

# Effects of Nonpharmaceutical COVID-19 Interventions on Pediatric Hospitalizations for Other Respiratory Virus Infections, Hong Kong Island

## Appendix

**Appendix Table.** Annual rate of pediatric hospitalizations for viral respiratory infection/10,000 residents, Hong Kong Island, China, 2017–2020\*

| Virus, year | Hospitalizations (95% CI) |                      |                     |                     |                     |                  |                  |                |
|-------------|---------------------------|----------------------|---------------------|---------------------|---------------------|------------------|------------------|----------------|
|             | <6 mo                     | 6 mo –<12 mo         | <1 y                | 1–<2 y              | 2–<5 y              | 5–<10 y          | 10–<15 y         | 15–<18 y       |
| HK Island   | 4,180                     | 4,180                | 8,360               | 9,136               | 27,102              | 46,470           | 40,137           | 27,930         |
| Population  |                           |                      |                     |                     |                     |                  |                  |                |
| Influenza A |                           |                      |                     |                     |                     |                  |                  |                |
| 2017        | 117.8 (82.0–163.8)        | 191.8 (145.3, 248.5) | 154.8 (124.8–189.8) | 141.6 (114.2–173.7) | 133.4 (117.6–150.7) | 58.4 (50.5–67.3) | 19.6 (14.8–25.5) | 8.6 (5.0–13.7) |
| 2018        | 53.8 (30.8–87.4)          | 74.0 (46.4–112.1)    | 63.9 (45.2–87.8)    | 84.7 (63.8–110.2)   | 102.8 (88.9–118.1)  | 31.2 (25.4–37.8) | 7.7 (4.8–11.7)   | 4.5 (2.1–8.6)  |
| 2019        | 117.8 (82.0–163.8)        | 134.6 (96.2–183.3)   | 126.2 (99.2–158.2)  | 144.7 (116.9–177.1) | 145.3 (128.8–163.4) | 51.5 (44.0–59.8) | 18.6 (13.9–24.3) | 9.1 (5.4–14.3) |
| 2020        | 16.8 (5.5–39.3)           | 40.4 (20.9–70.5)     | 28.6 (16.7–45.8)    | 29.3 (17.6–45.7)    | 23.4 (17.0–31.2)    | 7.6 (4.9–11.2)   | 3.9 (1.9–6.9)    | 2.0 (0.5–5.2)  |
| Influenza B |                           |                      |                     |                     |                     |                  |                  |                |
| 2017        | 6.7 (0.8–24.3)            | 26.9 (11.6–53.0)     | 16.8 (8.1–30.9)     | 16.9 (8.5–30.3)     | 19.7 (14.0–27.1)    | 16.0 (12.0–21.0) | 4.6 (2.4–7.8)    | 2.5 (0.8–5.9)  |
| 2018        | 30.3 (13.9–57.5)          | 67.3 (41.1–103.9)    | 48.8 (32.7–70.1)    | 77.0 (57.1–101.5)   | 78.4 (66.4–91.9)    | 52.7 (45.1–61.1) | 15.8 (11.5–21.1) | 5.0 (2.4–9.3)  |
| 2019        | 13.5                      | 26.9                 | 20.2                | 21.6                | 29.1                | 30.6             | 12.6             | 5.5            |

