

Incidence, clinical features, and outcomes of COVID-19 in Canada: Impact of sex and age

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A

| CanData | | | |
|-----------------|----------------------|-----------------------|-------|
| 2932509x3 table | | | |
| | 1 | 2 | 3 |
| | CaseldentifierNumber | Caselnformation | Value |
| 1 | 1 | 'Region' | 2 |
| 2 | 1 | 'Episode_week' | 17 |
| 3 | 1 | 'Episode_week_gro... | 0 |
| 4 | 1 | 'Episode_year' | 20 |
| 5 | 1 | 'Gender' | 2 |
| 6 | 1 | 'Age_group' | 8 |
| 7 | 1 | 'Occupation' | 4 |
| 8 | 1 | 'Asymptomatic' | 9 |
| 9 | 1 | 'Onset_week_of_sy... | 99 |
| 10 | 1 | 'Onset_year_of_sym... | 99 |
| 11 | 1 | 'Symptom_cough' | 9 |
| 12 | 1 | 'Symptom_fever' | 9 |
| 13 | 1 | 'Symptom_chills' | 9 |
| 14 | 1 | 'Symptom_sore_thr... | 9 |
| 15 | 1 | 'Symptom_runny_n... | 9 |

B

| CanPop | | | | |
|-------------|-----|----------|----------|----------|
| 102x4 table | | | | |
| | 1 | 2 | 3 | 4 |
| | Age | Total | Male | Female |
| 1 | -1 | 37589262 | 18678085 | 18911177 |
| 2 | 0 | 381716 | 195851 | 185865 |
| 3 | 1 | 381655 | 195516 | 186139 |
| 4 | 2 | 386542 | 198435 | 188107 |
| 5 | 3 | 394889 | 202187 | 192702 |
| 6 | 4 | 398373 | 204180 | 194193 |
| 7 | 5 | 401761 | 205366 | 196395 |
| 8 | 6 | 405905 | 208006 | 197899 |
| 9 | 7 | 408230 | 208483 | 199747 |
| 10 | 8 | 407905 | 208375 | 199530 |
| 11 | 9 | 415551 | 211776 | 203775 |
| 12 | 10 | 417389 | 212892 | 204497 |
| 13 | 11 | 417066 | 212116 | 204950 |
| 14 | 12 | 406889 | 207072 | 199817 |
| 15 | 13 | 397226 | 202088 | 195138 |

