

COVID-19 After Action Report Resources and Examples

Current as of January 19, 2023

This U.S. Department of Health and Human Services (HHS) Administration for Strategic Preparedness and Response (ASPR) Technical Resources, Assistance Center, and Information Exchange (TRACIE) document includes sample considerations that healthcare entities can utilize when documenting their ongoing After-Action Report (AAR) process for COVID-19 (gleaned from various sources). It also provides sample COVID-19 AARs that are currently available to the public.

ASPR TRACIE reviewed several documents, including those in our [COVID-19 Resource Page](#), for the development of this document. The ASPR TRACIE [Exercise Program Topic Collection](#) (not COVID-19 specific) was also reviewed and is relevant to this document.

It is important to note that the HHS ASPR Exercise, Evaluation, and After Action Division (E2A2) noted that the "industry standard" is to use the [Homeland Security Exercise and Evaluation Program \(HSEEP\) AAR template](#).

- Sample Participant Feedback Forms ([Burn](#), [Pediatric](#)) have been designed as AAR surveys for previous exercises and can serve as a guide for similar questioning for COVID-19.
- Note that the AAR should help the organization in updating their emergency preparedness program (e.g., for long-term care facilities annually).
- For an AAR to be useful, it should identify both strengths and weaknesses of the response as well as how those will be either reinforced in future plans / tactics or corrected as required. The more specific an AAR is, the greater value it will have during future events.
- It is important to note that the COVID-19 pandemic is different from a conventional mass casualty event in many ways. Caution should be exercised when considering changes to emergency operations and surge plans in context – so that the plan functionality is preserved or enhanced for no-notice events as well.

Sample Elements to Include/Consider for COVID-19 AAR

- **Emergency preparedness planning**
 - Emergency operations plan, continuity of operations plan, and business continuity plan reviews.
 - Are these plans updated routinely and on an as needed basis?
 - Did you assess other emergency plans (e.g., fire, evacuation, shelter in place) for pandemic implications?
 - How do evacuation or access control plans change during an infectious disease emergency?
 - Information sharing/situational awareness.
 - What are the most valuable/successful mechanisms used by your facility and among partners to share information?
 - How is your facility integrated with public Joint Information Systems (JIS) in your community?
 - Do you receive health alerts directly from the Centers for Disease Control and Prevention (CDC) or indirectly through your state or local health department, healthcare coalition, association, or other entity? Who receives state and Federal alerts and how is this information shared?
 - How do you maintain emergency point of contact information for your patients or residents, as well as internal staff and external partners?
 - How was information shared and communicated regionally for healthcare? What were the most effective means and the most needed content?
 - Coordination with state, local, healthcare coalitions, and community partners.
 - How actively does your facility participate in the activities of your region's healthcare coalition?
 - What information technology (IT) solutions do you use for information sharing and coordination and did you modify them during the pandemic?
 - How were MOCC (Medical Operations Coordination Cells) utilized in your area to load-balance or direct patients requiring critical care? What are opportunities to implement or strengthen these mechanisms in the future?
 - Were the assumptions about roles and responsibilities during a pandemic at the regional coordination level validated or not? What changes are needed to assure regional healthcare coordination for future events?
- **Response**
 - Incident management.
 - What structure did you use for incident management in your facility? Was this altered during the pandemic response? How did you maintain the Incident Command System (ICS) over a long duration event?
 - Did you use incident action planning (IAP) for your daily ICS? What could be improved in this process?

- How did the ICS integrate (or not) with your daily authorities and operational coordination (e.g., daily staffing huddles, executive leadership teams)?
- How engaged was executive leadership? Did you anticipate this level of engagement and was there value added or alteration from how you have trained, drilled and exercised in the past? How will you define the recommended roles of executive leadership for incident management in the future?
- Communications/information sharing.
 - Did you adjust your information sharing during response (e.g., frequency, who to share information with, mechanisms for sharing)?
 - What was the most effective means and platform for sharing information with staff? What changes may be needed for future events both in terms of platforms and content/responsibility for communication?
 - What was the most valuable/important information shared among partners?
 - What key data points did you routinely track? Were these identified as key elements of information prior to the pandemic or recognized as a need during the pandemic? Were these shared with regional partners?
 - How were policy changes coordinated (e.g., facility access policies, employee travel policies) for your organization/healthcare system? Are any changes needed to assure consistency?
 - How did you communicate new policies and procedures to your staff, patients/residents, and families or responsible parties?
 - What challenges did you encounter in meeting new Federal reporting requirements?
 - Did your organization identify alternate means for internal and external communication or redundant methods?
 - What strategies did you use to enable communication between patients/residents and their families or responsible parties?
- Staff management.
 - Was your surge staffing plan adequately detailed for the response? Were the assumptions about using staff in different roles validated or do they need adjustment?
 - Was there a clearly graded staffing plan that showed how staff would be used differently as the surge became more severe? Does this need modification for future events? Is the plan consistent with regional thresholds/terms to support information sharing and resource management?
 - Does your organization have an Employee Assistance Program (EAP) that includes a behavioral health plan for personnel who may need or request this support? Was this used or sufficient? Do you include a proactive leadership and staff monitoring program for issues associated with an extended high stress situation such as the pandemic?

