



# PREGNANCY AND COVID-19 IN ONTARIO

## Surveillance Report #1

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Submitted case reports for pregnant individuals admitted to hospital or in midwifery care between March 1, 2020 and May 29, 2020.

### Background

- The Better Outcomes Registry & Network (BORN) is Ontario's prescribed registry for maternal-newborn health and collects and uses data to facilitate and improve care.
- Limited evidence exists on management of COVID-19 in pregnancy and the early newborn period. In previous pandemics, such as H1N1 influenza and SARS, there were increased risks of poor maternal and perinatal outcomes following infection in pregnancy. BORN is collecting data to support care providers, hospitals, midwifery practice groups, families and policy makers in learning about the impacts of COVID-19 infection in pregnancy.
- Hospitals and midwifery practice groups have provided data on confirmed and suspected cases.

Thank you to the 54 of 94 hospitals (57.4%) and 29 of 92 midwifery practice groups (31.5%) currently participating in this COVID-19 data collection strategy. Of the confirmed or suspected cases to-date, they are from the following health regions: 1 is from the South West, 8 from Central-West, 26 from the Greater Toronto Area, and 1 from the Eastern-Southeastern region.

### Key Definitions

- **Confirmed case** – Positive laboratory test result
- **Negative case** – Negative laboratory test result (excluded from this report)
- **Suspected case** – Negative or unknown laboratory test result BUT
  - has a fever AND cough or shortness of breath or X-ray findings, or
  - has other signs/symptoms AND has had contact with a positive case
  - a strong clinical reason to suspect COVID-19

### Important Considerations

This report is not a complete ascertainment of cases for participating providers as of May 29th, 2020. Some submissions are delayed and therefore not included here. Record linkage with the BORN Information System (BIS) is currently pending as complete data on all births are not yet available in the BIS.

Stay tuned for our next report which will include information on maternal medical comorbidities, mode of delivery, size for gestational age, and more.

## Reported Maternal COVID-19 Cases by May 29, 2020

Cases	Frequency	Percent
Confirmed positive	27	75
Suspected	9	25
<b>Total</b>	<b>36</b>	<b>100</b>

## Maternal COVID-19 Complications

Complications	Frequency n=27	Percent
Pneumonia or abnormal findings on X-ray	2	7.4
Coagulopathy	1	3.7
None	24	88.9

Note: This report only includes outcomes for confirmed cases. Suspected cases have been excluded until lab confirmation is received; any confirmed as positive will be included in the next report

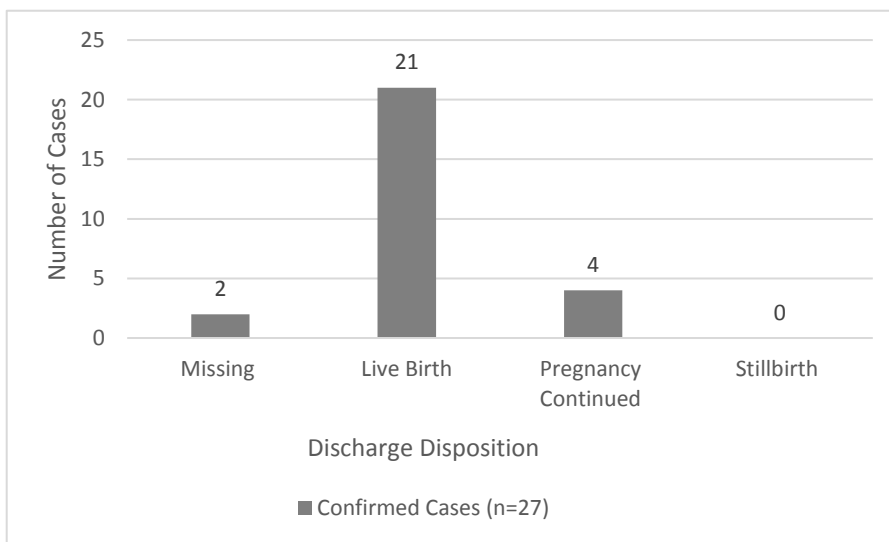
## Gestational Age at Time of COVID-19 Confirmed Infection<sup>a,b</sup>

