

## Substance use during pregnancy in Windsor and Essex County

Smoking tobacco, drinking alcohol, or using illicit or inappropriate drugs during pregnancy can have severe impacts on the health of the mother and unborn child. The use of these substances during pregnancy can cause a range of illnesses, including fetal growth restrictions, miscarriage, preterm birth, fetal alcohol spectrum disorder, sudden infant death syndrome, and behavioural disorders in childhood [1-2].

The Better Outcomes Registry and Network (BORN) information system was launched in Ontario in 2012 and it captures data for all hospital births and all home births attended by a midwife. This report uses self-reported substance use data from BORN and hospitalization data (confirmed medical diagnoses) to provide an overview of tobacco (smoking), alcohol, and drug (illicit drugs or inappropriate drugs/substances) use during pregnancy for Windsor-Essex County (WEC).

[1] Cnattingius, S. The epidemiology of smoking during pregnancy: smoking prevalence, maternal characteristics, and pregnancy outcomes. *Nicotine and Tobacco Research*. April 2004.

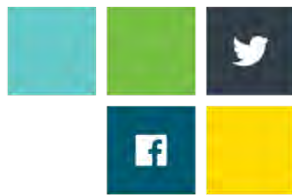
[2] Government of Canada. [The Sensible Guide to a Healthy Pregnancy](#). 2012.

## Key Findings

- 8.8% of expecting mothers from WEC smoked tobacco during pregnancy which is significantly greater than the provincial average of 7.4%.
- 1.8% of expecting mothers in WEC drank alcohol during pregnancy which is lower than Ontario (2.4%). Nearly three-quarters (73.5%) of alcohol use during pregnancy occurred before the pregnancy was confirmed or known.
- 1.9% of expecting mothers in WEC used illicit or inappropriate drugs during pregnancy; the most commonly used drugs were marijuana, opioids, and cocaine. In 2015, the rate of opioid use during pregnancy was 48.9% greater in WEC compared to Ontario.
- The rates of tobacco, alcohol, and drug use during pregnancy were highest among teenage mothers; the use of these substances decreased as the age of the expecting mother increased.
- In 2015, there were 68 hospitalizations of infants affected by maternal drug addiction in WEC; this rate has increased by 842.1% in WEC between 2003 and 2015 and is 2.2-times greater than Ontario.

## Data Sources

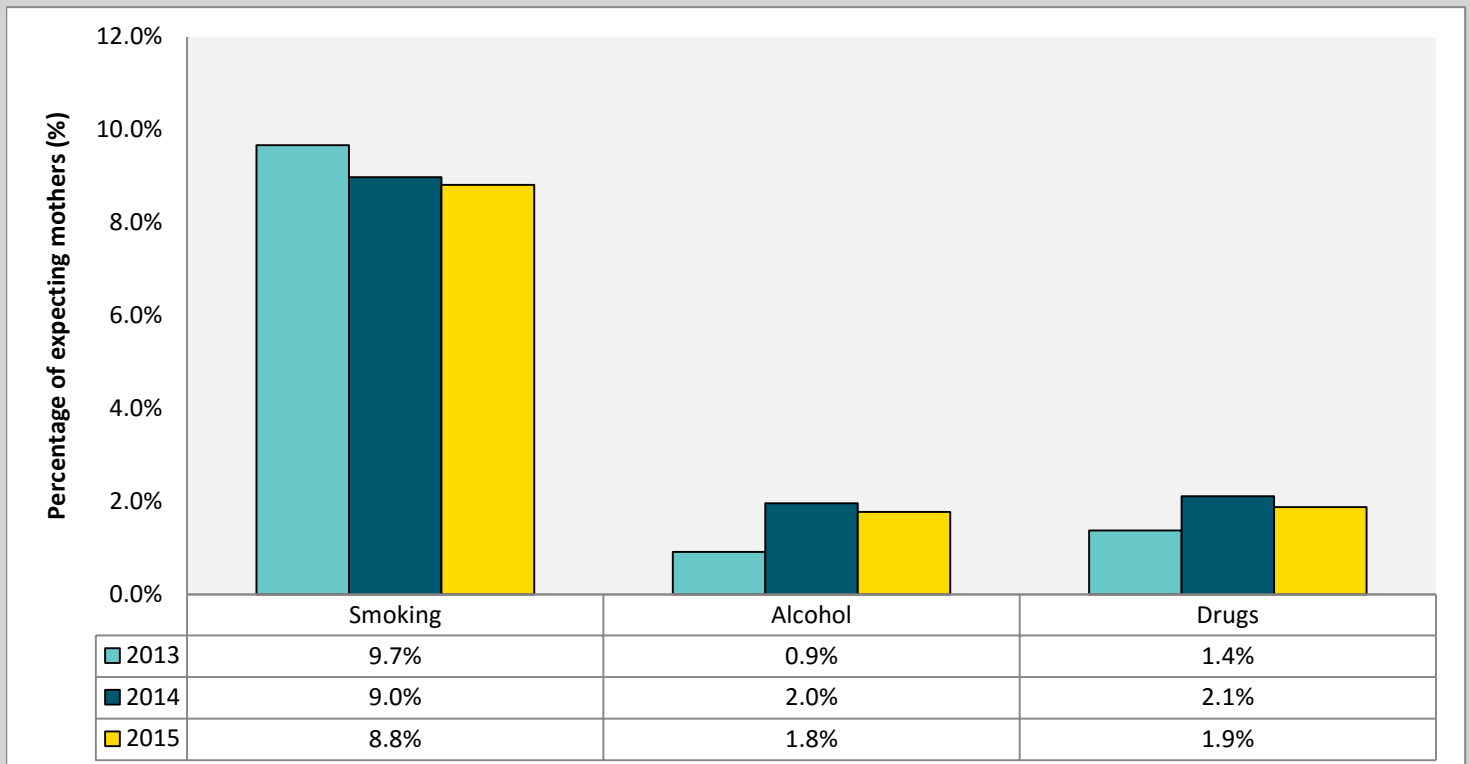
The data presented in this report were sourced from BORN Ontario (Extracted January 26, 2017) and the National Ambulatory Care Reporting System and the Discharge Abstract Database (Extracted January 16, 2017). The International Classification of Disease (ICD10-CA) codes P044 and P961 were used for infant hospitalizations due to the effects of maternal drug use.