C

| CanWork | | | | | | | | | | | | | |
|-----------------|------------------------------------|-------------|--------------------|---------------|---------------|---------------|-----------------|---|--------------------|--------------------|---------------------|--------------------------|------------------------|
| 405405x13 table | | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| | DIM_HighestCertificate_Diplon | MemberID_Hi | Notes_HighestCerti | DIM_Age_13A_ | MemberID_Age_ | DIM_Sex_3_ | MemberID_Sex_3_ | DIM_Occupation_NationalOccupationalClz | MemberID_Occupatio | Notes_Occupation_N | Dim_LabourForceStat | Dim_LabourForceStatus_3_ | Dim_LabourForceStatus_ |
| 1 | 'Total - Highest certificate, d... | 1 | 1 | 'Total - Age' | 1 | 'Total - Sex' | 1 | 'Total - Occupation - National Occupati... | 1 | 6 | 18672470 | 17230040 | 1442435 |
| 2 | 'Total - Highest certificate, d... | 1 | 1 | 'Total - Age' | 1 | 'Total - Sex' | 1 | 'Occupation - Not applicable' | 2 | 7 | 404350 | 0 | 404350 |
| 3 | 'Total - Highest certificate, d... | 1 | 1 | 'Total - Age' | 1 | 'Total - Sex' | 1 | 'All occupations' | 3 | 8 | 18268120 | 17230035 | 1038090 |
| 4 | 'Total - Highest certificate, d... | 1 | 1 | 'Total - Age' | 1 | 'Total - Sex' | 1 | '0 Management occupations' | 4 | NaN | 2013365 | 1958780 | 54585 |
| 5 | 'Total - Highest certificate, d... | 1 | 1 | 'Total - Age' | 1 | 'Total - Sex' | 1 | '00 Senior management occupations' | 5 | NaN | 225385 | 221420 | 3960 |
| 6 | 'Total - Highest certificate, d... | 1 | 1 | 'Total - Age' | 1 | 'Total - Sex' | 1 | '001 Legislators and senior management' | 6 | NaN | 225380 | 221420 | 3960 |
| 7 | 'Total - Highest certificate, d... | 1 | 1 | 'Total - Age' | 1 | 'Total - Sex' | 1 | '0011 Legislators' | 7 | NaN | 7810 | 7645 | 170 |
| 8 | 'Total - Highest certificate, d... | 1 | 1 | 'Total - Age' | 1 | 'Total - Sex' | 1 | '0012 Senior government managers and ... | 8 | NaN | 17490 | 17200 | 285 |
| 9 | 'Total - Highest certificate, d... | 1 | 1 | 'Total - Age' | 1 | 'Total - Sex' | 1 | '0013 Senior managers - financial, com... | 9 | NaN | 62610 | 61440 | 1170 |
| 10 | 'Total - Highest certificate, d... | 1 | 1 | 'Total - Age' | 1 | 'Total - Sex' | 1 | '0014 Senior managers - health, educatio... | 10 | NaN | 26445 | 25815 | 625 |
| 11 | 'Total - Highest certificate, d... | 1 | 1 | 'Total - Age' | 1 | 'Total - Sex' | 1 | '0015 Senior managers - trade, broadcast... | 11 | NaN | 51375 | 50505 | 865 |
| 12 | 'Total - Highest certificate, d... | 1 | 1 | 'Total - Age' | 1 | 'Total - Sex' | 1 | '0016 Senior managers - construction, tr... | 12 | NaN | 59655 | 58810 | 845 |
| 13 | 'Total - Highest certificate, d... | 1 | 1 | 'Total - Age' | 1 | 'Total - Sex' | 1 | '01-05 Specialized middle management ... | 13 | NaN | 650205 | 632665 | 17540 |
| 14 | 'Total - Highest certificate, d... | 1 | 1 | 'Total - Age' | 1 | 'Total - Sex' | 1 | '011 Administrative services managers' | 14 | NaN | 178340 | 172830 | 5515 |
| 15 | 'Total - Highest certificate, d... | 1 | 1 | 'Total - Age' | 1 | 'Total - Sex' | 1 | '0111 Financial managers' | 15 | NaN | 74525 | 72700 | 1825 |

Figure S1. Dataset layout. Screenshots were taken in MATLAB of the final dataset layout of the Canadian COVID19 dataset (A), Canadian population demographics (B), and Canadian workforce demographics (C).

Region:

- Atlantic (New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland and Labrador)
- Quebec
- Ontario and Nunavut
- Prairies (Alberta, Saskatchewan, and Manitoba) and the Northwest Territories
- British Columbia and Yukon

Episode week: The episode date is created from the earliest date available from the following series: Symptom Onset Date, Specimen Collection Date, and Laboratory Testing Date.

Sex: Male, Female, Not Stated

Age groups: 0-19, 20-29, 30-39, 40-49, 50-59, 60-69, 70-79, 80+

Occupation:

- Health care worker
- School or daycare worker/attendee
- Long term care resident
- Other
- Not stated

Asymptomatic: Yes, No, Not Stated

Week of symptom onset: 0-56, 99 (Not Stated)

Symptoms: Yes, No, Not Stated

- Cough
- Fever
- Chills
- Sore throat
- Runny nose
- Shortness of breath
- Nausea
- Headache
- Weakness
- Pain
- Irritability
- Diarrhea
- Other

Hospitalization status:

- Hospitalized and in Intensive care unit
- Hospitalized, but not in intensive care unit
- Not hospitalized
- Not Stated/Unknown

Recovered: Yes, No, Not Stated

Recovery week: 0-56, 99 (Not Stated)

Death: Yes, No, Not Stated

Transmission:

- Domestic acquisition - Contact of COVID case, contact with traveller, or unknown source
- International travel
- Not stated

Figure S2. Summary of COVID-19 dataset parameters and potential values.

