The Department is providing guidance for responding to signs and symptoms following COVID-19 vaccination in residents of long-term care facilities (LTCF). Strategies are needed by long-term care facilities to appropriately evaluate and manage post-vaccination signs and symptoms among their residents in order to minimize unnecessary testing and use of Transmission-Based Precautions and reduce transmission of infectious diseases, including COVID-19.

Key points in the advisory include:

- Signs and symptoms, such as fever, fatigue, headache, chills, myalgia, and arthralgia, can occur following COVID-19 vaccination, usually within the first three days of vaccination.
- Presence of signs and symptoms consistent with SARS-CoV-2 infection that are not typical for post-vaccination signs and symptoms (i.e. cough, shortness of breath, rhinorrhea, sore throat, loss of taste or smell) should not be attributed to the COVID-19 vaccine.
- Positive viral (molecular or antigen) tests for SARS-CoV-2, if performed, should not be attributed to the COVID-19 vaccine, as vaccination does not influence the results of these tests.

A figure is provided to outline the steps to take in response to long-term care facility residents who develop symptoms in the 3 days following vaccination for COVID-19. If you have questions about this guidance, please contact DOH at 1-877-PA-HEALTH (1-877-724-3258) or your local health department.

Strategies are needed by long-term care facilities to appropriately evaluate and manage post-vaccination signs and symptoms among their residents. The approach described in this document is intended to balance:
• The risk of unnecessary testing and implementation of Transmission-Based Precautions for residents with only post-vaccination signs and symptoms with that of
• Inadvertently allowing residents with infectious COVID-19 or another transmissible infectious disease to expose others in the facility.

While this guidance is intended for long-term care facilities, it could also be applied to patients in other healthcare settings. These considerations are based on the current understanding of signs and symptoms following COVID-19 vaccination, including timing and duration, and might change as experience with the vaccine accumulates.

A. OVERVIEW

Signs and symptoms, such as fever, fatigue, headache, chills, myalgia, and arthralgia, can occur following COVID-19 vaccination. Preliminary data from mRNA COVID-19 vaccine trials indicate that most systemic post-vaccination signs and symptoms are mild to moderate in severity, occur within the first three days of vaccination (the day of vaccination and following two days, with most occurring the day after vaccination), resolve within 1-2 days of onset, and are more frequent and severe following the second dose and among younger persons compared to those who are older (>55 years). Cough, shortness of breath, rhinorrhea, sore throat, or loss of taste or smell are not consistent with post-vaccination symptoms, and instead may be symptoms of SARS-CoV-2 or another infection.

B. ROUTINE INFECTION PREVENTION AND CONTROL PRACTICES

Healthcare personnel at long-term care facilities should follow the recommended infection prevention and control practices described in PA-HAN-524 and PA-HAN-530. These recommendations, which emphasize close monitoring of residents of long-term care facilities for symptoms of COVID-19, universal source control, physical distancing (when possible), hand hygiene, and optimizing engineering controls, are intended to protect healthcare personnel and residents from exposures to SARS-CoV-2. Use of personal protective equipment (PPE), including universal use of a facemask and eye protection for healthcare personnel who are caring for residents not suspected to have SARS-CoV-2 infection, is also recommended.

Because information is currently lacking on vaccine effectiveness in the general population; the resultant reduction in disease, severity, or transmission; or the duration of protection, residents and HCP should continue to follow all current infection prevention and control recommendations outlined in PA-HAN-524 or its successor to protect themselves and others from SARS-CoV-2 infection, regardless of their vaccination status.

C. SUGGESTED APPROACHES TO EVALUATING AND MANAGING NEW-ONSET POST-VACCINATION SIGNS AND SYMPTOMS FOR RESIDENTS IN LONG-TERM CARE FACILITIES

The approaches described in the Table and Figure apply to residents who have received COVID-19 vaccination in the prior 3 days (including day of vaccination, which is considered day 1).