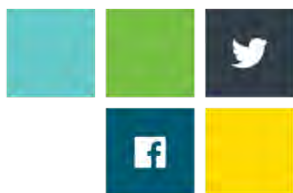
## Tobacco, alcohol, and drug use during pregnancy

- There were 342 expecting mothers from WEC who reported smoking tobacco during pregnancy in 2015 (8.8% of all expecting mothers in WEC); the percentage of expecting mothers who reported smoking tobacco has decreased year-over-year between 2013 and 2015 (**Figure 1**).
- In 2015, there were 69 expecting mothers from WEC who reported drinking alcohol during pregnancy (1.8% of all expecting mothers in WEC); 50 of these expecting mothers (72.5%) consumed alcohol before their pregnancy was confirmed or known.
- There were 73 expecting mothers from WEC who reported using drugs during pregnancy in 2015 (1.9% of all expecting mothers in WEC); the most common drugs used were marijuana (68.5% of cases), opioids (26.0% of cases), and cocaine (6.8% of cases).
- Fifteen expecting mothers from WEC used both drugs and alcohol during pregnancy in 2015.
- Trends over time should be interpreted with caution (**Figure 1**); more years of data are required to better discern trends in the rates of substance use during pregnancy for WEC.

**Figure 1.** Tobacco (smoking), alcohol, and drug use during pregnancy, Windsor-Essex County (WEC) (2013-2015).



**Source:** BORN Information System [2013-2015], Date Extracted: [26 Jan 2017].



## Tobacco, alcohol, and drug use during pregnancy (con't)

- Tobacco, alcohol, and drug use during pregnancy is compared between WEC and Ontario in **Table 1**.
- Tobacco use (smoking) during pregnancy was significantly greater in WEC (8.8%) compared to Ontario (7.4%) in 2015.
- Alcohol use during pregnancy was significantly lower in WEC (1.8%) compared to Ontario (2.4%) in 2015.
- There was no significant difference in drug use during pregnancy for WEC and Ontario in 2015.
- The rates of tobacco, alcohol, and drug use during pregnancy is reported by age groups in **Figure 2**.
- The use of all substances was greatest among expecting mothers under 20 years-old. The rates for each substance decreased as the age of the expecting mother increased; mothers 30 years-old or older had the lowest rate of substance use during pregnancy.

