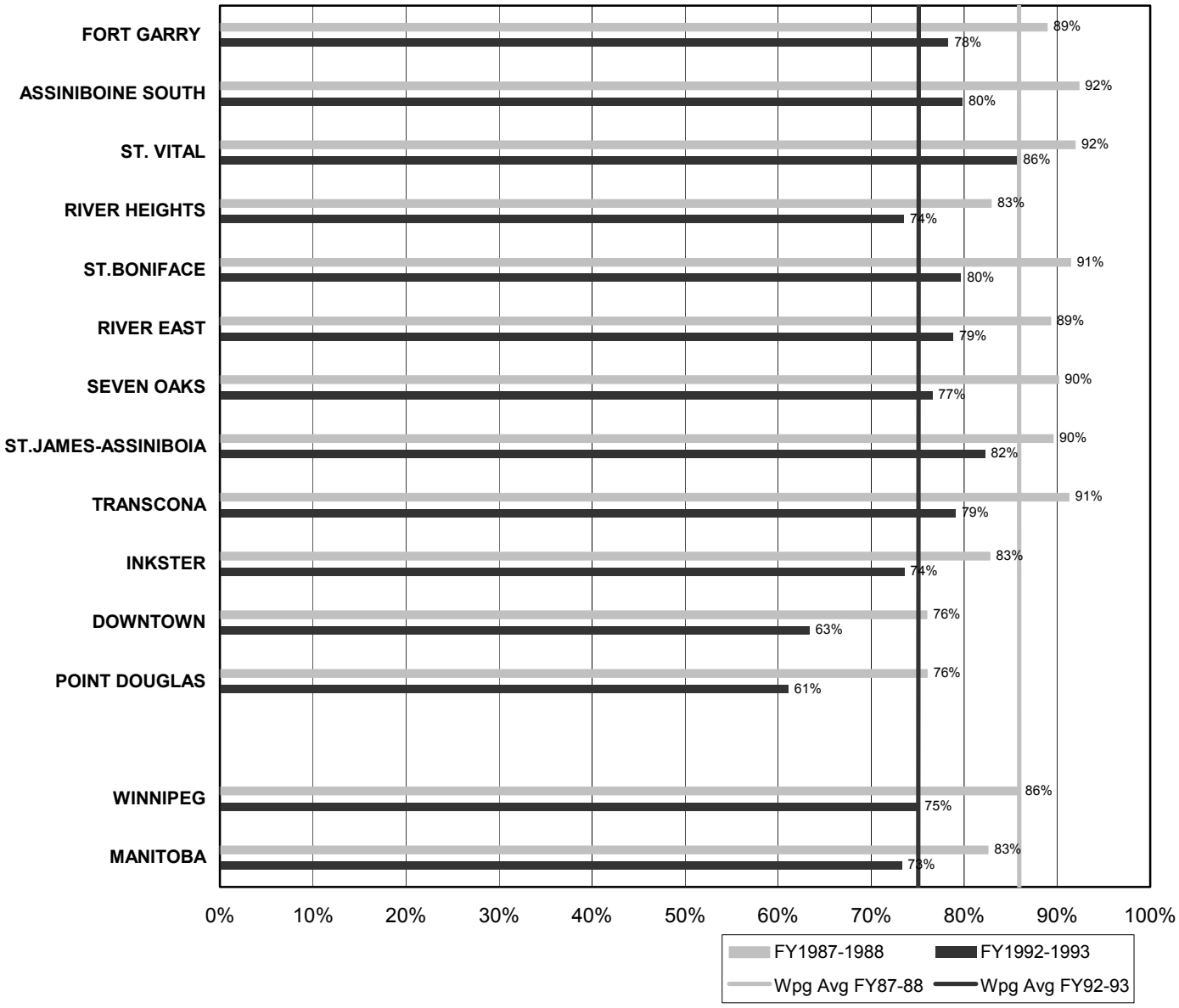
Two-year Childhood Immunization: Crude Rates by NC

