

MATERNAL HYPERTENSION IN CANADA

SUMMARY

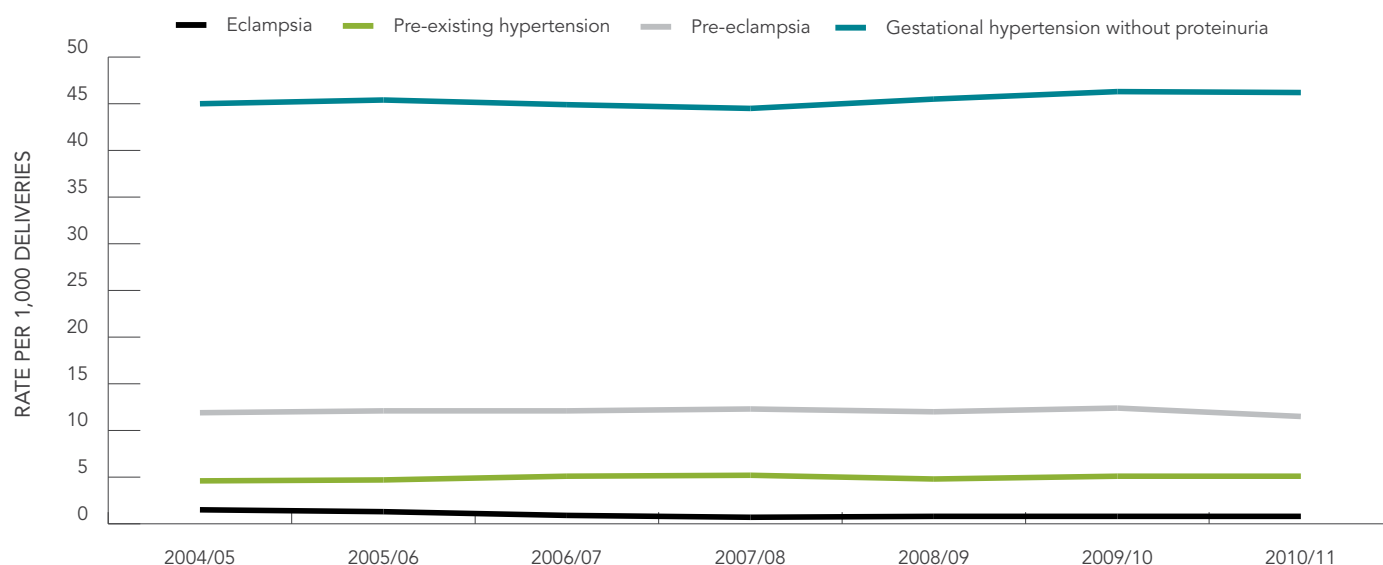
- In 2010/11, the rate of gestational hypertension without proteinuria in Canada was 46.3 (95% CI: 45.4-47.0) per 1,000 deliveries. The overall rates of gestational hypertension without proteinuria increased between 2004/05 and 2010/11 (Table 1 and Figure 1).
- Over the seven-year time period (2004/05–2010/11), the rates of pre-existing hypertension and pre-eclampsia remained relatively stable (Table 1 and Figure 1). Rates of eclampsia have decreased.
- Differences in the rates of gestational hypertension were observed across age groups. Higher rates were observed among women among women 40 years and older (Figure 2).
- The overall rates of gestational hypertension varied across provinces and territories. The rates were highest in Newfoundland and lowest in the Northwest Territories (Table 2).

TABLE 1: Temporal trends rate (per 1,000 deliveries) in maternal hypertension in Canada, 2004/05–2010/11