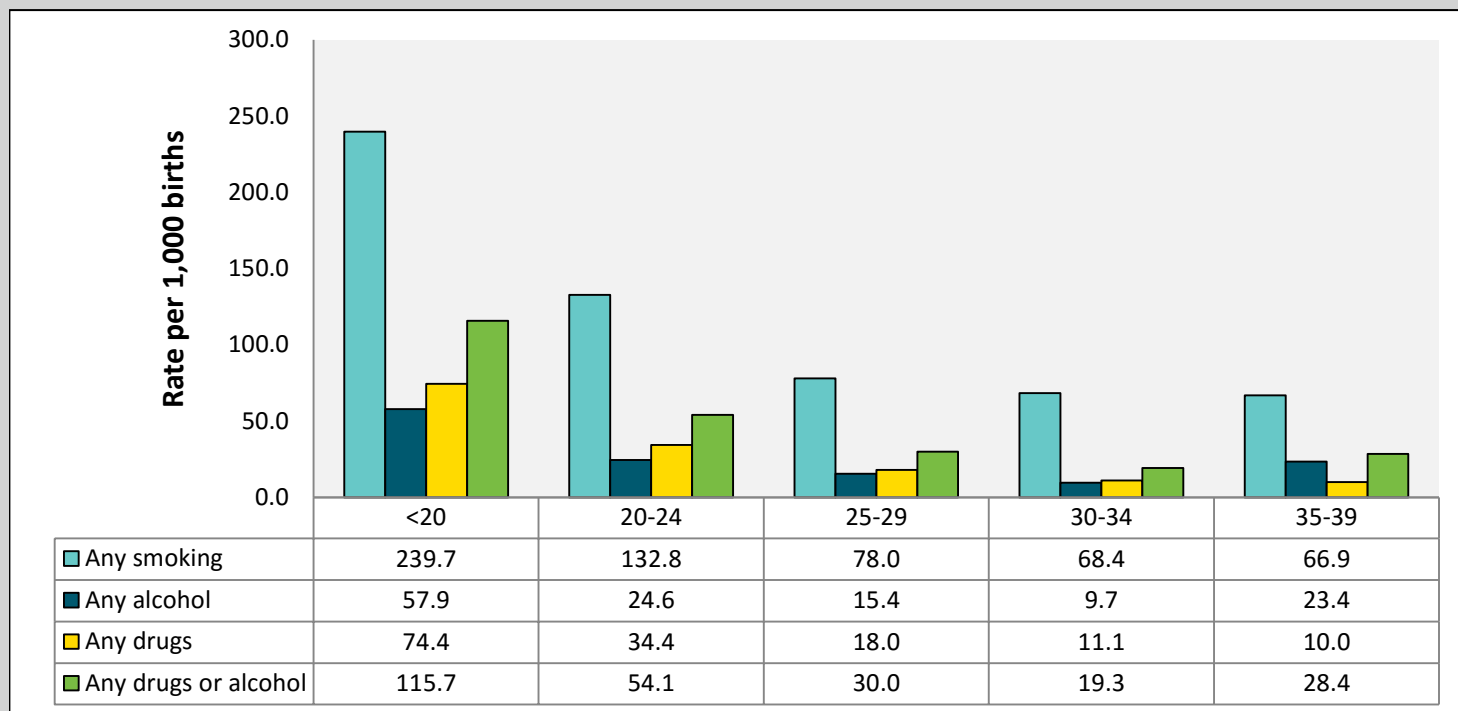
**Table 1.** Percentage (%) of expecting mothers exposed to tobacco (smoking), alcohol, and drugs for Windsor-Essex County (WEC) and Ontario (2015).

Substance	WEC (%)	ON (%)
Smoking	8.8*	7.4
Alcohol	1.8*	2.4
Drugs	1.9	2.0

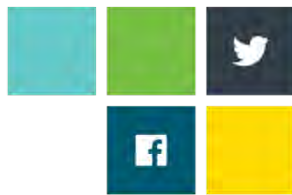
\*Statistically significant difference.

**Source:** BORN Information System [2015], Date Extracted: [26 Jan 2017].

**Figure 2.** The rates of tobacco (smoking), alcohol, and drug use during pregnancy by age group, Windsor-Essex County (WEC) (2015).



