

Keeping Up with C. auris: How to Address the Fungal Infection that's Taking Society by Storm

In recent weeks, *Candida auris (C. auris)* has gone from a fungal infection known only by those in healthcare to a household name. But why is the public just now hearing about *C. auris*? While recent media coverage that categorizes the infection as <u>"new and mysterious"</u> has led society to believe *C. auris* is an emerging fungal infection, research shows that it's been around for longer than most realize. Although there is debate as to when *C. auris* first surfaced, several sources point to its initial outbreak in <u>Japan in the year 2009</u>. However, the Centers for Disease Control and Prevention (CDC) dates the earliest known strain of *C. auris* to the year <u>1996 in South Korea</u>.

Why then is the fungal infection just now making headlines in the U.S.? It's prominence in the media is due in no small part to the rapid increase of cases in America in recent years. Notable and more frightening than its growing prevalence is the fact that *C. auris* is highly resistant to many anti-fungal treatments on the market today. According to the <u>CDC</u>, more than 90 percent of *C. auris* infections are resistant to at least one drug, and 30 percent are resistant to two or more major drugs. As a result, approximately <u>30 to 60 percent of patients with *C. auris* infections die from the infection.</u>

On top of it all, many standard disinfection methods are incapable of eradicating the fungal infection, which can <u>colonize individuals' skin for months</u> and spread to surfaces. Due to the fungus' enduring nature, *C. auris* has been spreading rapidly, especially in healthcare facilities like <u>hospitals and nursing homes</u>.

As *C. auris* cases continue to rise in the U.S. and around the world, what can we learn from its history, and how can we best prevent it from spreading further?

When C. auris Entered the United States

Although *C. auris* has been reported in more than <u>30 countries</u>, the fungal infection has only recently appeared in the United States, according to the CDC. In fact, it wasn't until December 2018 that U.S. health officials declared the deadly *Candida auris (C. auris)* infection nationally notifiable due to its growing health threat both in the U.S. and around the globe.

Despite the lethal fungal infection's late arrival to the U.S. in <u>mid-2015</u>, over 700 patients with a *C. auris* infection or colonization were <u>identified by April 2018</u>. To date, approximately <u>1,226 clinical cases of *C.*</u>

auris have been recorded in the U.S. and an additional <u>1,123 patients</u> have been found to be colonized with *C. auris* via targeted screening in eight states with clinical cases.

While the fungal infection has reached the West Coast, the majority of U.S. cases are on the <u>East Coast</u> and <u>Midwest</u>—particularly in New York (613 cases), Illinois (156 cases), and New Jersey (106 cases). Upon <u>whole genome sequencing</u> *C. auris* specimens from countries, CDC officials found that isolates within each region are quite similar to one another, but are relatively different across regions. This evidence suggests that although *C. auris* is spreading, it has emerged independently in multiple regions at roughly the same time.

Integral to preventing the proliferation of *C. auris* are the disinfection practices utilized in facilities vulnerable to the infection. Since the infection has proven resistant to many traditional disinfection practices, it is critical to develop a rigorous disinfection strategy that is prepared for an encounter with the fungus.

Where C. auris is Lurking Here and Now

But where in these states is *C. auris* spreading? Since the <u>majority of people who contract *C. auris*</u> are individuals already sick from other medical conditions, healthcare facilities like hospitals and nursing homes are prime breeding grounds for the infection. As *C. auris* can survive on surfaces for months at a time, infections can easily spread from one patient to the next if not properly disinfected against.

To prevent the continued spread, healthcare facilities are cautioned to properly disinfect high-risk areas like bedside tables, bedrails, radiology, and physical therapy areas. In addition, mobile equipment has been found as a prime suspect in the spread of the infection—literally, from patient to patient. Glucometers, temperature probes, blood pressure cuffs, ultrasound machines, nursing carts, and crash carts are all equipment the CDC noted in its most recent update carry the fungus, which can then be easily transferred to the patients who are undergoing testing or treatment and the healthcare personnel who are operating systems.

Disinfecting this equipment, which is both sensitive and expensive, against *C. auris* is a top challenge faced by many healthcare facilities today. While the CDC has <u>approved a few spray and wipe</u> <u>disinfectants</u> for *C. auris*, such tactics often leave the fungal infection lurking in cracks and crevices just out of reach. Far more effective for killing the fungus are dry fogging-based disinfectants; however, only a <u>select few</u> are currently approved to disinfect against *C. auris*.

How to Prevent the Future Spread of C. auris

Since *C. auris* has proven to be a resistant fungus that can last on surfaces and people for extended periods of time, a standard disinfectant cannot prevent the continued spread of the infection. For instance, <u>quaternary ammonium compounds (QACs)</u>, which are commonly used for routine disinfection, won't eliminate *C. auris* in the <u>recommended routine disinfections of patient areas and terminal</u> <u>disinfections of patient rooms</u>.

To prevent the further spread, the CDC recommends using an Environmental Protection Agency (EPA)registered hospital-grade disinfectant effective against *C. diff* spores. Currently, <u>List K disinfectants</u>, released by the CDC, are the only solutions approved to eliminate both *C. diff* and *C. auris*. A List K disinfectant, our <u>HaloMist[®]</u>, Registration No. 84526-6, is an EPA-certified dry fogging formula proven to kill 99.9999% of resistant *C. difficile* spores. Optimized for complex environments, our system delivers the recommended 6-log kill rate needed to stop *C. auris* from spreading in your facility and keep patients and workers safe from harm.

When it comes to dangerous pathogens like *C. auris,* there's no room for error. <u>Contact Safety Net</u> today to develop your whole room disinfection plan against *C. auris.*