



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

# The coronavirus (COVID-19) epidemic and patient safety



Dirk M. Elston, MD  
Charleston, South Carolina

In this issue of the *JAAD*, Chen et al<sup>1</sup> discuss patient safety measures in a Chinese dermatology clinic during the coronavirus outbreak (2019-nCoV acute respiratory disease), including patient screening, respiratory precautions, and telemedicine consultations. The steps they enacted serve as a reminder that we should have policies in place for infection control in every dermatology clinic.

Patients with varicella, measles, and other viral exanthems present to the dermatologist and may pose a risk to patients and office staff. Employees should receive all appropriate vaccinations, and testing should be available for employees to determine their immune status. This is especially important for women of child-bearing age who may be exposed to diseases such as varicella and erythema infectiosum. If available, a negative pressure room should be designated as an isolation room for patients with respiratory pathogens, and exposed susceptible individuals should be furloughed during the incubation period.<sup>2,3</sup> Large health care organizations often address these issues during in-processing of employees, but many dermatologists practice in private clinics and should review existing policies to prepare for the inevitability of contagious patients entering the clinic.

This is not the first outbreak of a severe coronavirus. Prior outbreaks of virulent coronavirus strains have also been associated with severe respiratory syndromes and patient deaths. Individuals who are asymptomatic or who have only mild symptoms may spread the virus. However, superspreading events—instances where an index patient transmitted disease to  $\geq 5$  subsequent patients—were typically associated with patients who were severely ill, initially not recognized as severe respiratory syndrome-coronavirus cases, and subsequently died. Delays in implementation of control measures contributed to

secondary transmission, but contact tracing, testing, employee furloughing, and implementation of recommended transmission-based precautions for suspected cases ultimately halted transmission.<sup>4</sup>

Our responsibility for patient and employee safety is not limited to respiratory pathogens. Virulent streptococcal infections associated with necrotizing fasciitis and death have been spread during liposuction in outpatient facilities.<sup>5</sup> The procedures were performed by a single surgical team that traveled between locations, and 2 team members were colonized by the organism. Substandard infection control, including errors in equipment sterilization and standard precautions, contributed to the outbreak.

Prevention of transmission of blood-borne infections deserves special mention, and readers should review the *JAAD* continuing medical education articles that focused on patient safety and blood-borne pathogens ([https://www.jaad.org/article/S0190-9622\(09\)00603-3/fulltext](https://www.jaad.org/article/S0190-9622(09)00603-3/fulltext) and [https://www.jaad.org/article/S0190-9622\(09\)00602-1/fulltext](https://www.jaad.org/article/S0190-9622(09)00602-1/fulltext)).<sup>6-8</sup> Standard precautions should be enforced, and policies should be in place for post-exposure prophylaxis. As captains of our individual ships, it falls to us to put policies in place to prevent the spread of disease and prepare for the needle-stick injuries and transmissible diseases that are part of the practice of medicine.

## REFERENCES

1. Chen Y, Pradhan S, Xue S. What are we doing in the dermatology outpatient department amidst the raging of the 2019 novel coronavirus? *J Am Acad Dermatol*. 2020;82:1034.
2. Herwaldt L, Smith S, Carter C. Infection control in the outpatient setting. *Infect Control Hosp Epidemiol*. 1998;19(1):41-74.
3. Preblud SR. Nosocomial varicella. Worth preventing, but how? *Am J Public Health*. 1988;78:13-15.
4. Alanazi KH, Killerby ME, Biggs HM, et al. Scope and extent of healthcare-associated Middle East respiratory syndrome

From the Department of Dermatology and Dermatologic Surgery, Medical University of South Carolina.

Funding sources: None.

Conflicts of interest: None disclosed.

IRB approval status: Not applicable.

Reprints not available from the author.

Correspondence to: Dirk M. Elston, MD, Department of Dermatology and Dermatologic Surgery, Medical University of

South Carolina, MSC 578, 135 Rutledge Ave, 11th Floor, Charleston, SC 29425-5780. E-mail: [elstond@musc.edu](mailto:elstond@musc.edu).

*J Am Acad Dermatol* 2020;82:819-20.

0190-9622/\$36.00

© 2020 by the American Academy of Dermatology, Inc.

<https://doi.org/10.1016/j.jaad.2020.02.031>

- coronavirus transmission during two contemporaneous outbreaks in Riyadh, Saudi Arabia, 2017. *Infect Control Hosp Epidemiol.* 2019;40(1):79-88.
5. Beaudoin AL, Torso L, Richards K, et al. Invasive group A *Streptococcus* infections associated with liposuction surgery at outpatient facilities not subject to state or federal regulation. *JAMA Intern Med.* 2014;174(7):1136-1142.
  6. Elston DM, Stratman E, Johnson-Jahangir H, Watson A, Swiggum S, Hanke CW. Patient safety: part II. Opportunities for improvement in patient safety. *J Am Acad Dermatol.* 2009; 61(2):193-205.
  7. Elston DM, Taylor JS, Coldiron B, et al. Patient safety: part I. Patient safety and the dermatologist. *J Am Acad Dermatol.* 2009;61(2):179-190.
  8. Brewer JD, Elston DM, Vidimos AT, Rizza SA, Miller SJ. Managing sharps injuries and other occupational exposures to HIV, HBV, and HCV in the dermatology office. *J Am Acad Dermatol.* 2017; 77(5):946-951.e6.