



Public Health Advisory

January 12, 2023

Increased Incidence of Intracranial Abscesses in Pediatric Patients in Clark County, NV in 2022

Situation:

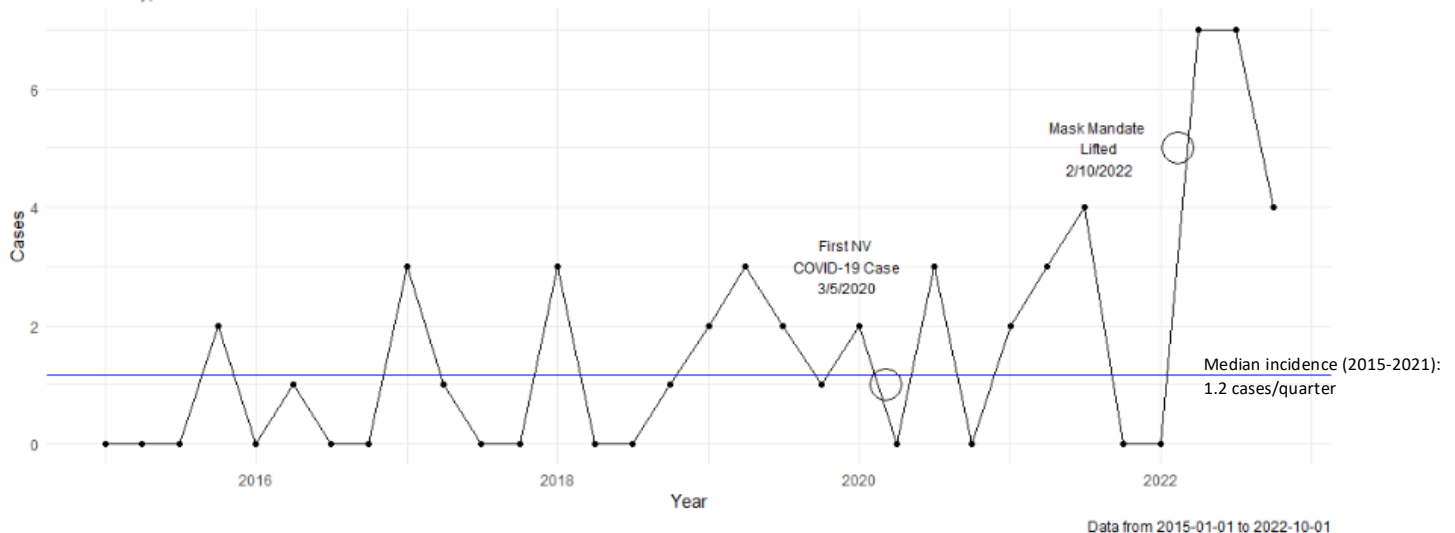
The Southern Nevada Health District (SNHD) Division of Disease Surveillance and Control (DDSC) is investigating a report of increased incidence of intracranial abscess (intraparenchymal, subdural, and epidural) in pediatric patients during the year 2022. DDSC is working to identify additional cases. This report summarizes findings to date as well as recommendations for providers.

Investigation Summary:

Intracranial abscesses among pediatric patients are rare disease events, with an estimated incidence of 0.5 cases/100,000 population. In previous years (2015-2021) in Clark County, there were on average approximately 5 cases per year (1.2 cases/quarter). In 2022, 17 cases of brain abscesses among patients \leq 18 years have been identified. Median age of those affected was 12 years, and the majority (76%) were in males. The median length of stay for hospitalization was 15 days and 14 cases (82%) required craniotomy for drainage of the abscess. Most patients (76%) were diagnosed with sinusitis and 26% were diagnosed with mastoiditis during their hospitalization.

In phone interviews conducted to obtain more detail about the period preceding hospitalization, 64% (n=9) of interviewees reported cold symptoms such as rhinorrhea and nasal congestion, with 50% (n=7) reporting other symptoms such as headache (n=3), headache with fever (n=3), and head injuries with concern for concussion (n=2). Eleven (79%) interviewees sought care for their children prior to the presentation that resulted in hospitalization, with the majority seeking care from an emergency department (50%). The median time from symptoms to hospitalization reported was 7.5 days. No common exposures have been identified at this time, although 6 (38%) reported cessation of masking practices after the mandate was lifted on 2/10/2022.

Pediatric Intracranial Infection 2015-2022
Clark County, Nevada



Additional Background for Health Care Providers:

Predisposing factors are found in most cases of brain abscess, often from a contiguous focus of infection (i.e., otitis media, mastoiditis, sinusitis, or orbital cellulitis). Fever is present in approximately 50% of patients with a brain abscess, and a history of headaches is a more common symptom (60-70%). Focal neurologic findings can be seen in about half of patients, and approximately 25% have seizures. The most important initial study for diagnosis is imaging, with either CT or MRI with intravenous contrast. Management is multidisciplinary, and neurosurgical intervention is needed for most patients.

Recommendations for Health Care Providers:

- Provide prompt treatment of suspected bacterial sinusitis, otitis media, or orbital cellulitis in pediatric patients as these infections are predisposing factors for development of an intracranial abscess
- Consider intracranial abscess in a pediatric patient presenting with severe headaches or neurological symptoms after preceding upper respiratory illness, otitis media, or sinusitis
- If suspected, obtain cranial imaging in consultation with neurosurgical specialists
- Educate your patients on signs and symptoms of intracranial abscess which include fever, severe headache, nausea and vomiting, changes in personality or behavior, changes in speech, problems walking, other neurologic deficits, and seizures

Reporting and Call for Cases:

SNHD requests that clinicians report patients ≤ 18 years of age diagnosed with an intracranial abscess to the Southern Nevada Health District's Office of Acute Communicable Disease Control as we continue to monitor this situation.

- Phone: 702-759-1300
- Fax: 702-759-1414

For More Information

- [Previous CDC Investigation \(https://www.cdc.gov/ncird/investigation/streptococcus/overview-what-to-know.html\)](https://www.cdc.gov/ncird/investigation/streptococcus/overview-what-to-know.html)
- [Guidance for Parents \(https://www.cdc.gov/ncird/investigation/streptococcus/parents.html\)](https://www.cdc.gov/ncird/investigation/streptococcus/parents.html)



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Health Alert: conveys the highest level of importance; warrants immediate action or attention

Health Advisory: provides important information for a specific incident or situation; may not require immediate action

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action

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