- What additional resiliency/psychological support was offered to staff? What should be offered in future events?
- How did your collective bargaining agreements affect the response? What changes may be needed in future agreements/incidents?
- Did you revise your workforce exposure policy to address the pandemic? Does your workforce exposure policy account for staff who may also work in other facilities?
- How did staff used outside their usual roles adapt? What should be required for education, orientation, and supervision for future events?
- What additional infection prevention training did you provide to your staff?
- Did you implement contingency strategies (e.g., leave cancellation, mandatory overtime) to ensure adequate staffing?
- How did you acquire additional staff (if needed)?
- Space management
 - Was your surge plan (particularly for critical care) sufficient in terms of expansion progression and in level of detail? If not, what needs to be changed? Will those changes be relevant to a mass casualty event or should they be a separate annex for an infectious disease/protracted event?
 - Were your critical care expansion assumptions and plans accurate? What modifications are needed to the plans?
- Patient/resident well-being.
 - How did you offer social activities for your patients/residents while maintaining distancing requirements? Pediatric units, behavioral health or secured dementia, skilled nursing, etc.
 - What did you do to encourage interactions between patients/residents and their families or responsible parties while visitor restrictions were in place?
 - If applicable, how did you ensure access to caregivers from outside the facility (e.g., specialty providers, social workers, palliative care, behavioral health providers)?
- Logistics and supply chain management.
 - How did you meet your personal protective equipment (PPE) needs?
 - Did you implement any PPE optimization strategies?
 - Did you encounter challenges in acquiring other supplies (e.g., linen, nutrition, pharmaceuticals)?
 - How did the pandemic affect your procurement policies/contracting?
 - Would you modify any future strategies for how you fund supply chain requirements during a local, regional, or national disaster?
 - What are reasonable stocks of critical care, PPE, and pharmaceutical supplies for the facility/system to have available for future events?

- Resource management
 - How did the facility decide on restrictions to non-emergency procedures to preserve resources? Were these restrictions communicated or coordinated with other healthcare systems/facilities?
 - How did the facility request resources from system/regional/state/Federal partners? What changes to this process are needed to ensure effective and efficient requests/communication?
 - How were resources in shortage allocated (e.g., PPE) at the state or regional level? What was the role of the healthcare coalition/hospital association? What needs to change or be improved upon for future events?
 - How did the facility communicate resource challenges and adaptations including the potential need for crisis standards of care (CSC)?
 - Were your CSC plans sufficient? Are they integrated into the surge plan (vs. a stand-alone plan)? Did they differentiate between elastic (e.g., staffing) and non-elastic (e.g., ventilators) resources?
 - Who was involved in CSC planning and decisions? Does this need to change for future events?
 - Who provided critical care guidance and ethics support if guidance on restricting access to services was necessary? (e.g., changes to dialysis). Did providers understand clearly which resources they needed to allocate and which they did not (i.e., that usual care was to be provided unless they had guidelines for restrictions or sought consultation for a specific issue - thus preventing 'implicit triage').
 - Who will lead the changes to the CSC plans at the facility and system level and monitor the national-level recommendations for change?
- Infection prevention.
 - How efficient was the enhanced screening process for staff and visitors? What changes would you make for future events?
 - What administrative policies did you implement to improve infection prevention? How should these implement daily and seasonal (e.g., influenza) practices?
 - If you have a respiratory protection program, how was it modified during the pandemic? If you do not have a respiratory protection program, how did you ensure proper use and fit of PPE by staff?
 - What modifications did you make to your physical space or systems to protect staff and patients/residents from exposure to the virus? How can these be adapted/preserved for future use?
 - Did you cohort patients/residents? If so, was this effective? What would you change about locations of cohorted care?
- Laboratory/testing capabilities.
 - Were your testing capabilities sufficient? What would you change about your testing process?

