

When can COVID-19 patients presenting with anosmia be taken off isolation or allowed to return to work?

Loss of the sense of smell (anosmia) or a reduced sense of smell (hyposmia) have long been known to occasionally occur as a result of the common cold and other viral respiratory infections.

Cases of spontaneous-onset anosmia and hyposmia were recognized in patients with COVID-19 infections in China, South Korea and Italy soon after the COVID-19 pandemic began. Anosmia was the primary presenting symptom in many of these early cases, especially in those with mild illnesses. Subsequently, SARS-CoV-2 was detected in patients who had no other symptoms of COVID-19 infection.¹ Dysgeusia (distortion in the sense of taste), hypogeusia (reduced sense of taste) and ageusia (complete loss of the sense of taste) have also been reported in patients with COVID-19 infection.

Duration of Anosmia

The duration of loss of smell after COVID-19 infection has not yet been systematically studied. However, anecdotal evidence suggests that anosmia can be temporary in some cases or last for many weeks in others. The long-term outcome of COVID-19 related disturbances in smell and taste has not yet been determined, but it may be relevant that prior studies have shown that anosmia after influenza and other viral respiratory infections, can sometimes last for months, and rarely years.²⁻⁵

Underlying Mechanism

The mechanisms for coronavirus-induced abnormalities in the sense of smell and taste are not fully understood and thus far, they have not been adequately studied. However, proposed mechanisms include viral-induced damage to the olfactory or lingual sensory nerves or to their adjacent cells.

Implications Related to Testing, Quarantine and Return to Work

- During the ongoing COVID-19 pandemic, the sudden onset of anosmia or hyposmia with or without associated respiratory symptoms should be considered evidence of possible infection with SARS-CoV-2 and should be considered an indication for testing and home quarantine at least until the results of PCR testing are available.
- The presence of new-onset anosmia or hyposmia and/or dysgeusia should be included as a screening questions for entry into health-care facilities and in contact tracing of known cases of COVID-19.
- Personal protective equipment should be used during the clinical evaluation of all patients who present with complaints of sudden onset of anosmia or dysgeusia during this pandemic time.
- As anosmia can last for weeks even after other signs and symptoms of COVID-19 infection have resolved, it is our opinion that return in the sense of smell or taste should not be used as a criterion to decide whether patients with known COVID-19 infection can be released from quarantine and/or safely return to work.



• CDC return to work criteria are based on fever and respiratory symptoms, but British guidelines recommend isolating for 7 days for patients presenting with anosmia as the only symptom of COVID-19 infection.

References:

- 1) Loss of sense of smell as marker of COVID-19 infection, British Rhinological Society
- 2) AAO-HNS: Anosmia, Hyposmia, and Dysgeusia Symptoms of Coronavirus Disease
- 3) Keyhan, S.O., Fallahi, H.R. & Cheshmi, B. Dysosmia and dysgeusia due to the 2019 Novel Coronavirus; a hypothesis that needs further investigation. *Maxillofac Plast Reconstr Surg* 42, 9 (2020). https://doi.org/10.1186/s40902-020-00254-7
- 4) Welge-Lussen A, Wolfensberger M Olfactory disorders following upper respiratory tract infections Avd Otorhinolaryngol 2006:63;125-32
- 5) <u>https://wtop.com/coronavirus/2020/04/people-who-lost-their-sense-of-smell-weeks-ago-still-waiting-for-it-to-return/</u>