

COVID-19 and Pemphigus and Pemphigoid

April 9, 2020 Patient Education Call

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Overview

Term	Meaning
Mary Tomayko, MD, PhD	Background on the virus and symptoms
Aimee Payne, MD, PhD	Risk factors for more severe COVID-19 disease and current data on outcomes
Emanual Maverakis, MD	General advice on how to protect yourself during the COVID-19 outbreak
Panel discussion	Questions and answers

A basic primer on terminology

Term	Meaning
Coronavirus	A general term for the family of viruses that cause respiratory illness (SARS, MERS, SARS-CoV-2)
SARS-CoV-2	The official name for the virus causing the global pandemic (severe acute respiratory syndrome coronavirus 2), also called “novel coronavirus” to distinguish from the SARS 2003 outbreak
COVID-19	“coronavirus disease 2019” – the official name of the disease caused by SARS-Co-V2

<https://www.cdc.gov/coronavirus/2019-ncov/faq.html#covid19-basics>

How the novel coronavirus spreads

- Person-to-person spread is the major transmission route
- Respiratory droplets from sneezing, coughing, or talking (6 foot range)
- Virus can be spread by asymptomatic carriers
- Traces of virus can be found on solid surfaces such as doorknobs, elevator buttons, bathroom fixtures (toilet/faucet), office fixtures (phone/desk/keyboard)

<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>

Disease symptoms (2-14 days after exposure)

- Symptoms arise 2-14 days after exposure
- Fever, cough, shortness of breath
- Less common: loss of smell or taste, red eyes, diarrhea
- Call your primary care doctor for guidance on testing if you have symptoms

- Emergency symptoms warranting urgent evaluation (911 or ER)
 - Persistent chest pain/tightness, moderate to severe shortness of breath
 - Confusion, feeling “out of it”, severe dizziness or weakness
 - Congestive heart failure (sudden weight gain, leg swelling)

<https://www.cdc.gov/coronavirus/2019-ncov/faq.html#symptoms-testing>

Individuals at higher risk for serious illness

- Age > 65
- People who live in a nursing home or long-term care facility
- Chronic lung disease, asthma
- Serious heart conditions
- Immunocompromised
- Severe obesity (BMI > 40)
- Diabetes
- Chronic kidney disease undergoing dialysis
- Chronic liver disease
- Pemphigus and pemphigoid in and of itself, in the absence of any other risk factors, is not known to increase the risk of more serious COVID-19 illness

<https://www.cdc.gov/coronavirus/2019-ncov/faq.html#high-risk>

COVID-19 outcomes

Overall, 20% are hospitalized and 6% require ICU admission

TABLE 1. Reported outcomes among COVID-19 patients of all ages, by hospitalization status, underlying health condition, and risk factor for severe outcome from respiratory infection — United States, February 12–March 28, 2020



	Not hospitalized	Hospitalized, non-ICU	ICU admission	Hospitalization status unknown
Overall cases (7162)	5,143 72%	1,037 14%	457 6%	525 7%
One or more conditions (2692)	1,388	732	358	214
Immunocompromised condition (264)	141	63	41	19
None of the above conditions [§] (4470)	3,755	305	99	311

Preliminary Estimates of the Prevalence of Selected Underlying Health Conditions Among Patients with Coronavirus Disease 2019 — United States, February 12–March 28, 2020. Morb Mortal Wkly Rep 2020;69:382–386. DOI: <http://dx.doi.org/10.15585/mmwr.mm6913e2> (Table 1 has been modified to simplify)

**40% of immunocompromised cases are hospitalized, 16% require ICU
(~same risk as heart/lung/kidney disease, diabetes, obesity)**

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Immunocompromised condition (264)	141 53%	63 24%	41 16%	19 7%
None of the above conditions [†] (4470)	3,755 84%	305 7%	99 2%	311 7%

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Being immunocompromised increases the risk of hospitalization by 3x and ICU admission by 8x compared to those without risk factors

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**Caveat: Due to limited test availability, cases with mild or no symptoms are likely not captured in these statistics*

How to protect yourself from infection

- Currently, stay at home to the extent possible
- Wear a cloth face cover when you go out for food or other necessities (more on this on the next slide)
- If you do go out, stay 6 feet away from people you do not live with
- Avoid non-essential travel and mass transit
- Wash your hands with soap and water for at least 20 seconds after returning home
- If soap and water are not available, use hand sanitizer with >60% alcohol
- Avoid touching your eyes/nose/mouth with unwashed hands

<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>

Guidances on masks

- The CDC has not recommended medical-grade masks for the general public due to shortages
- On 4/3/20, the CDC recommended a cloth face covering for the general public to reduce your ability to spread and also inhale respiratory droplets (instructions posted online)
- Face coverings should not be used for those under age 2 or those who can't remove the mask without assistance
- Don't forget hand-washing and physical distancing in addition
- “Perfect is the enemy of good” – this strategy conserves precious medical resources and also reduces risk of spread among the general public

<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/diy-cloth-face-coverings.html>

Balancing P/P therapy with risk of COVID-19

- The goal is to maintain disease control on the least amount of immunosuppression, and avoid a disease flare that may require hospitalization
 - Topical steroids, doxycycline, dapson likely don't affect risk of serious disease (unless greater than 20 g topical steroids are used daily)
 - Immunosuppressives such as oral steroids (particularly greater than 20 mg daily), mycophenolate, azathioprine, methotrexate, cyclophosphamide, cyclosporine, and rituximab may increase your risk of infection and more severe disease
 - An advantage of IVIg is that it is not immunosuppressive and may be able to be given through home infusion
- **Speak with your doctor if you have concerns about your treatment regimen**

<https://www.cdc.gov/coronavirus/2019-ncov/faq.html#high-risk>