- Did you require assistance from partners or contractors for specimen collection?
- Did you use serial testing?
- Were other laboratory services impacted during the pandemic? What changes to specimen handling and test ordering may need to be considered?
- Treatment/transport/discharge protocols.
 - Was there a need for additional palliative care resources or engagement? If so, how will this be addressed in future events?
 - Were there any regional policies that made it easier or more difficult to transfer patients from hospitals to long-term care facilities or vice versa? What are some changes that should be made prior to another incident?
 - Acute Care: How did you communicate with long-term care facilities and emergency medical services providers about transfers/transports?
 - Long-term Care: How did you communicate with hospitals and emergency medical services providers about transfers/transports?
 - Long-term Care: Did you use telemedicine or other means to reduce resident transports to providers and/or to reduce the number/frequency of providers entering your facility to see residents?
- Case management protocols (to also include clinical care and fatality management).
 - What, if any, modifications did you need to make related to case management protocols?
 - What lessons did you learn from any adjustments made to case management protocols?
 - How should these lessons be integrated into future responses?
- Medical countermeasures (e.g., therapeutics, vaccines).
 - How are you coordinating with partners on monoclonal antibody administration? In future events (e.g., anthrax) that may also require these medications, how will administration be accomplished for large numbers of persons?
 - What mechanisms are you using for vaccine administration? How would you change this in future events?
 - How are you educating your staff, patients/residents, and their families or responsible parties on vaccination?
 - How have you dealt with vaccine hesitancy among employees?
- **Recovery**
 - Administrative/financial.
 - How did you track your pandemic-related expenses for potential reimbursement/cost recovery?
 - How did you assess your eligibility for federal or state COVID-19 financial relief programs?

- Policies/processes updates and revisions.
 - What went well that you will continue to implement for future responses and what did not go well?
 - What are your priorities for preparedness, resources, or coordination as your organization anticipates recovery/return to a new normal? What will you keep and what will you return to pre-COVID?
- Mitigation efforts.
 - Are there populations that require additional efforts to assure access to information and care that can be prioritized now to mitigate equity issues in future events? How can the needs of these populations be identified and addressed?

Sample COVID-19 After Action Reports and Other Relevant Resources

The following resources were gathered as sample COVID-19 AARs that are currently available to the public. The resources are categorized by healthcare setting type. **NOTE:** These resources may become outdated as the COVID-19 pandemic evolves. [Contact ASPR TRACIE](#) if you have questions or need additional assistance.

Dialysis Centers

- Kidney Community Emergency Response (KCER). (2020). [End Stage Renal Disease Community COVID-19 After-Action Report and Improvement Plan](#).

Federal Agencies

- U.S. Department of Health and Human Services, Office of the Inspector General. (n.d.). [HHS-OIG's Oversight of COVID-19 Response and Recovery: Reports](#).
- U.S. Federal Emergency Management Agency. (2021). [Pandemic Response to Coronavirus Disease 2019 \(COVID-19\): Initial Assessment Report – FEMA Operations January through September 2020](#).

First Responder Organizations

- International Association of Firefighters (IAFF). (n.d.) [IAFF COVID-19: Interim After-Action Report](#).

Healthcare Coalitions

- Colorado Northeast Region Healthcare Coalition (NERHCC). (2020). 2020 COVID-19 Response After-Action Report. (**NOTE:** Contact the [ASPR TRACIE Assistance Center](#) for a copy of this document).
- Metro Health and Medical Preparedness Coalition (MN). (2021). [COVID-19 Pandemic. September 2020 - April 2021: Phase 2 of the Response](#).
- North Central Florida Healthcare Coalition. (2020). [Region 3 Healthcare Coalition Alliance. COVID-19 After-Action Report/Improvement Plan](#).
- Northwest Wisconsin Healthcare Emergency Readiness Coalition (NWWIHERC). (2020). [Multi-Disciplinary COVID-19 Response Pandemic Intervals Framework 1-4](#).
- Southwest Florida Healthcare Coalition. (2020). [COVID-19 After Action Report/Improvement Plan](#).
- Region 3 Healthcare Coalition Alliance. (n.d.). [COVID-19 After-Action Report/Improvement Plan](#). (**NOTE:** This document was developed by the North Central Florida Healthcare Coalition, Northeast Florida Healthcare Coalition, and the Coalition for Health and Medical Preparedness.)

- Regional Emergency and Disaster Healthcare Coalition (REDi) (WA). (2020). [COVID-19 REDi Healthcare Coalition Gap Analysis](#).
- Southeast Texas Regional Advisory Council (SETRAC). (2020). [COVID-19 Tabletop Exercise After Action Report \(AAR\) /Improvement Plan \(IP\)](#).
- Vermont Healthcare Emergency Preparedness Coalition. (2020). [COVID-19 Pandemic Response AAR/ IP](#).

