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- 1 Puelles VG, Lütgehetmann M, Lindenmeyer MT, et al. Multi-organ and renal tropism of SARS-CoV-2. *N Engl J Med* 2020; published online May 13. <https://doi.org/10.1056/NEJMc2011400>.
- 2 Gross O, Moerer O, Weber M, Huber TB, Scheithauer S. COVID-19-associated nephritis: early warning for disease severity and complications? *Lancet* 2020; **395**: e87–88.
- 3 Selby NM, Forni LG, Horne KL, et al. Covid-19 and acute kidney injury in hospital: summary of NICE guidelines. *BMJ* 2020; **369**: m1963.
- 4 Battle D, Soler MJ, Sparks MA, et al. Acute kidney injury in COVID-19: emerging evidence of a distinct pathophysiology. *JASN* 2020; **31**: 1380–83.
- 5 Kim D, Lee J-Y, Yang J-S, Kim JW, Kim VN, Chang H. The architecture of SARS-CoV-2 transcriptome. *Cell* 2020; **181**: 914–21.



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Back to basics: the outbreak response pillars

The Global Outbreak Alert and Response Network (GOARN), with more than 250 technical partner organisations across the world, has undertaken 150 operations in response to disease outbreaks during the past 20 years.

We read with interest the Editorial entitled, *COVID-19: the worst may be yet to come*.¹ GOARN has learned that the worst can be avoided through rapid and robust action to minimise the transmission of severe acute respiratory syndrome coronavirus 2. This prevention and control involves the core pillars of the outbreak response: surveillance and contact tracing, testing, case management, infection prevention and control, epidemiological and outbreak analytics, logistics, risk communication, and community engagement. Lockdowns and border

closures are not a desirable long-term strategy; these measures should be used to gain time for building up capacities for a public health response.

To this end, the GOARN Steering Committee urges all governments and partners at a local level to (1) engage communities to build trust for evidence-based public health and encourage local ownership of outbreak control response measures; (2) discourage the politicisation of the COVID-19 response because politicisation is counterproductive and leads to poor strategic decisions; (3) leverage in-country expertise of experienced outbreak responders, including GOARN partners and emergency medical teams, because current decisions can be strengthened by expanding the advisory pool; (4) invest in the rapid expansion of the public health workforce for this response; (5) make decisions on the basis of a comprehensive strategy, the latest evidence, and the epidemiological situation (eg, supervised isolation for infectious patients and mandated mask wearing have been shown to improve outcomes), and explain these decisions clearly;^{2–4} (6) ensure equitable access to diagnostic tests, therapeutics, and vaccines, which should be allocated according to sound public health criteria and needs; and (7) champion multilateral action and international solidarity. WHO is key to the international response as the organisation offers both a global direction to each nation and tailored technical assistance to responders.

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- 1 The Lancet. COVID-19: the worst may be yet to come. *Lancet* 2020; **396**: 71.
- 2 Koob SF. "Very disappointing": people with COVID-19 not staying home, going to work. July 20, 2020. <https://www.theage.com.au/national/victoria/very-disappointing-people-with-covid-19-not-staying-home-going-to-work-20200730-p559gwf.html> (accessed Aug 5, 2020).
- 3 Ali ST, Wang L, Lau EHY, et al. Serial interval of SARS-CoV-2 was shortened over time by nonpharmaceutical interventions. *Science* 2020; published online July 21. <https://doi.org/10.1126/science.abc9004>.
- 4 Lyu W, Wehby GL. Community use of face masks and COVID-19: evidence from a natural experiment of state mandates in the US. *Health Aff (Millwood)* 2020; **39**: 1419–25.

SARS-CoV-2 PCR testing of skin for COVID-19 diagnostics: a case report

Understanding the disease course and prevalence of COVID-19 is important not only for medical, but also for socioeconomic reasons. So far, COVID-19 has been understood as a multisystem disease, mainly affecting the lungs, kidneys, and heart.¹ In the past few months, different cutaneous manifestations, such as chilblain-like, vasculitis-like, or urticaria-like lesions, have been described in patients with COVID-19.² Colmenero and colleagues³ detected severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in endothelial cells of cutaneous chilblain lesions via immunohistochemistry methods in seven paediatric patients with negative nasopharyngeal swabs.³

Here, we report the case of an 81-year-old woman who presented at the Department of Dermatology at the University Hospital of Basel, Basel, Switzerland, with a temperature of up to 39°C and a generalised macular eruption with partial vasculitis-like patterns and palmo-plantar accentuation (appendix pp 1–2). Infection with SARS-CoV-2 was suspected and laboratory assessments of blood samples showed increased C-reactive protein (248 mg/L), decreased lymphocyte

See Online for appendix

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