

# COVID-19 Updates: May 20, 2020

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TREATMENT

EPIDEMIOLOGY

INFECTION CONTROL

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DISEASE

# COVID-19 and Cats



## **Susceptibility of ferrets, cats, dogs, and other domesticated animals to SARS-coronavirus**

- SARS-CoV-2 replicates poorly in dogs, pigs, chickens, and ducks, but ferrets and cats are permissive to infection.
- Cats are susceptible to airborne infection.

## **Transmission of SARS-CoV-2 in Domestic Cats**

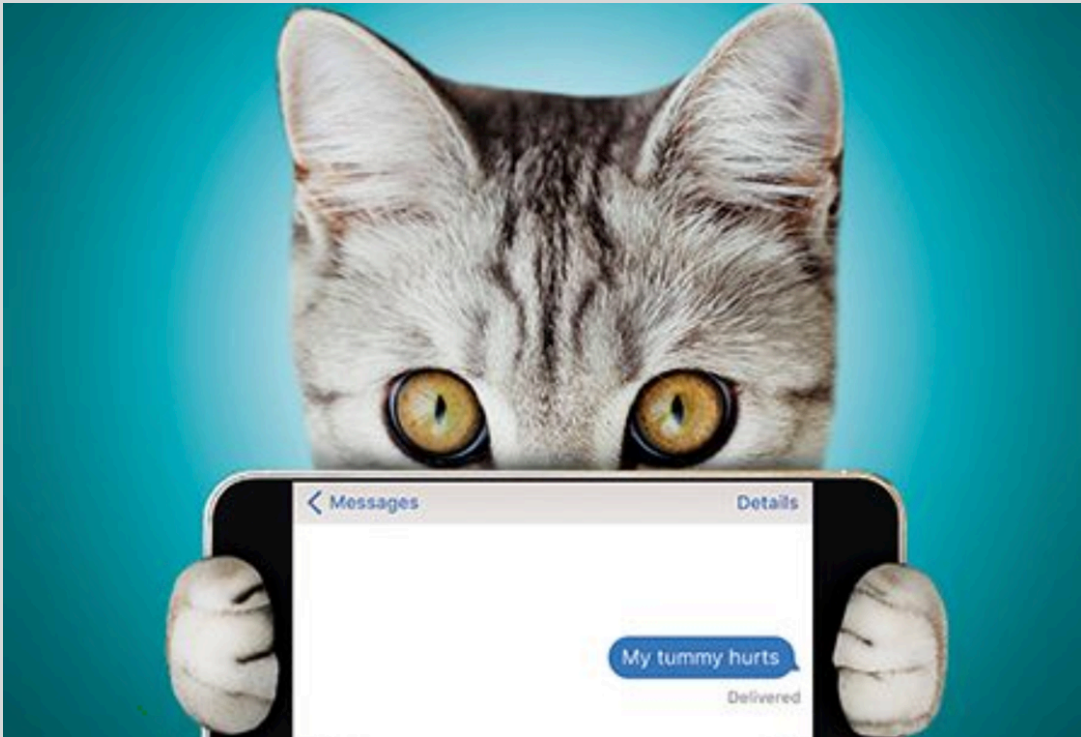
- Three domestic cats were inoculated with SARS-CoV-2 and cohoused with 3 other non infected cats.
- Five 5 days later, virus was detected in all three cats that were cohoused with the inoculated
- Given the need to stop the coronavirus disease 2019 pandemic through various mechanisms, including breaking transmission chains, a better understanding of the role cats may play in the transmission of SARS-CoV-2 to humans is needed.

# COVID-19 and Household Animals (HHA)

- **People with COVID-19 and in home isolation should be advised to restrict interaction with HHA**
  - A person with *symptomatic COVID-19* should maintain separation from HHA as they would with other household members
    - Avoid direct contact, including petting, snuggling, being kissed or licked, sleeping in the same location, and sharing food or bedding.
  - If possible, a household member should be designated to care for pets and should follow standard hand washing
  - In accordance with the Americans with Disabilities Act, service animals should be permitted to remain with their handlers.
- **HHA may require alternative care or re-homing if the owner is unable to care for them or has surrendered them**
  - A home receiving a new HHA should follow standard hand washing practices before and after interacting with the animal.
  - Shelters receiving HHA should ensure they review and adhere to their established biosafety and biosecurity practices

# COVID-19 and Household Animals (HHA)

## Pet Telemedicine



**Care for HHA that are sick or injured should be coordinated with the household's local veterinarian**

- The owner should call ahead and arrange the hospital or clinic visit
- Telemedicine may also be appropriate
- Veterinarians that see animals with a new, concerning illness that could be compatible with SARS-CoV-2 should contact their state public health veterinarian for guidance regarding testing.