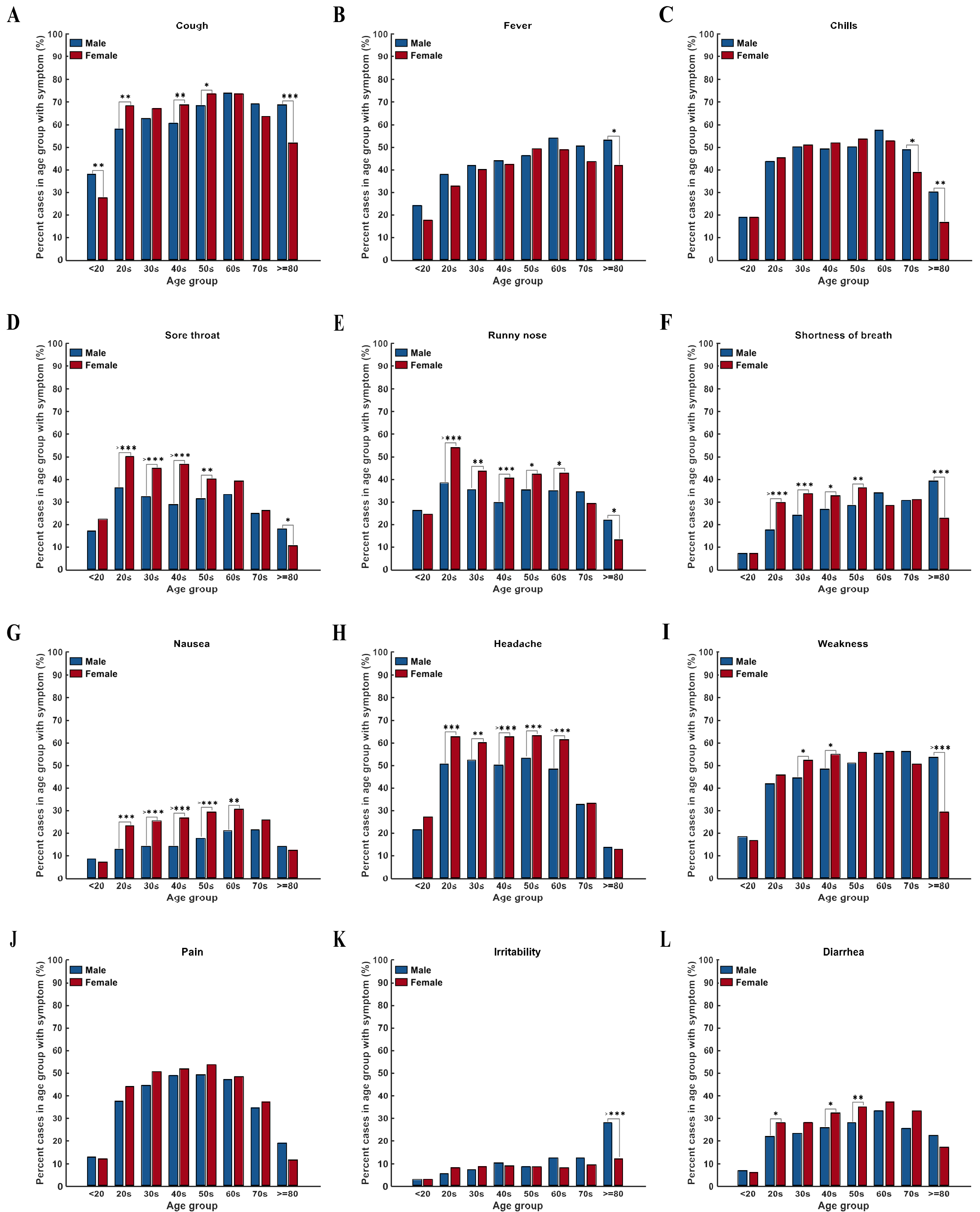


Figure S3. Age, sex, and symptom segregated COVID-19 cases. Data represent percentage of cases with symptom relative to total closed cases per sex in each age group. Data were sampled from the 'A/Symptomatic, Closed cases' group and analyzed with Fisher's Exact Test. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, >*** $p < 0.0001$.