

[Detection of Covid-19 in Children in Early January 2020 in Wuhan, China](#)

March 12, 2020

SARS-CoV-2, the virus that causes Covid-19, was detected in 6 pediatric patients in Wuhan.

The median age of the six patients was 3 years (range, 1 to 7) ([Table 1](#)). All six children had previously been completely healthy. Common clinical characteristics included high fever (>39°C) (in all six patients), cough (in all six), and vomiting (in four). Laboratory investigations showed that the levels of lymphocytes, white cells, and neutrophils were below the normal range in six, four, and three patients, respectively. Four of the six patients had pneumonia, as assessed radiographically, with computed tomographic scans of the chest showing typical viral pneumonia patterns (Fig. S3). One child was admitted to the pediatric intensive care unit (ICU) and received pooled immune globulin from healthy donors. All the patients were treated empirically with antiviral agents, antibiotic agents, and supportive therapies. All the patients recovered after hospitalization for a median of 7.5 days (range, 5 to 13)

Aerosol and surface stability of HCoV-19 (SARS-CoV-2) compared to SARS-CoV-2 (study submitted to NEJM, could be already published but couldn't check, authors (from NIH) have made their manuscript openly available ahead of publishing)

Authors found that viable virus could be detected in aerosols up to 3 hours post aerosolization, up to 4 hours on copper, up to 24 hours on cardboard and up to 2-3 days on plastic and stainless steel. HCoV-19 and SARS-CoV-1 exhibited similar half-lives in aerosols, with median estimates around 2.7 hours. Both viruses show relatively long viability on stainless steel and polypropylene compared to copper or cardboard: the median half-life estimate for HCoV-19 is around 13 hours on steel and around 16 hours on polypropylene. Our results indicate that aerosol and fomite transmission of HCoV-19 is plausible, as the virus can remain viable in aerosols for multiple hours and on surfaces up to days.

[Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study](#)

This is a very interesting study with a lot of data. Key points below

191 patients were included in this study, of whom 137 were discharged and 54 died in hospital.

(48%) patients had a comorbidity, with hypertension being the most common ([30%] patients), followed by diabetes ([19%] patients) and coronary heart disease ([8%] patients). Multivariable regression showed increasing odds of in-hospital death associated with older age (odds ratio 1.10, 95% CI 1.03–1.17, per year increase; $p=0.0043$), higher Sequential Organ Failure Assessment (SOFA) score (5.65, 2.61–12.23; $p<0.0001$), and d-dimer greater than 1 $\mu\text{g/mL}$ (18.42, 2.64–128.55; $p=0.0033$) on admission.

Age, lymphopenia, leucocytosis, and elevated ALT, lactate dehydrogenase, high-sensitivity cardiac troponin I, creatine kinase, d-dimer, serum ferritin, IL-6, prothrombin time, creatinine, and procalcitonin were also associated with death

| | Total (n=191) | Non-survivor (n=54) | Survivor (n=137) | p value |
|--|------------------|------------------------|---------------------|---------|
| Demographics and clinical characteristics | | | | |
| Age, years | 56.0 (46.0–67.0) | 69.0 (63.0–76.0) | 52.0 (45.0–59.0) | <0.0001 |

Median duration of viral shedding was 20.0 days (IQR 17.0–24.0) in survivors, but SARS-CoV-2 was detectable until death in non-survivors. The longest observed duration of viral shedding in survivors was 37 days.

The median time from illness onset (ie, before admission) to discharge was 22.0 days (IQR 18.0–25.0), whereas the median time to death was 18.5 days (15.0–22.0; table 2).

Sepsis was the most frequently observed complication, followed by respiratory failure, ARDS, heart failure, and septic shock (table 2). Half of non-survivors experienced a secondary infection, and ventilator-associated pneumonia occurred in ten (31%) of 32 patients requiring invasive mechanical ventilation. The frequency of complications were higher in non-survivors than survivors

The potential risk factors of older age, high SOFA score, and d-dimer greater than 1 $\mu\text{g/mL}$ could help clinicians to identify patients with poor prognosis at an early stage. Prolonged viral shedding provides the rationale for a strategy of isolation of infected patients and optimal antiviral interventions in the future.

Most important news : [Toilet paper](#) hoarding!

According to clinical psychologist Steven Taylor, who spoke with CNN, the rush for toilet paper may be based on a panic response to global fears over how coronavirus may impact populations. Because much is still unknown about the virus, consumers may feel compelled to stock up on essentials.

Phenomenon of panic-buying having a snowball effect, Taylor told the outlet. If someone walks into a store and sees empty shelves where toilet paper used to be or sees social media posts in their feed about it, they're being fed information that indicates toilet paper is in short supply and will proceed to stock up elsewhere.