What does this research mean?

1. Fever and cough are the most common symptoms; but a significant number of infected persons can be asymptomatic.

2. Almost two-thirds of infected persons reported history of contact with another exposed person; another one-third reported history of travel to the epidemic area.

3. Most would not develop severe disease or cause death, but some might end up with breathing difficulties that require intensive care and a ventilator (machine to support breathing).

4. In the presence of risk factors or severe illness including breathing difficulties, the death rate is high.

What should we do now?

1. If you have symptoms or is at risks for infection, seek immediate medical attention to get tested.

2. It is advisable to wear a mask and keep your hands clean (with soap or hand sanitizer) to reduce the risk of exposure.

3. Through measures such as Movement Control Order (MCO), the Government hopes to reduce the number of people at any one time (i.e. flattening the curve). If there is a low number of patients infected at any one time, most healthcare systems will have enough ventilators to cope.

4. Individuals who are older or with pre-existing medical conditions (such as heart disease, respiratory problems, diabetes, and cancer) need to take extra precaution to reduce their risk of infection.
**Clinical course and risk factors for death among hospitalised adults with COVID-19**

In this paper by Lancet, risk factors for death among hospitalised adults were described. In addition, investigators identified prolonged viral shedding even in those patients who recovered.

### What does this research mean?

1. The risk factors associated with death being older age as well as development of sepsis (organ involvement and failure from overwhelming infection).

2. Among the survivors, the virus continued to shed for an average of 20 days. Meanwhile, the virus continued to shed among those who died.

### What should we do now?

1. Elderly and those with chronic diseases need to take greater precautions to reduce their risk of infection. Once hospitalised, their risks for intensive care admission and death may increase significantly.

2. Since individuals could continue to be infectious, quarantine needs to continue for those who have recovered.

---

**Early transmission dynamics of those with COVID-19 associated chest infection**

In this paper, investigators have confirmed human-to-human transmission with SARS-CoV-2 virus. The dynamic of transmission was also described.

### What does this research mean?

1. This study confirms human-to-human transmission with a reproductive number of $R_0$ of 2.2. This means that each infected person may infect an average of more than two other people. In comparison, $R_0$ for SARS is 3.0 and for MERS-COV is below 1.

2. In the early stage of the epidemic, the number of infected persons doubled every 7.4 days.

3. On average, the incubation (from contact to symptom) period is 5.2 days and hospitalisation occurs in about 12 days, supporting a quarantine period of 14 days for the exposed persons.

### What should we do now?

1. As long as $R_0$ is more than 1, the epidemic will keep increasing. Therefore, it is important to have movement control measures in place in order to reduce the $R_0$ to less than 1.

2. It is important to perform contact tracing and rapid testing to confirm infection; if not the number of infected people may increase rapidly.

3. Exposed person should be quarantined for at least 14 days. Development of symptoms should be monitored during the quarantine period.