Facilities conducting outbreak testing for SARS-CoV-2 transmission, or evaluating residents who have had prolonged close contact with someone with SARS-CoV-2 infection in the previous 14 days, should care for residents following all recommended infection prevention and control practices for COVID-19 including Transmission-Based Precautions per PA-HAN-524 and PA-HAN-530.

All symptomatic residents should be assessed; the approaches suggested in the Table below should be tailored to fit the clinical and epidemiologic characteristics of the specific case. The Table and Figure provide the same information in two different formats.
Positive viral (molecular or antigen) tests for SARS-CoV-2, if performed, should not be attributed to the COVID-19 vaccine, as vaccination does not influence the results of these tests.

Note: The following signs and symptoms, alone, are not consistent with SARS-CoV-2 infection and should be managed per usual protocols for vaccine-related side effects:

- Immediate hypersensitivity reactions (e.g., urticaria, anaphylaxis)
- Local symptoms (e.g., pain, swelling, or redness at injection site)
Table. Response to residents of long-term care facilities who have received COVID-19 vaccination in the prior 3 days (including day of vaccination, which is considered day 1)

<table>
<thead>
<tr>
<th>Resident Signs and Symptoms</th>
<th>Suggested approach</th>
<th>Additional notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Signs and symptoms unlikely to be from COVID-19 vaccination:</strong></td>
<td></td>
<td>If performed, a negative SARS-CoV-2 antigen test in a resident who has signs and symptoms that are not typical for post-vaccination signs and symptoms should be confirmed by SARS-CoV-2 molecular (RT-PCR) test. Further information on testing is available in PA-HAN-524, PA-HAN-526 and on the Point-of-Care testing website.</td>
</tr>
<tr>
<td>Presence of signs and symptoms consistent with SARS-CoV-2 infection or another infectious etiology (e.g., influenza) that are <strong>not</strong> typical for post-vaccination signs and symptoms (e.g., cough, shortness of breath, rhinorrhea, sore throat, loss of taste or smell).</td>
<td>Evaluate for possible infectious etiologies, including testing for SARS-CoV-2 and/or other pathogens, as appropriate.</td>
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<tr>
<td>Pending evaluation, these residents should be placed in a single person room (if available) and cared for by healthcare personnel wearing all PPE recommended for residents with suspected or confirmed SARS-CoV-2 infection per <a href="https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html">PA-HAN-524</a>. They should <strong>not</strong> be cohorted with residents with confirmed SARS-CoV-2 infection unless they are also confirmed to have SARS-CoV-2 infection through testing.</td>
<td>Criteria for when Transmission-Based Precautions may be discontinued depend on the results of the evaluation.</td>
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<tr>
<td><strong>Signs and symptoms that may be from either COVID-19 vaccination, SARS-CoV-2 infection, or another infection:</strong></td>
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<td></td>
</tr>
<tr>
<td>Presence of <strong>ANY</strong> systemic signs and symptoms (e.g., fever, fatigue, headache, chills, myalgia, arthralgia) that are consistent with post-vaccination signs and symptoms, SARS-CoV-2 infection or another infectious etiology (e.g., influenza).</td>
<td>Evaluate the resident.</td>
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</tr>
<tr>
<td>Fever in long-term care settings is defined as a measured temperature of 100.0°F (37.8°C) or higher or repeated temperatures of 99.0°F (37.2°C).</td>
<td>These residents should be restricted to their current room (except for medically necessary procedures) and closely monitored until:</td>
<td></td>
</tr>
<tr>
<td>• Fever (if present) resolves and • Symptoms improve</td>
<td>Healthcare personnel caring for these residents should, ideally, wear all PPE recommended for residents with suspected or confirmed SARS-CoV-2 infection while evaluating the cause of these symptoms. Strategies to optimize PPE supply are available here: <a href="https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html">https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html</a></td>
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</tr>
<tr>
<td>If the resident’s symptoms resolve within 2 days, precautions can be discontinued. Fever, if present, should have resolved for at least 24 hours before discontinuing precautions. Viral testing for SARS-CoV-2 should be considered for residents if their symptoms are not improving or persist for longer than 2 days. Consider simultaneous testing for influenza and other circulating respiratory viral diseases. Refer to <a href="https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html">PA-HAN-537</a>.</td>
<td>Residents residing in facilities with active transmission, or who have had prolonged close contact with someone with SARS-CoV-2 infection in the prior 14 days, should be tested for SARS-CoV-2 infection.</td>
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<td></td>
<td>If SARS-CoV-2 antigen testing is used to evaluate a symptomatic resident, a negative antigen test in a resident who has symptoms that are limited only to those observed following COVID-19 vaccination (i.e., do not have cough, shortness of breath, rhinorrhea, sore throat, or loss of taste or smell) does not require confirmatory SARS-CoV-2 molecular (RT-PCR) test. However, confirmatory SARS-CoV-2 NAAT testing should be conducted if there is active transmission in the facility, if the resident has had prolonged close contact with someone with SARS-CoV-2 infection in the prior 14 days, or if symptoms persist for longer than 2 days.</td>
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<td></td>
<td>Further information on testing is available in PA-HAN-532, PA-HAN-526 and on the Point-of-Care testing website.</td>
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</table>
Figure. Response to residents of long-term care facilities who have received COVID-19 vaccination in the prior 3 days (including day of vaccination, which is considered day 1)