| Virus, year | Hospitalizations (95% CI) |               |             |              |              |             |            |           |
|-------------|---------------------------|---------------|-------------|--------------|--------------|-------------|------------|-----------|
|             | <6 mo                     | 6 mo –<12 mo  | <1 y        | 1–<2 y       | 2–<5 y       | 5–<10 y     | 10–<15 y   | 15–<18 y  |
|             | (3.7–34.5)                | (11.6–53.0)   | (10.4–35.3) | (11.8–36.2)  | (22.0–37.7)  | (24.9–37.1) | (8.8–17.5) | (2.8–9.9) |
| 2020        | 0                         | 0             | 0           | 1.5          | 1.6          | 0.6         | 1.4        | 0.5       |
|             | (0–12.4)                  | (0–12.4)      | (0–6.2)     | (0–8.6)      | (0.3–4.6)    | (0.1–2.2)   | (0.4–3.6)  | (0–2.8)   |
| RSV         |                           |               |             |              |              |             |            |           |
| 2017        | 383.6                     | 333.1         | 358.3       | 224.8        | 120.4        | 7.3         | 2.5        | 2.0       |
|             | (316.4–                   | (270.7–405.6) | (311.8–     | (189.8–      | (105.4–      | (4.7–10.8)  | (1.0–5.1)  | (0.5–5.2) |
|             | 460.8)                    |               | 409.8)      | 264.3)       | 136.9)       |             |            |           |
| 2018        | 353.3                     | 249.0         | 301.1       | 161.6        | 113.7        | 8.8         | 1.4        | 0.5       |
|             | (289.0–                   | (195.5–312.6) | (258.6–     | (132.2–      | (99.1–129.7) | (5.9–12.6)  | (0.4–3.6)  | (0–2.8)   |
|             | 427.7)                    |               | 348.6)      | 195.7)       |              |             |            |           |
| 2019        | 275.9                     | 201.9         | 238.9       | 147.8        | 88.2         | 7.0         | 2.5        | 1.0       |
|             | (219.4–                   | (154.1–259.9) | (201.2–     | (119.7–      | (75.5–102.5) | (4.4–10.4)  | (1.0–5.1)  | (0.1–3.6) |
|             | 342.5)                    |               | 281.6)      | 180.5)       |              |             |            |           |
| 2020        | 33.6                      | 13.5          | 23.6        | 18.5         | 10.4         | 1.5         | 0          | 0         |
|             | (16.2–61.9)               | (3.7–34.5)    | (12.9–39.5) | (9.5–32.3)   | (6.3–16.0)   | (0.5–3.5)   | (0–1.3)    | (0–1.9)   |
| Adeno       |                           |               |             |              |              |             |            |           |
| 2017        | 60.6                      | 175.0         | 117.8       | 160.1        | 138.6        | 51.5        | 11.9       | 2.5       |
|             | (35.9–95.7)               | (130.7–229.4) | (91.8–      | (130.8–      | (122.4–      | (44.0–59.8) | (8.3–16.6) | (0.8–5.9) |
|             |                           |               | 148.8)      | 194.0)       | 156.2)       |             |            |           |
| 2018        | 20.2                      | 90.8          | 55.5        | 115.5        | 75.8         | 15.4        | 2.1        | 0.5       |
|             | (7.4–43.9)                | (59.9–132.2)  | (38.2–78.0) | (90.8–144.7) | (64.0–89.1)  | (11.5–20.3) | (0.8–4.6)  | (0–2.8)   |
| 2019        | 37.0                      | 77.4          | 57.2        | 115.5        | 94.4         | 21.5        | 4.6        | 2.5       |
|             | (18.5–66.2)               | (49.1–116.1)  | (39.6–79.9) | (90.8–144.7) | (81.2–109.2) | (16.8–27.1) | (2.4–7.8)  | (0.8–5.9) |
| 2020        | 6.7                       | 43.7          | 25.2        | 36.9         | 14.5         | 3.6         | 1.4        | 0.5       |
|             | (0.8–24.3)                | (23.3–74.8)   | (14.1–41.6) | (23.7–55.0)  | (9.7–21.0)   | (1.9–6.3)   | (0.4–3.6)  | (0–2.8)   |
| Para 1–4    |                           |               |             |              |              |             |            |           |
| 2017        | 191.8                     | 329.7         | 260.8       | 275.6        | 199.3        | 39.0        | 8.8        | 2.5       |
|             | (145.3–                   | (267.7–401.9) | (221.3–     | (236.7–      | (179.9–      | (32.6–46.4) | (5.7–12.9) | (0.8–5.9) |
|             | 248.5)                    |               | 305.2)      | 319.0)       | 220.2)       |             |            |           |
| 2018        | 171.6                     | 265.8         | 218.7       | 250.9        | 193.1        | 38.1        | 5.6        | 2.0       |
|             | (127.8–                   | (210.4–331.3) | (182.7–     | (213.9–      | (173.9–      | (31.8–45.4) | (3.2–9.1)  | (0.5–5.2) |
|             | 225.6)                    |               | 259.7)      | 292.6)       | 213.7)       |             |            |           |
| 2019        | 148.0                     | 282.6         | 215.3       | 214.0        | 178.5        | 38.1        | 5.3        | 2.0       |