CDC.gov

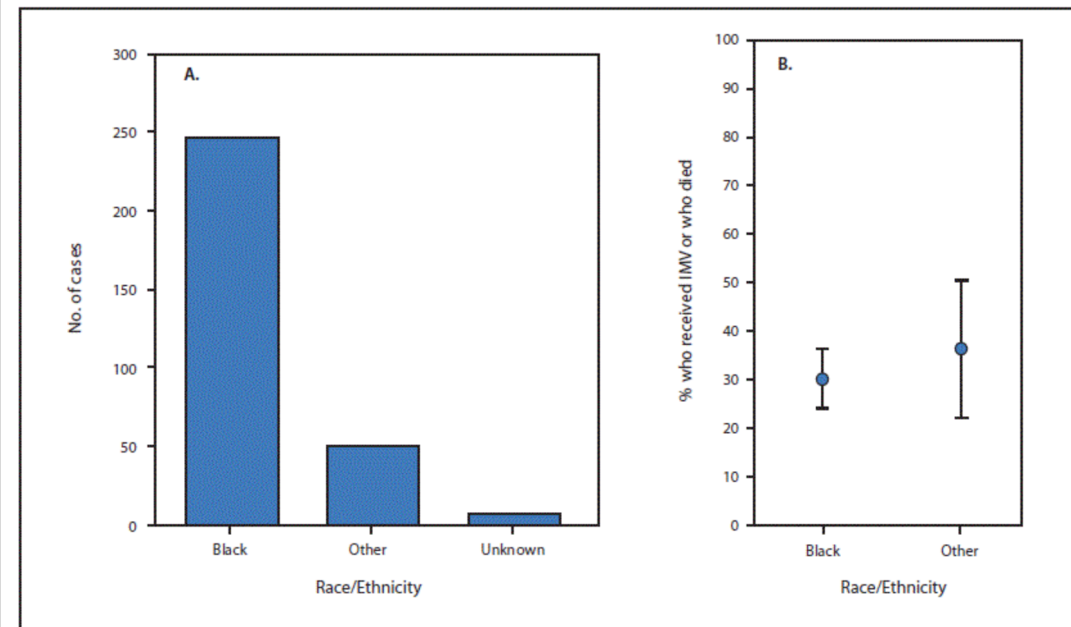


# Characteristics and clinical outcomes of adult patients hospitalized with COVID-19, Georgia, March 2020

- Median age 60 years
- Patients age <65 years: in 62%
- Non-Hispanic Black: 83%
- Patients without underlying risk conditions: 26%
- Admitted to ICU: 39%

**In this cohort black patients were overrepresented, and their clinical outcomes were similar to those of nonblack patients. One in four hospitalized patients had no recognized risk factors for severe COVID-19.**

FIGURE 2. Number of hospitalized patients with COVID-19 (N = 305)\* (A) and percentage who received or died (B),† by race/ethnicity§ — eight hospitals, Georgia, March 2020



Abbreviations: COVID-19 = coronavirus disease 2019; IMV = invasive mechanical ventilation.

\* A total of 273 patients had available race/ethnicity data and known hospitalization outcomes.

† Vertical bars represent 95% confidence intervals for proportions.

§ Black was defined as non-Hispanic black race/ethnicity; other includes all other racial/ethnic groups.

# Epidemiology of and Risk Factors for Coronavirus Infection in Health Care Workers: A Living Rapid Review.

Ann Intern Med. 2020 May 05

- Studies included: **64**
  - Studies that addressed burden of HCW infections: **43** (15 on SARS-CoV-2)
  - Studies that addressed risk factors: **34** (3 on SARS-CoV-2).
- **Health care workers accounted for a significant proportion of coronavirus infections** and may experience particularly high infection incidence after unprotected exposures, but illness severity was lower than in non-HCWs.
- **Depression, anxiety, and psychological distress were common** in HCWs during the COVID-19 outbreak.
- **The strongest evidence on risk factors was on PPE use and decreased infection risk.**
  - The association was most consistent for masks but was also observed for gloves, gowns, eye protection, and hand washing;
    - Evidence suggested a dose-response relationship.
  - No study evaluated PPE reuse.
  - Exposures involving intubations, direct patient contact, contact with bodily secretions were associated with increased risk
  - Infection control training was associated with decreased risk.

**Table 1.** Exposure History and Risk for Infection With SARS-CoV-2, SARS-CoV-1, or MERS-CoV in HCWs\*

Author, Year (Reference)	Intubation	Directness of Contact	Oxygen Administration and Related Exposures	Number or Duration of Contacts and Proximity to Patient	Other Exposures
<b>SARS-CoV-2</b>					
Ran et al, 2020 (61)	Endotracheal tube removal: RR, 0.63 (95% CI, 0.06-7.08)	-	-	-	CPR: RR, 0.63 (95% CI, 0.06-7.08) Fiberoptic bronchoscopy: RR, 0.63 (95% CI, 0.06-7.08)

**Table 2.** Mask Use and Risk for Infection With SARS-CoV-2, SARS-CoV-1, or MERS-CoV in HCWs\*

Author, Year (Reference)	Mask Use Versus Nonuse	Comparison of Mask Types	Consistency of Mask Use	Multiple Mask Layers Versus Single Layer
<b>SARS-CoV-2</b>				
Wang et al, 2020 (70)	In department with N95 mask use (yes vs. no): OR, 0.04 (95% CI, 0.002-0.61)†; adjusted OR, 0.002 (95% CI, 0-0.21) (note: reversed from no vs. yes as reported in study, for which the 95% CI, was 97.73-∞)	-	-	-

**Table 3.** Infection Prevention and Control Factors (Other Than Masks) and Risk for Infection With SARS-CoV-2, SARS-CoV-1, or MERS-CoV in HCWs\*

Study, Year (Reference)	Gown	Glove	Handwashing	Eye Protection	PPE
<b>SARS-CoV-2</b>					
Wang et al, 2020 (70)	-	-	-	-	-
Ran et al, 2020 (61)	-	-	Unqualified handwashing: RR, 2.64 (95% CI, 1.04-6.71) Suboptimal handwashing before patient contact: RR, 3.10 (95% CI, 1.43-6.73) Suboptimal handwashing after patient contact: RR, 2.43 (95% CI, 1.34-4.39)	-	Improper PPE: RR, 2.82 (95% CI, 1.11-7.18)

# COVID-19: VIRUS IN SEMEN

- SARS-CoV-2 has been detected in the semen of men with COVID-19
- 6 out of 38 men with confirmed illness in China who provided a semen sample for tested positive for the virus
- Out of these 6 - 4 were in the acute stage of infection and 2 were in the recovery phase
- It is not yet known whether the virus can be transmitted sexually

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