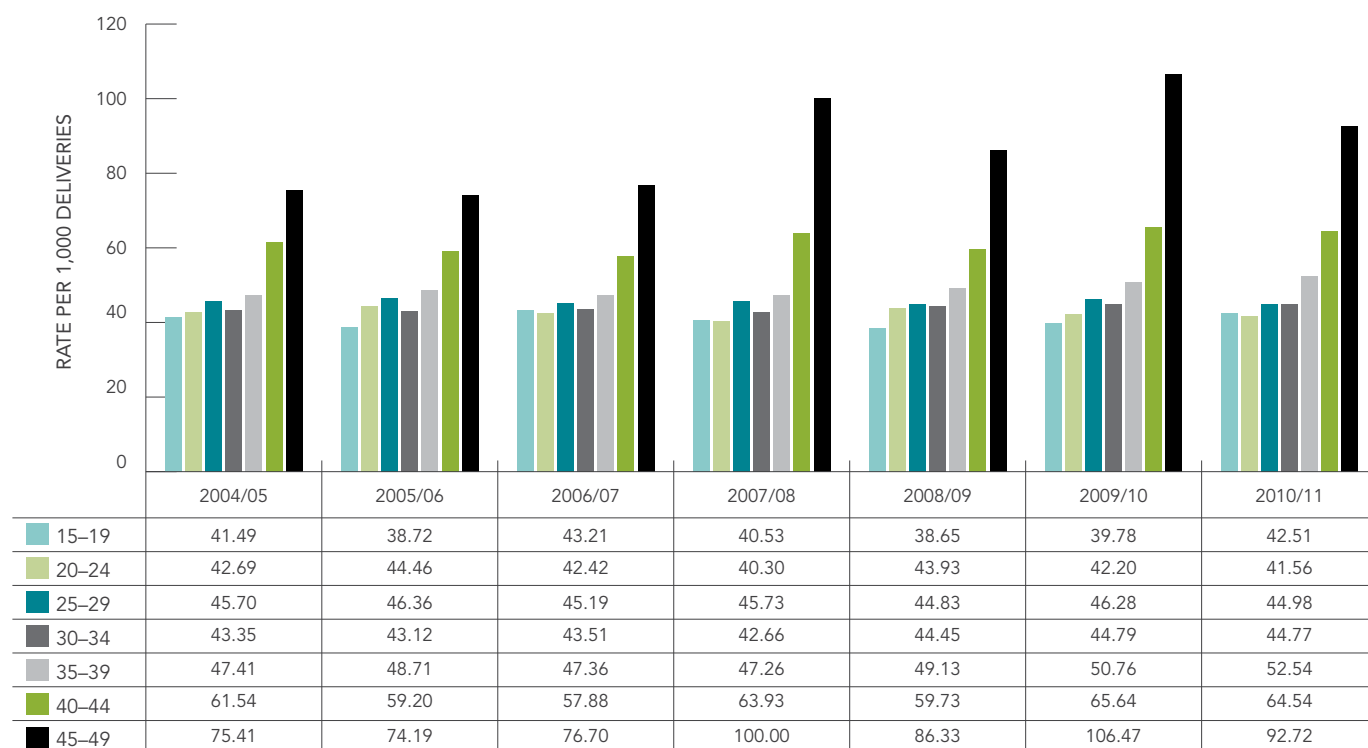
	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
Pre-existing hypertension	4.6	4.8	5.1	5.2	4.9	5.1	5.1
Gestational hypertension without proteinuria	45.0	45.4	44.9	44.5	45.5	46.3	46.2
Pre-eclampsia	11.9	12.1	12.1	12.3	12.0	12.4	11.5
Eclampsia	1.5	1.3	0.9	0.7	0.8	0.8	0.8

SOURCE: Canadian Institute for Health Information, Discharge Abstract Database (DAD). Quebec data was not included because it does not contribute to DAD

FIGURE 1: Rates of hypertension among pregnant women in Canada, 2004/05–2010/11



SOURCE: Canadian Institute for Health Information, Discharge Abstract Database (DAD). Quebec data was not included because it does not contribute to DAD

FIGURE 2: Rate of gestational hypertension (without proteinuria) by age group in Canada, 2004/05–2010/11

SOURCE: Canadian Institute for Health Information, Discharge Abstract Database (DAD). Quebec data was not included because it does not contribute to DAD

TABLE 2: Rates of gestational hypertension (without proteinuria) by province and territory in Canada, 2004/05–2010/11

PROVINCE/TERRITORY	RATE PER 1,000 DELIVERIES	95% CI
Newfoundland and Labrador	68.8	66.0–71.7
Prince Edward Island	59.3	54.5–64.4
Nova Scotia	60.5	58.6–62.5
New Brunswick	47.4	45.5–49.3
Ontario	42.1	41.7–42.5
Manitoba	54.1	52.7–55.5
Saskatchewan	48.0	46.6–49.5
Alberta	50.7	49.9–51.4
British Columbia	40.3	39.6–41.1
Yukon	40.8	33.2–49.7
Northwest Territories	32.9	28.3–38.0
Nunavut	54.9	46.3–64.6
Canada	45.4	45.1–45.7

SOURCE: Canadian Institute for Health Information, Discharge Abstract Database (DAD). Quebec data was not included because it does not contribute to DAD

DEFINITION

Hypertension in pregnancy is defined as a diastolic BP of ≥ 90 mmHg and is classified as pre-existing or gestational. Pre-existing hypertension pre-dates pregnancy or appears before 20 weeks, and gestational hypertension appears at or after 20 weeks. Pre-eclampsia is characterized by high blood pressure and significant amounts of protein in the urine in a pregnant woman (≥ 0.3 g/d in a 24-hour urine collection or ≥ 30 mg/mmol urinary creatinine in a spot urine sample). Eclampsia is characterized as seizures (convulsions) in a pregnant woman that are not related to a pre-existing brain condition. Rates are expressed per 1,000 deliveries in a given place and time.

DATA SOURCE

Rates of maternal hypertension were calculated using data from the Discharge Abstract Database (DAD) of the Canadian Institute for Health Information for the period 2004/10–2010/11. This database contains information on all hospital discharges in Canada (except Quebec). Diagnoses and procedures in the database are coded using the International Statistical Classification of Diseases, Tenth Revision (ICD-10CA).

The rates are calculated based on fiscal years (i.e., April 1 to March 31).

LIMITATIONS

Our data may underestimate rates of maternal hypertension in Canada, as all maternal hypertension rates could not be identified due to limitations of the ICD-10CA codes (i.e. miscoding, unspecified hypertension). Maternal hypertension rates in Quebec could not be estimated because this province's data were not part of the Discharge Abstract Database (DAD). Case ascertainment was limited to the province/territory of occurrence; therefore the data may therefore not accurately reflect the regional differences in Canada.

The Public Health Agency of Canada's Canadian Perinatal Surveillance System monitors and reports on key indicators of maternal, fetal and infant health in Canada. For more information visit: www.phac-aspc.gc.ca/rhs-ssg/