

RE: Growth of Drug-Resistant Fungi Threatens Health in the U.S.

Dear (Representative/Senator):

We write to you out of concern for the growing threat of drug-resistant fungal infections here in the United States and internationally. Recent findings suggest that front-line medications no longer work for certain kinds of fungal infections here in the US and Americans with severe COVID-19 are particularly vulnerable. Fungal drug resistance also contributes to other serious health threats like antimicrobial resistance. When left untreated, invasive fungal disease is nearly always associated with death. Today, fungal disease is the 5th most common cause of death, taking about 2 million lives per year, globally. With these considerations in mind, federal government should prioritize antifungal and antibiotic drug development as a priority for pandemic preparedness to get ahead of these problems.

The global emergence of antifungal resistance is a growing threat to public health. Research released just before the onset of the COVID-19 pandemic suggest that the threat of drug-resistance for patients with a fungal infection is increasing.¹ This threat is present and all too real in the United States. As an example, the US burden of invasive candidiasis including bloodstream infection is more than 70,000 people, with a global burden of more than 750,000 people.² Transplant recipients, diabetes patients, premature infants, and patients in intensive care are at highest risk of contracting these types of infections. About 7% of all *Candida* blood samples tested at CDC are resistant to the antifungal drug fluconazole; in parallel, resistance to echinocandins (the other class of drug used to treat *Candida* infections) also appears to be increasing, especially in the species *Candida glabrata*. Patients with *Candida* infections that are resistant to both fluconazole and echinocandin drugs have very few treatment options. In particular, concern is rising over the growing threat of the fungus *Candida auris* in the United States. In fact, roughly 90% of *Candida auris* samples were found to be resistant to fluconazole and as many as one-third resistant to other drugs that can treat the infection.³

We also learned some disturbing news in 2021 that the threat is getting worse.

The CDC released findings in June 2021 that “researchers have for the first-time reported cases of people carrying or infected with strains of the dangerous fungus *Candida auris* that were resistant to all major classes of antifungal drugs before any treatment. The CDC reported on five cases, three in Washington, D.C., and two in Texas. The agency also reported evidence of some transmission of the strains within health facilities. That there are now so-called pan-resistant cases in people who had never been treated with antifungal drugs is particularly unnerving, experts said.”⁴ Late last year, the CDC also released a warning that “people with severe COVID-19, such as those in an intensive care unit (ICU), are particularly vulnerable to bacterial and fungal infections.” In fact, one study found that COVID-19 and influenza patients who are admitted to intensive care or developed acute respiratory distress syndrome are at an

¹ [Antifungal Resistance: a Concerning Trend for the Present and Future | SpringerLink](#)

² Toda M; Williams SR; Berkow EL. et al. Population-Based Active Surveillance for Culture-Confirmed Candidemia — Four Sites, United States, 2012–2016. US Department of Health and Human Services/Centers for Disease Control and Prevention. MMWR / September 27, 2019 / Vol. 68 / No. 8

³ [Antifungal Resistance in Candida | Fungal Diseases | CDC](#)

⁴ [US sees first Candida auris cases resistant to all drugs in untreated people \(statnews.com\)](#)

increased risk for secondary life-threatening invasive aspergillosis infection.⁵ These fungal co-infections are being reported with increasing frequency and can cause severe illness and death.

We, the undersigned, stand united in our efforts to protect American patients from this growing threat. New drug and vaccine development, along with improved diagnostic and other proper stewardship efforts, will be needed to head off what we fear is another emerging pandemic health threat – and should be prioritized by Congress this year. The PASTEUR Act, sponsored by Senator Bennet, Senator Young, Representative Doyle and Representative Ferguson, would allow us to take a big step forward in the fight against fungal infections, and we urge Congress to prioritize this legislation as part of pandemic preparedness legislative efforts. In addition, the FORWARD Act, sponsored by Representative McCarthy, Representative Bass, Representative Schweikert, Representative O’Halloran, Senator Kelly, Senator Sinema, and Senator Feinstein, includes meaningful proposals for desperately needed work on other medically threatening fungi. Taken together, these pieces of legislation represent important and effective actions to address the growing fungal infection crisis.

Sincerely,

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Antibiotic Resistance Action Center, the George Washington University
Anti-infectives Consulting
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Center for Emerging and Neglected Diseases, UC Berkeley
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Children’s Memorial Hermann Hospital
Connecting Pharma BV
CUBRC, Inc.
Cystic Fibrosis Foundation
Developing Novel Antibiotics Consultancy

⁵ Rutsaert L, et al. COVID-19-associated invasive pulmonary Aspergillosis. Ann Intensive Care. 2020;10(1):71. <https://doi.org/10.1186/s13613-020-00686-4>

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