COVID-19 Status	Gestational Age Category					Total
	≤ 20 weeks	21 - 32 weeks	33 - 36 weeks	37 - 40 weeks	≥ 40 weeks	
Confirmed case	4	3	2	13	5	<b>27</b>

<sup>a</sup> This includes delivered and undelivered cases

<sup>b</sup> The infection might have occurred earlier in the pregnancy (not necessarily at birth)

## Maternal COVID-19 Cases by Discharge Disposition



## Maternal COVID-19 Symptoms<sup>a,b</sup>

Symptom	Frequency n=27	Percent
Cough	12	44.4
Fever	11	40.7
Asymptomatic	7	25.9
Anosmia	6	22.2
Myalgia	4	14.8
Malaise	4	14.8
Shortness of breath	4	14.8
Headache	3	11.1
Anorexia	3	11.1
Rhinitis	2	7.4
Sore throat	1	3.7
Diarrhea	1	3.7
Vomiting	1	3.7
Loss of taste	1	3.7
Chest pain/ECG changes	1	3.7

<sup>a</sup> Categories are not mutually exclusive, therefore, percentages will not sum to 100%

<sup>b</sup> Expressed as a percentage of the total number of confirmed cases

## Births<sup>a,b</sup>

Type of Birth	Frequency n= 23	Percent
Singleton infant	23	100.0
Multiple (twin) infants	0	0.0
Preterm births	4	17.4
Term/post-term births	17	73.9
Missing	2	8.7

<sup>a</sup> 4 unborn (ongoing pregnancies)

<sup>b</sup> Expressed as a percentage of the total number of births

## Birth Weight<sup>a</sup>

	n=21
Mean birth weight	3228 g
Median birth weight	3288 g
Low birth weight (LBW) (<2500g)	1 (4.8%)

<sup>a</sup> 2 babies with missing birth weight and 4 unborn

## Infant SARS-CoV-2 Testing<sup>a</sup>

Testing	Frequency n=23	Percent
Performed		
Yes	12	52.3
No	9	39.1
Missing	2	8.7
Test Result (n=12)		
Positive	1	8.3
Negative	11	91.7

<sup>a</sup> 4 unborn

## NICU Admission<sup>a</sup>

Admission	Frequency n=23	Percent
Yes	3	13.0
No	18	78.3
Missing	2	8.7

<sup>a</sup> 4 unborn

## Care of Infants from Birth to Discharge<sup>a,b</sup>

	Frequency n=23	Percent
Newborns were asymptomatic and kept with a well mother	9	39.1
Newborns were asymptomatic and isolated away from mother	1	4.3
Newborns were symptomatic and isolated away from mother	0	0.0
Newborns were transferred to another setting/hospital due to clinical needs	1	4.3
Other	2	8.7
Missing	10	43.5

<sup>a</sup> 4 unborn

<sup>b</sup> Interpret with caution due to high missingness

## Infant Feeding<sup>a,b</sup>

	Fed by Mother	Percent	Fed by Another (non-infected individual)	Percent
Breastfed	22	95.7	N/A	N/A
Expressed breast milk	1	4.3	2	8.7
Donor milk	0	0.0	1	4.3
Breast milk substitute/Formula	4	17.4	6	26.1

<sup>a</sup> Babies could have received multiple methods of feeding, therefore, percentages will not sum to 100%

<sup>b</sup> Expressed as a percentage of the total number of babies (n=23)

Missing data has a negative impact on the ability to make accurate conclusions. For example, almost half of the ‘Care of Infants’ outcomes are missing. This prevents us from contributing to decisions about whether keeping mothers and babies together, or separate, is best practice. Please continue to collect data as completely as possible. In particular, please ensure complete collection of the **core variables** to allow us to help evaluate the recommendations of the Ontario Maternal/Neonatal COVID-19 Task Force.

## THANK-YOU for contributing to the BORN COVID-19 project!

We’ll issue another report and add further analyses as data accumulate.

Not contributing yet? Check out our [data collection forms and details](#).

Contact us: [covid@bornontario.ca](mailto:covid@bornontario.ca)

More Info: [www.bornontario.ca](http://www.bornontario.ca)