Hospitals

- California Hospital Association. (2020). [COVID-19: Mid-Response and After Action Reporting Webinar](#). (**NOTE:** Available to healthcare organizations only; free registration required.)
- Community Hospital [redacted]. (2020). COVID-19: Midpoint Report and Improvement Plan. (**NOTE:** Contact the [ASPR TRACIE Assistance Center](#) for a copy.)
- Missouri Hospital Association. (2021). [Missouri's COVID-19 Response: A Clinical and Operational Reflection for Missouri Hospitals](#).
- Pediatric Overflow Planning Contingency Response Network (POPCoRN) Writing Collaborative. (2021). [Lessons Learned from COVID-19: A Practical Guide for Pediatric Facility Preparedness and Repurposing](#).
- Regional Health System [redacted]. (2020). After action Report for COVID-19 Response. (**NOTE:** Contact the [ASPR TRACIE Assistance Center](#) for a copy.)

International Organizations

- European Centre for Disease Prevention and Control. (2020). [Conducting In-action and After-action Reviews of the Public Health Response to COVID-19](#).
- World Health Organization. (2020). [Guidance for Conducting a Country COVID-19 Intra-Action Review \(IAR\)](#).

Long-term Care Facilities

- Connecticut Department of Public Health. (2020). [COVID-19 Pandemic Facility After-Action Report/ Improvement Plan](#). (**NOTE:** This document was developed by RPA, a Jensen Hughes company, in association with the Connecticut Long Term Care Mutual Aid Plan [LTC-MAP]).

State and Local Health Departments and Other Agencies

- City of Burlington (VT). (2021). [COVID-19 Pandemic Response After Action Report](#).
- City of Kirkland (WA). (2020). [First in the Nation: City of Kirkland, Washington. COVID-19 Initial Response After Action Report](#).

- City of Palo Alto (CA). (2020). [COVID-19 Emergency Operations Center After-Action Review](#).
- City and County of Denver (CO). (2021). Denver COVID-19 Initial Response: After-Action Report. (**NOTE:** Contact the [ASPR TRACIE Assistance Center](#) for a copy of this document).
- County of Los Angeles (CA) Emergency Medical Services Agency. (2022). [Incident After Action Report: COVID-19 Pandemic \(January 2020-April 2021\)](#).
- Fairfax County (VA) Public Safety Committee. (2022). [COVID-19 After Action Report](#).
- Indiana Department of Health, Division of Emergency Preparedness. (2022). [COVID-19 Response After Action Report and Improvement Plan](#).
- Kansas Department of Health and Environment. (2020). [Public Health Emergency Preparedness After Action Report & Improvement Plan COVID-19 Interim](#). (**NOTE:** This Word document will automatically download for most upon clicking the link.)
- Linn County Public Health (IA). (2022). [2019 Novel Coronavirus \(SARS-CoV-2\) Response After Action Report](#).
- Montezuma County (CO). (2021). [Montezuma County, Colorado COVID-19 Response. After-Action Report/Improvement Plan – Version 2](#).
- National Homeland Security Consortium (NHSC). (2021). [COVID-19 Pandemic After-Action Report](#). (**NOTE:** This document includes information from the NHSC’s 22 associations, which represent a diverse cross-section of thousands of state, local, and private-sector professionals.)
- Pinellas County (FL) Emergency Management. (2022). [Coronavirus \(COVID-19\) County Response. After Action Report](#).
- Public Health Seattle and King County (WA). (2022). [COVID-19 After Action Report](#).
- Spokane Regional Health District (WA). (2020). [COVID-19 Interim After-Action Report](#).
- State of Oregon. (2020). [State of Oregon After-Action Review. Enterprise Response to COVID-19](#).
- Summit County Health Department (UT). (2022). [COVID-19 Response. After Action Report: Executive Summary](#).
- Virginia Department of Health. (2020). [Local COVID 19 Vaccination Tabletop Exercise After-Action Report/Improvement Plan Template](#). (**NOTE:** This AAR is vaccination specific.

Other General Resources

- Chamberlin, M., Okunogbe, A.T., Moore, M., et al. (2015). [Intra-Action Report — A Dynamic Tool for Emergency Managers and Policymakers](#). Rand Corporation. PE-147-RC.

- Health Information Sharing and Analysis Center (H-ISAC). (2020). [Capturing Lessons Learned: COVID-19 After Action Report.](#)
- Mathematica and Public Health Foundation. (2021). [COVID-19 After Action Review Toolkit.](#)