

AHCA/NCAL Clinical Scenarios

Scenario: Utilizing CDC's Transmission-Based Precautions and Appendix A in LTC

Scenario:

Mr. Johnson is a 66-year-old gentleman who is a resident at the Sunnyside Nursing Home where you are the facility Infection Preventionist (IP). In the morning report, it is shared that he had been complaining yesterday of moderate pain across his left temple area and above his left eyebrow. No irritation or skin changes were noted until early this morning when the day shift nurse coming on duty noted several small red areas which may have small vesicles in their center in the area where he had described the pain on his left face area. They placed the resident in Contact Precautions, notified the physician about the changes in his condition and left a message for the Infection Preventionist as they are concerned that he may be contagious for Shingles. As the IP, utilize the Appendix A of the [CDC's Isolation Precautions Recommendations](https://www.cdc.gov/infection-control/hcp/isolation-precautions/appendix-a-type-duration.html) or <https://www.cdc.gov/infection-control/hcp/isolation-precautions/appendix-a-type-duration.html> for Herpes zoster (Shingles) to answer the following questions as you plan how to manage the infection risk in this situation.

Questions:

1. If Mr. Johnson is immunocompetent, what type of precautions should be followed for him for Shingles (Herpes zoster)?
 - a. Standard Precautions
 - b. Standard and Contact Precautions
 - c. Contact and Airborne Precautions
 - d. Contact Precautions

ANSWER: a) Standard Precautions are to be used for patients who are immunocompetent with localized Herpes zoster lesions that can be contained/covered. No other isolation precautions are necessary.

2. How long should the precautions above be followed?
 - e. For 14 days from onset of first lesions
 - f. Until pain is no longer present
 - g. Until lesions are dry and crusted over

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ANSWER: c) Lesions should be contained/covered and Standard Precautions followed until the lesions are dry and crusted over. There is no specific number of days involved; the time required depends on how long it takes for the lesions to dry and crust over.

3. The actions taken by the day shift nurses were not in accordance with recommendations found in the CDC Appendix A. Which of the following will you as the IP change to align with the CDC recommendations (pick best answer)

- a. The resident should not have been placed in Contact Isolation Precautions but instead managed with Standard Precautions only.
- b. The lesions should have been contained/covered on his forehead.
- c. The risk of spreading varicella is low if the healthcare worker has documented immunity to varicella and is not caring for other immunocompromised individuals. Since Standard Precautions are used with all patients and residents, there should be no risk to others when performed properly.
- d. All the above

ANSWER: d) all of the three answers above are correct and would be considered by the IP when assisting the nursing team with properly managing the resident in this example.

4. Suppose that Mr. Johnson had been considered immunocompromised with additional lesions noted on his abdomen and upper back (disseminated zoster). Which type of precautions would need to be followed according to the CDC Isolation Precautions' Appendix A?

- a. Standard Precautions
- b. Standard and Contact Precautions
- c. Standard, Contact, and Airborne Precautions until disseminated zoster is ruled out.

ANSWER: c) Standard, Contact and Airborne Precautions would be required to prevent potential spread of the organism that causes Chicken Pox (varicella zoster) through contact with the vesicular lesions or via the respiratory tract of immunocompromised individuals with disseminated herpes zoster. When an individual has disseminated zoster lesions, it is as if the person has active Chicken Pox, who is considered to be viremic and able to spread the virus through the air.

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5. In addition to the type of precautions to use, what should you tell other staff and visitors who may come in contact with or enter his room, if he is not immunocompromised?

- a. Nothing more than to follow precautions posted on the door
- b. Do not enter the room if you are susceptible to varicella (i.e. never had chickenpox or the vaccine)
- c. Do not provide direct care if you are you are susceptible to varicella (i.e. never had chickenpox or the vaccine)

Answer: C. Do not provide direct care if you are you are susceptible to varicella (i.e. never had chickenpox or the vaccine) because individuals without immunity from either prior case of chickenpox or vaccination are susceptible. If Mr. Johnson was immunocompromised, there is a likelihood of greater and more extensive viral shedding, which would mean staff without immunity should not enter the room given the potential for airborne spread. However, in this case Mr. Johnson is not immunocompromised, so the risk of transmission is based on contact, not airborne spread.

Additional Resources

1. CDC: Shingles (Herpes Zoster) <https://www.cdc.gov/shingles/index.html>
2. CDC Isolation Guidelines <https://www.cdc.gov/infection-control/hcp/isolation-precautions/index.html>
3. CDC Isolation Precautions Appendix A:
<https://www.cdc.gov/infection-control/hcp/isolation-precautions/appendix-a-type-duration.html>