

BRINGING CLINICIANS TOGETHER TO DISCUSS CURRENT DRUG THERAPY

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The following succinct analysis appeared in *Pharmacist's Letter*. Based on vol. 34. No. 3

VACCINES

New CDC recommendations will raise questions about when to give a booster dose of a mumps vaccine (MMR, etc).

Almost 6,000 patients had mumps in the U.S. in 2017...possibly putting them at risk for hearing loss, meningitis, and encephalitis.

Risk seems higher in people living in close-knit settings such as college dorms...even if they had the 2-dose MMR series as a child. Immunity seems to be waning...plus some kids aren't getting immunized.

Now CDC recommends a booster dose of mumps vaccine in an outbreak.

But don't give boosters until your health dept identifies target groups. It's too soon to say if routine boosters will limit outbreaks.

Stay tuned for communication from your health department or check their website. Consider signing up for your state's Health Alert Network (HAN)...many states send health-related advisories this way.

If booster immunizations are recommended during an outbreak, give a single MMR dose to patients who've previously had one or 2 doses. Give a second dose at least 4 weeks later to complete the series if patients have never had the vaccine...or vaccine history is unknown.

But don't give MMR to immunocompromised patients...since it's a live vaccine. If needed, vaccinate household contacts of these patients.

Also avoid MMR during pregnancy...and advise women not to become pregnant for 4 weeks after MMR vaccination. The vaccine's live rubella virus could theoretically lead to birth defects.

Hear our team discuss this with a CDC expert on *PL Voices*. Address questions and myths with our charts, *Mumps FAQs and Vaccine Adherence*.

(For more on this topic, see Clinical Resource #340308 at PharmacistsLetter.com.)

Primary Reference – Cardemil CV, Dahl RM, James L, et al. Effectiveness of a third dose of MMR vaccine for mumps outbreak control. *N Engl J Med* 2017;377:947-56.

See **LEADER NOTES** for answers to discussion questions.

DISCUSSION QUESTIONS

OVERVIEW OF CURRENT THERAPY

1. **What are the symptoms and possible complications of mumps? Why are mumps outbreaks occurring?**

ANALYSIS OF NEW STUDY

2. **What type of study was this? How were the patients selected for inclusion?**

3. **How were the patient groups and outcomes defined?**

4. **What were the results of the cohort study?**

5. **What were the strengths and weaknesses of the cohort study?**

See [LEADER NOTES](#) for answers to discussion questions.

6. Were the results expressed in terms we care about and can use?

HOW SHOULD THE NEW FINDINGS CHANGE CURRENT THERAPY?

7. Do the results change your practice? How?

APPLY THE NEW FINDINGS TO THE FOLLOWING CASE

Jenny and Mike Smith are scheduled for their annual physicals. They are 33 and 35 years old, respectively, with no significant past medical history. Jenny works in the financial aid office of the local university where Mike teaches political science.

They would like to start a family and want to make sure they are in good health. Jenny has stopped her birth control. They take no other medications, try to eat a well-balanced diet, and exercise 4-5 times each week. They have no drug allergies, although Mike gets hives when eating eggs. Both patients' vital signs are normal.

8. What health habits might you suggest for this couple? What should you suggest if Jenny becomes pregnant?

See LEADER NOTES for answers to discussion questions.

Jenny and Mike both get a flu shot, but are both up-to-date with their tetanus vaccine. Jenny agrees to pick up some OTC prenatal vitamins with the key nutrients you suggested.

Four months later, Jenny sends you a message through the medical record that she has had a positive pregnancy test and is very excited. You request that she schedule her first prenatal appointment.

At the appointment, Jenny and Mike report that their nephew was home from college for a visit this past weekend. He attends a school in the Midwest that is currently having a mumps outbreak, and he was given a dose of MMR. Jenny and Mike want to know more about mumps since they thought it was eradicated in the United States.

9. How is mumps diagnosed and treated? What are possible complications of mumps?

Even though they don't live in the Midwest and there have been no reported cases of mumps at the university where they work, they want to know if they should get vaccinated for mumps since they were around their nephew this past weekend. They are both pretty sure that they were vaccinated for mumps as children.

10. Should you recommend MMR vaccination for Jenny and Mike? Are there other vaccines to consider during pregnancy?

See [LEADER NOTES](#) for answers to discussion questions.

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Additional Pharmacist's Letter Resources available at PharmacistsLetter.com

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See LEADER NOTES for answers to discussion questions.

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