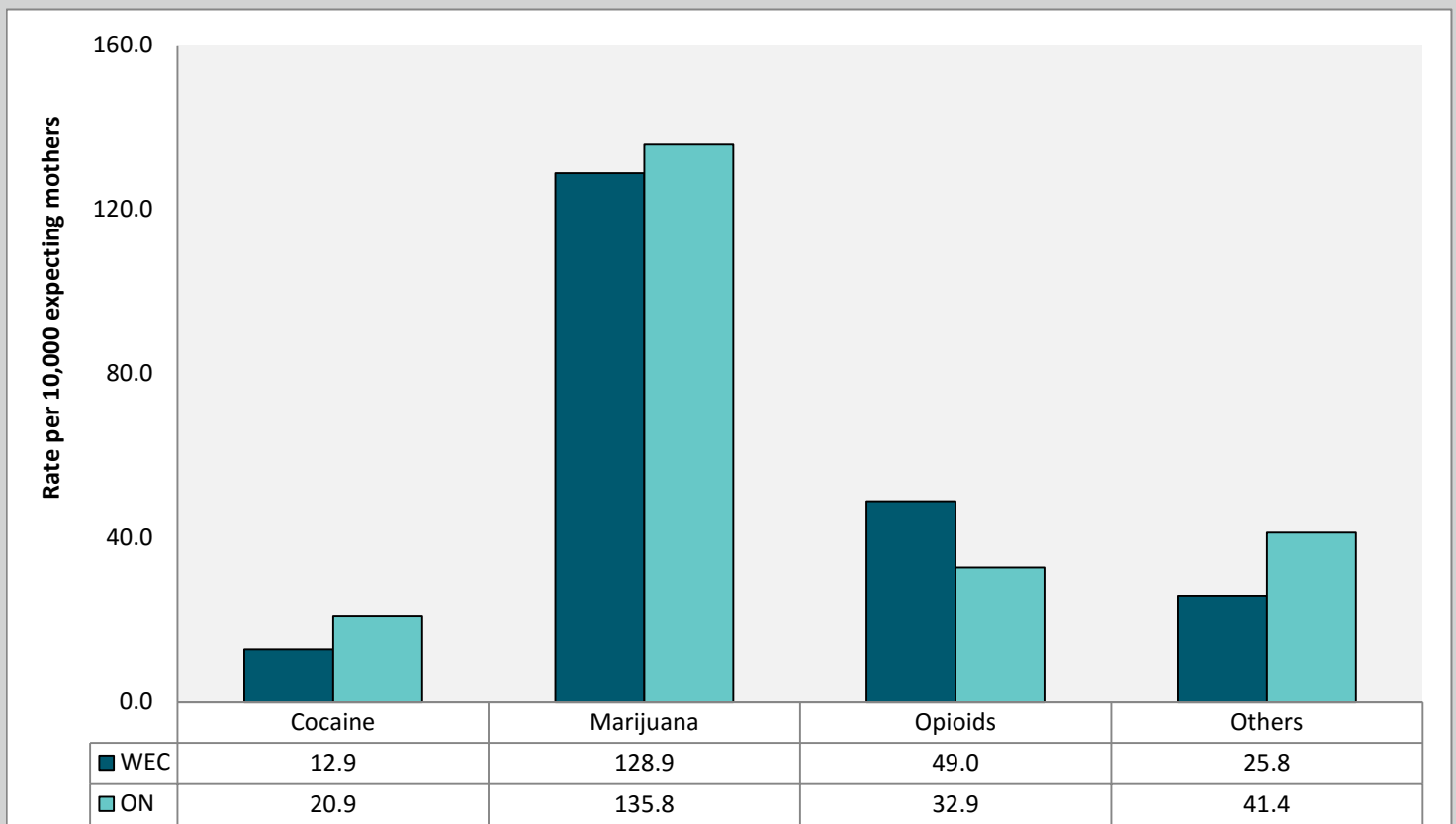
**Source:** BORN Information System [2015], Date Extracted: [26 Jan 2017].



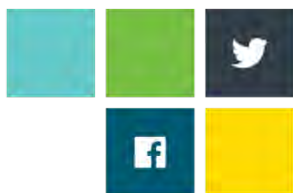
## Illicit drug use during pregnancy

- The rates of drug use during pregnancy by specific substance categories are reported in **Figure 3** for WEC and Ontario (2015).
- Marijuana was the most commonly reported drug used during pregnancy; 50 expecting mother from WEC reported marijuana use during pregnancy in 2015. The rate of marijuana use during pregnancy was 5.3% greater in Ontario compared to WEC.
- There were 19 expecting mothers from WEC who used opioids during pregnancy in 2015; the rate in WEC was 48.9% greater than the Ontario rate for opioid use during pregnancy in 2015.
- Cocaine use during pregnancy was relatively uncommon compared to all other categories of drugs, but the rate was greater in Ontario compared to WEC.
- If marijuana were excluded, the rate of drug use during pregnancy in WEC would be 87.7 users per 10,000 expecting mothers for 2015, compared to an equivalent rate of 95.1 users per 10,000 expecting mothers for Ontario.

**Figure 3.** The rates of drug use during pregnancy by specific substance categories, Windsor-Essex County (WEC) and Ontario (2015).