Per cent of children with complete immunization schedule at age two years



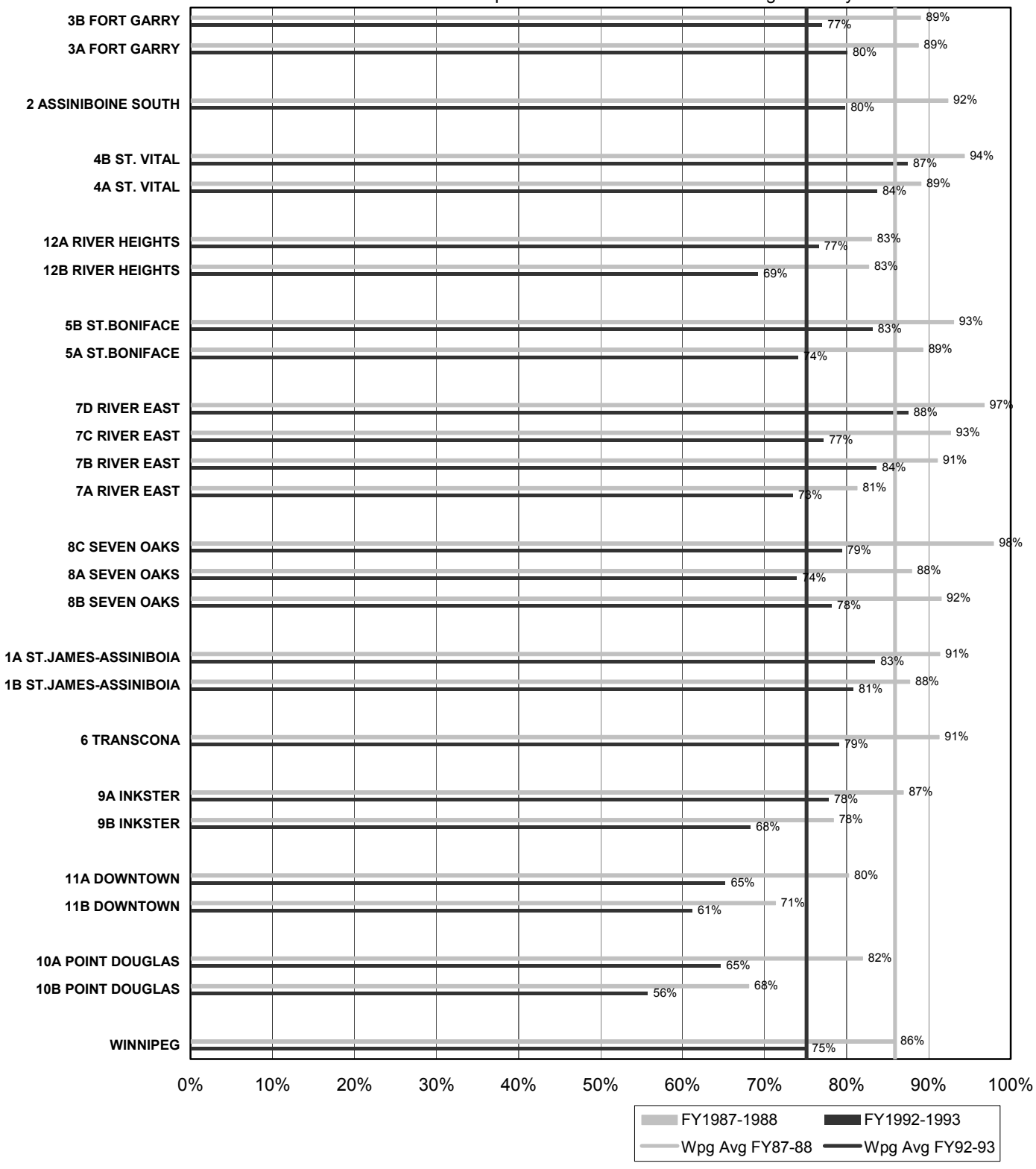
Seven-Year Childhood Immunization: Crude Rates by CA

Per cent of children with complete immunization schedules at age seven-years



Seven-Year Childhood Immunization: Crude Rates by NC

Per cent of children with complete immunization schedules at age seven-years



Highlights:

Note: The crude rates are referred to in this narrative (unless otherwise stated).

Regional Rates:

- The percentage of children in the WHR with complete immunization schedules at age one-year has remained fairly stable between the two time periods; 88% for children born in 1993/94-1994/95, and 86% for children born in 1998/99-1999/2000.
- A lower percentage of WHR children at age two-years have complete immunization schedules, although this percentage remained fairly stable between the two time periods; 74% for children born in 1992/93-1993/94, and 74% for children born in 1997/98-1998/99.
- The percentage of children in the WHR with complete immunization schedules at age seven-years has decreased dramatically between the two time periods; from 86% (children born in 1987/88-1988/89) to 75% (children born in 1992/93-1993/94).
- The WHR rates were consistently higher than than those for Manitoba for the same time periods, for all three indicators.

Community Area Rates:

- For most community areas, the percentage of children with complete immunization schedules at age one-year is consistently higher than the WHR rate with the exception of community areas Downtown and Point Douglas, which have lower rates.
- For most community areas, the percentage of children with complete immunization schedules at age two-years is consistently higher than the WHR rate with the exception of community areas Downtown and Point Douglas, which have substantially lower rates.
- The percentage of children with complete immunization schedules at age seven-years is consistently higher than the WHR rate for most community areas with the exception of the Inkster, Downtown and Point Douglas, which have substantially lower rates.

Neighbourhood Cluster Rates:

- For most neighbourhood clusters, the percentage of children with complete immunization schedules at age one-year is consistently higher than the WHR rate with the exception of the Seven Oaks 9C, Downtown 11B and Point Douglas 10B, which have lower rates.
- For most neighbourhood clusters, the percentage of children with complete immunization schedules at age two-years is consistently higher than the WHR rate with the exception of Inkster 9B, Downtown 11A&B and Point Douglas 10A&B, which have substantially lower rates.
- For most neighbourhood clusters, the percentage of children with complete immunization schedules at age seven-years is consistently higher than the WHR rate with the exception of River Heights 12B, Inkster 9B, Downtown 11A&B and Point Douglas 10A&B, which have substantially lower rates.
- It should be noted that there appears to be some dramatic decreases in the percentage of children with complete immunization schedules at age seven-years, in most of the neighbourhood clusters, but most notably the following neighbourhood clusters: Seven Oaks 8C, Downtown 11A, and Point Douglas 10A.
- Interestingly, the shifts seen in Downtown 11A, and Point Douglas 10A, show the rates moving from just below the WHR average in the first time period to further away in the second. Thus shifting the rate to be closer to that of their “partner” NC (Downtown 11B, and Point Douglas 10B).