



# Central California Pediatrics

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Specialty information for physicians who treat children and expectant mothers.



## 'Tis the Influenza Season: What to Keep an Eye Out For

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While this season brings beautiful fall colors, colder weather and allergies, it often also brings the start of flu season. The 2019-2020 flu season is projected to be early, active and possibly severe, based on data from the Southern Hemisphere. Based off this data, the current influenza vaccine has been updated to better match viruses expected to be active this season. All of the vaccines this year are quadrivalent and grown in cells (not eggs).

In Valley Children's Emergency Department, we are already seeing the flu and RSV, and we are also encountering a more severe croup. This is leading to an unusually high number of patients requiring repeat treatment with racemic epinephrine and extended observation in the emergency department.

### What to keep an eye out for this season

With these recent observations in mind, any child with biphasic stridor or stidor at rest should be referred to a local ED for evaluation. Additionally, signs of dehydration, respiratory distress, change in mental status and hypoxia also warrant a prompt referral to an ED in an attempt to avoid complications.

Complications from influenza include pneumonia, secondary bacterial pneumonia, influenza sepsis, bacterial sepsis, myocarditis, encephalitis and myositis. Complications should be suspected in children who appear toxic or present with respiratory distress and/or hypoxia or having clinical worsening after 3-5 days of symptoms. Children infected with influenza should minimize contact with others and not attend daycare or school for at least 24 hours after the fever has abated.

## Testing and Diagnosing

The available testing kits have poor sensitivity (~62%) but good specificity (98%) for influenza. Testing is most useful in patients with severe comorbidities or weakened immune systems where a correct diagnosis is essential. A positive test in these patients would diagnose the infection, because high specificity of these tests helps to rule-in the disease.

For low-risk patients with flu-like symptoms during influenza season, clinical diagnosis is sufficient and testing is not necessary. Most of the low-risk children will not need treatment or prophylaxis, so testing does not add value and does not change treatment. Routine treatment of patients <5 years old with no risk factors who are well-appearing can be weighed individually in concert with discussions of the pros and cons of treatment with the family. Children with severe immune deficiencies or receiving immunosuppressive medications may be candidates for prophylaxis to prevent influenza after exposure to an infectious person.

### References

1. Summarized from <https://www.cdc.gov/flu/professionals/diagnosis/consider-influenza-testing.htm>. Accessed 11/21/19.
2. Summarized from <https://www.cdc.gov/flu/professionals/diagnosis/rapidlab.htm>. Accessed 11/21/19.
3. Summarized from <https://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm>. Accessed 11/21/19.
4. Summarized from <https://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm>. Accessed 11/21/19.
5. Summarized from <https://www.cdc.gov/flu/weekly/index.htm#ILIActivityMap>. Accessed 11/21/19.

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Valley Children's was named a Top Children's Hospital in the nation by The Leapfrog Group for its excellence in patient safety and quality of care. The Top Children's Hospital award is one of the most competitive honors American hospitals can receive and Valley Children's is one out of only 10 children's hospitals in the country that achieved this honor.

Learn more at [valleychildrens.org/leapfrog](http://valleychildrens.org/leapfrog).