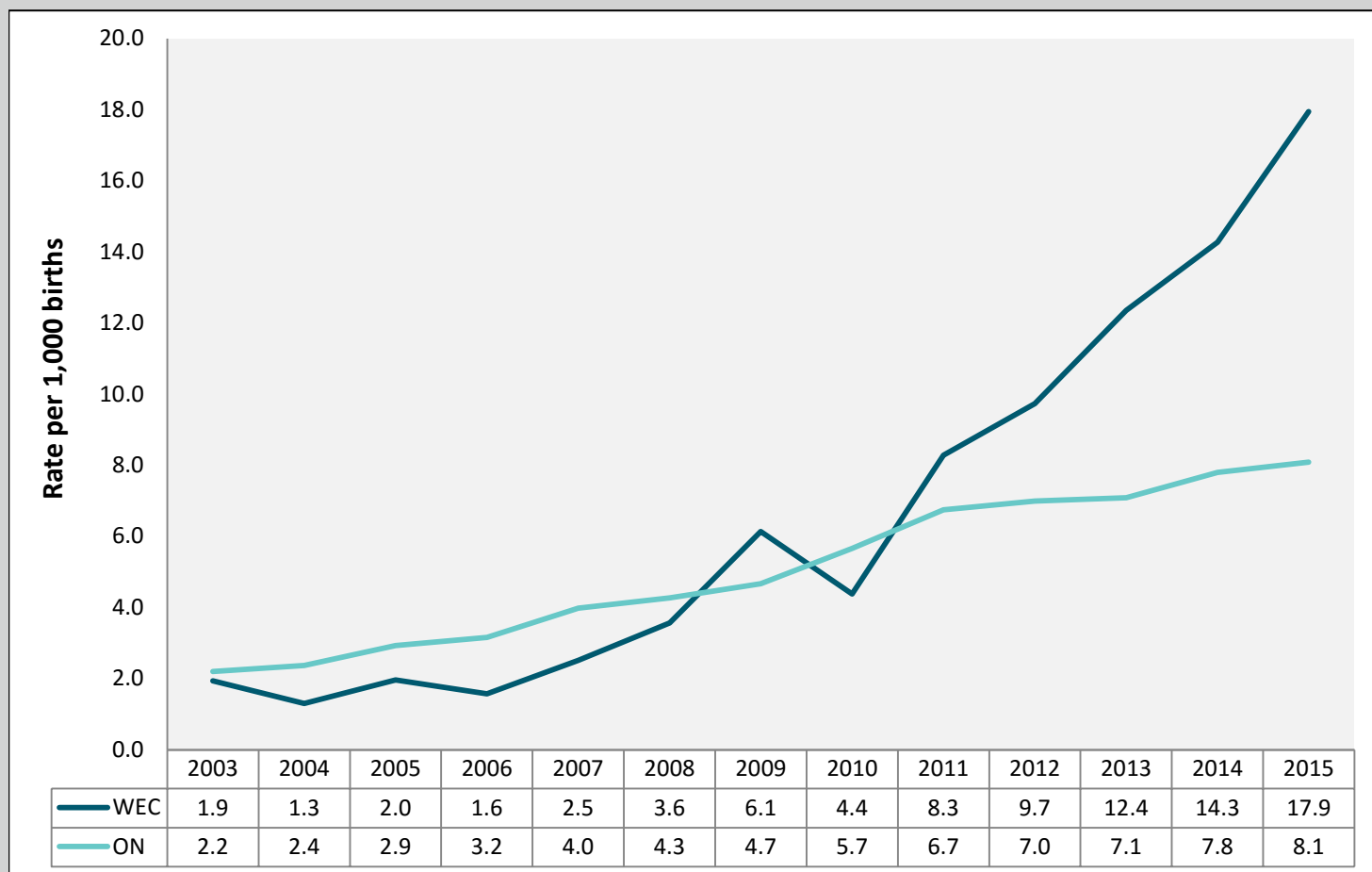
Source: BORN Information System [2015], Date Extracted: [26 Jan 2017].



## Hospitalizations for Infants Affected by Maternal Drug Addiction

- The rate of hospitalization for infants (0-28 days-old) affected by maternal drug addiction in WEC and Ontario (2003-2015) is reported in **Figure 4**.
- In 2015, there were 68 hospitalizations of infants affected by maternal drug addiction in WEC compared to 9 hospitalizations in 2003.
- The rate of hospitalizations of infants affected by maternal drug addiction increased by 842.1% in WEC between 2003 and 2015.
- The 2015 rate of hospitalizations of infants affected by maternal drug addiction for WEC was 2.2-times greater than the provincial rate.

**Figure 4.** The rate of hospitalizations for infants (0-28 days old) affected by maternal drug addiction, Windsor-Essex County (WEC) and Ontario (2003-2015).



**Source:** Ambulatory All Visit Problem Dx and External Cause (CIHI), MOHLTC, IntelliHEALTH ONTARIO, extracted Jan 16, 2017.