*Response for SARS-CoV-2 consistent symptoms* includes:
- Institute Transmission-Based Precautions for COVID-19 for resident care as outlined in PA-HAN 530.
- If confirmed to have COVID-19, residents should be moved to Red Zones as per PA-HAN 530. Do not move residents with symptoms following vaccination to Red Zones unless COVID-19 infection is confirmed. Do not move residents with symptoms following vaccination to Yellow Zones unless exposure to COVID-19 has occurred per PA-HAN 530.
- Perform viral testing for SARS-CoV-2, if available. Ideally, testing should have rapid turnaround time from collection time to result reporting (< 24 to 48 hours). Consider simultaneous testing for influenza and other circulating respiratory viral diseases. Refer to PA-HAN-537.
- If performed, a negative SARS-CoV-2 antigen test should be confirmed by SARS-CoV-2 molecular (RT-PCR) test.

*Fever* in long-term care settings is defined as a measured temperature of 100.0°F (37.8°C) or higher or repeated temperatures of 99.0°F (37.2°C).

**D. ADDITIONAL RESOURCES**

Further information on COVID-19 vaccines and recommendations can be found at:
https://www.cdc.gov/vaccines/covid-19/index.html
https://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/covid-19.html

Adverse events that occur in a recipient following COVID-19 vaccination should be reported to VAERS. Vaccination providers are required by the Food and Drug Administration to report vaccination administration errors, serious adverse events, cases of Multisystem Inflammatory Syndrome, and cases of
COVID-19 that result in hospitalization or death following COVID-19 vaccination under Emergency Use Authorization.

Serious adverse events following vaccination are defined as death; a life-threatening adverse event; inpatient hospitalization or prolongation of existing hospitalization; a persistent or significant incapacity or substantial disruption of the ability to conduct normal life functions; a congenital anomaly/birth defect; an important medical event that based on appropriate medical judgement may jeopardize the individual and may require medical or surgical intervention to prevent one of the outcomes listed in this definition.

Reporting is encouraged for any other clinically significant adverse event even if it is uncertain whether the vaccine caused the event. Information on how to submit a report to VAERS is available at https://vaers.hhs.gov or by calling 1-800-822-7967.

If you have questions about this guidance, please contact DOH at 1-877-PA-HEALTH (1- 877-724-3258) or your local health department.

Categories of Health Alert messages:
**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.

This information is current as of December 19, 2020 but may be modified in the future. We will continue to post updated information regarding the most common questions about this subject.