| Virus, year | Hospitalizations (95% CI) |                        |                        |                        |                        |                      |                     |                    |
|-------------|---------------------------|------------------------|------------------------|------------------------|------------------------|----------------------|---------------------|--------------------|
|             | <6 mo                     | 6 mo –<12 mo           | <1 y                   | 1–<2 y                 | 2–<5 y                 | 5–<10 y              | 10–<15 y            | 15–<18 y           |
|             | (107.6–198.8)             | (225.4–349.9)          | (179.6–256.0)          | (179.9–252.7)          | (160.2–198.4)          | (31.8–45.4)          | (2.9–8.7)           | (0.5–5.2)          |
| 2020        | 26.9<br>(11.6–53.0)       | 53.8<br>(30.8–87.4)    | 40.4<br>(25.9–60.1)    | 36.9<br>(23.7–55.0)    | 24.4<br>(17.9–32.4)    | 6.4<br>(3.9–9.7)     | 2.1<br>(0.8–4.6)    | 2.0<br>(0.5–5.2)   |
| HMPV        |                           |                        |                        |                        |                        |                      |                     |                    |
| 2017        | 37.0<br>(18.5–66.2)       | 63.9<br>(38.5–99.8)    | 50.5<br>(34.1–72.1)    | 69.3<br>(50.5–92.7)    | 46.7<br>(37.6–57.4)    | 5.8<br>(3.5–9.0)     | 1.1<br>(0.2–3.1)    | 1.0<br>(0.1–3.6)   |
| 2018        | 67.3<br>(41.1–103.9)      | 107.7<br>(73.7–152.0)  | 87.5<br>(65.3–114.7)   | 92.4<br>(70.5–118.9)   | 72.1<br>(60.6–85.2)    | 11.5<br>(8.1–15.8)   | 3.5<br>(1.7–6.4)    | 0.5<br>(0–2.8)     |
| 2019        | 53.8<br>(30.8–87.4)       | 97.6<br>(65.3–140.1)   | 75.7<br>(55.2–101.3)   | 75.4<br>(55.8–99.7)    | 78.9<br>(66.8–92.5)    | 11.8<br>(8.4–16.1)   | 2.1<br>(0.8–4.6)    | 1.5<br>(0.3–4.4)   |
| 2020        | 0<br>(0–12.4)             | 13.5<br>(3.7–34.5)     | 6.7<br>(1.8–17.2)      | 1.5<br>(0–8.6)         | 1.6<br>(0.3–4.6)       | 0<br>(0–1.1)         | 0.4<br>(0–2.0)      | 0.5<br>(0–2.8)     |
| EV/RV       |                           |                        |                        |                        |                        |                      |                     |                    |
| 2017        | 434.1<br>(362.4–515.8)    | 632.6<br>(545.4–729.7) | 533.3<br>(476.2–595.4) | 511.1<br>(457.6–569.2) | 327.5<br>(302.9–354.0) | 83.2<br>(73.7–93.7)  | 22.8<br>(17.6–29.0) | 10.1<br>(6.2–15.6) |
| 2018        | 494.6<br>(417.9–581.4)    | 551.8<br>(470.6–643.1) | 523.2<br>(466.7–584.7) | 449.5<br>(399.4–504.1) | 377.8<br>(351.3–406.3) | 81.1<br>(71.7–91.4)  | 27.7<br>(21.9–34.5) | 7.6<br>(4.2–12.5)  |
| 2019        | 376.9<br>(310.3–453.4)    | 461.0<br>(387.0–544.9) | 418.9<br>(368.5–474.3) | 424.9<br>(376.2–478.1) | 327.5<br>(302.9–354.0) | 91.4<br>(81.4–102.3) | 27.7<br>(21.9–34.5) | 7.6<br>(4.2–12.5)  |
| 2020        | 60.6<br>(35.9–95.7)       | 107.7<br>(73.7–152.0)  | 84.1<br>(62.4–110.9)   | 95.4<br>(73.2–122.4)   | 72.1<br>(60.6–85.2)    | 18.5<br>(14.1–23.7)  | 9.1<br>(6.0–13.4)   | 3.0<br>(1.1–6.6)   |

\*RSV, respiratory syncytial virus; Adeno, adenovirus; para 1–4, parainfluenza virus types 1–4; HMPV, human metapneumovirus; EV/RV, enterovirus/rhinovirus.