

How to Write an After-Action Report and Improvement Plan After an Exercise

Once an exercise ends, the evaluation team is responsible for analyzing the data collected, compiling the findings into a report, and turning those findings into a plan for improvement. This guide walks you through how to write an after-action report step by step, from consolidating raw exercise data to assigning time-bound corrective actions. Before you begin, gather all documentation generated during the exercise so the analysis reflects every perspective and source involved.



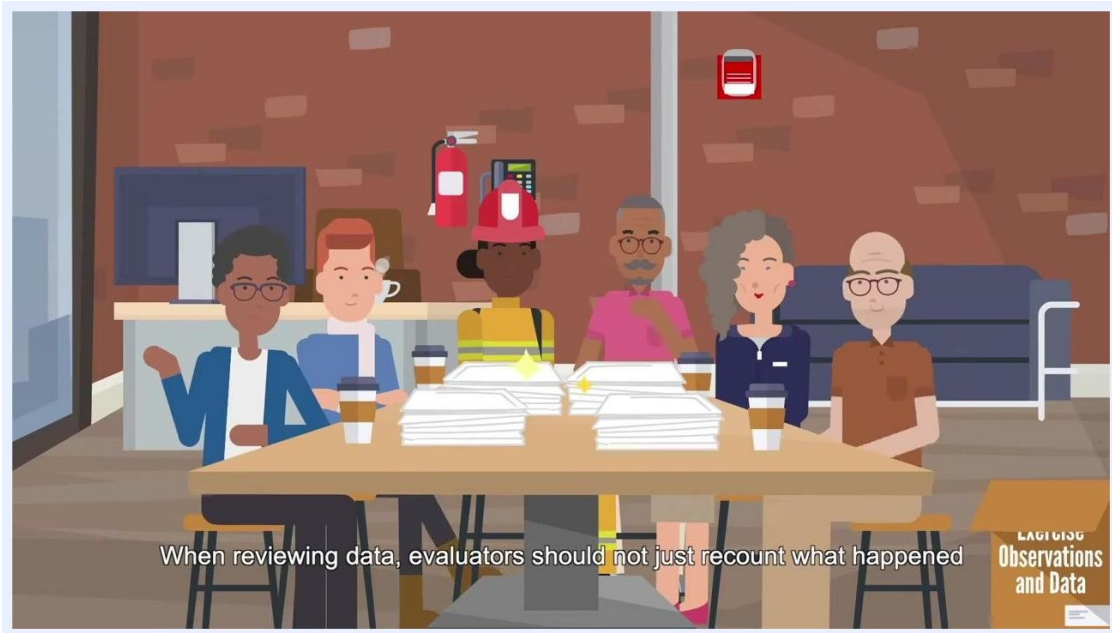
An animated cityscape with a green sign reading "Developing an After-Action Report and Improvement Plan," alongside a document icon, a coffee cup, and an Exercise Cycle diagram, captioned "Once an exercise has ended and data has been collected."



Diverse team members holding clocks and calendars, emphasizing the importance of time-bound corrective actions.

Event Summary

Recognize that the after-action process begins the moment an exercise concludes. At this point, the evaluation team must analyze all collected data, compile the After-Action Report (AAR), and develop the accompanying Improvement Plan (IP).



A magnifying glass highlighting the words "Analysis Techniques" against a brown background, emphasizing the range of methods used in analysis.

This process requires reviewing every observation and piece of data gathered, whether the exercise was discussion-based or operations-based, to identify both what worked well and what needs improvement.

Objectives Reviewed

Compare actual participant performance against three benchmarks: exercise objectives, capability targets, and critical tasks. This comparison forms the basis for determining whether the exercise achieved its intended purpose.

Analyze performance by comparing the actual outcomes of the exercise with the outcomes intended in the relevant plans, policies, and procedures. As part of this review, determine:

- Whether participants were familiar with the relevant documents
- Whether there was a difference between the intended and actual outcomes

- The impact of any difference, whether positive, negative, or neutral

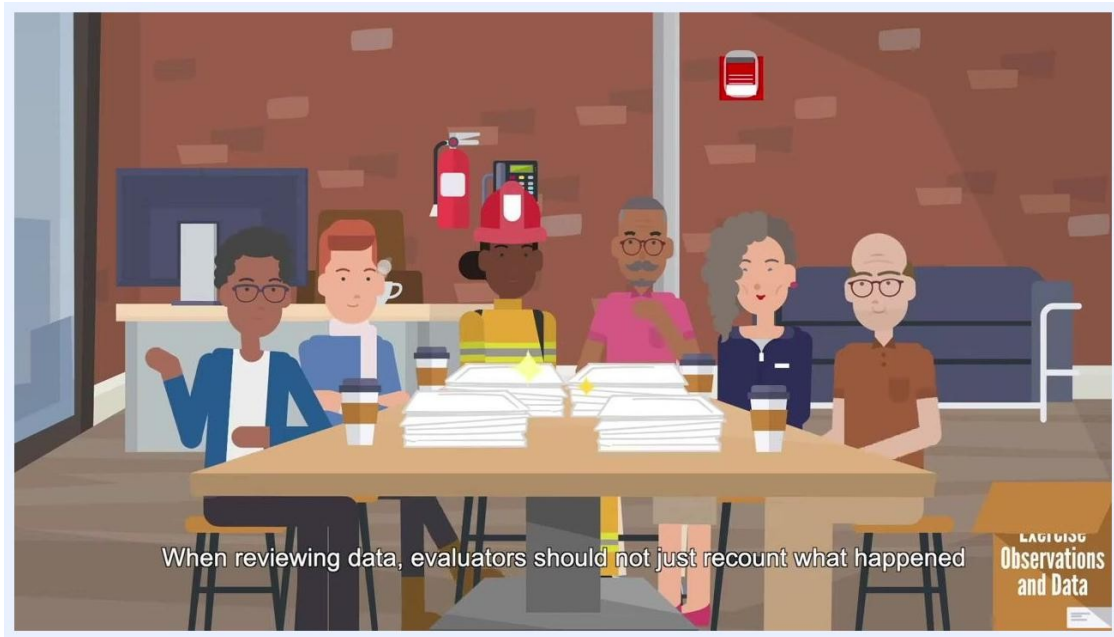
For exercises involving incident response, such as HAZMAT scenarios, expand the review to include the specific response plan, the timing and coordination of the response, and how effectively the response matched the plan.



A firefighter holding a HAZMAT Response Plan document, set against a background of emergency vehicles, helicopters, and a large clock, illustrating incident response and timing analysis.

The lead evaluator and evaluation team should apply a variety of analysis techniques to support future integrated planning.

Data Synthesis means compiling and reviewing data from multiple sources, including interviews, video recordings, and written documentation, to build a comprehensive understanding of the exercise.



An evaluator at a desk reviewing an interview recording on a computer monitor, labeled "Data Synthesis," with papers and a folder nearby.

Trend Analysis involves reviewing data across multiple exercises or over time to identify recurring strengths, recurring areas for improvement, and major changes in observations. Track these changes by comparing different versions or iterations of plans and performance.



A trend analysis chart with upward arrows alongside documents labeled "Version 1" and "Version 2," representing the identification of patterns over time.

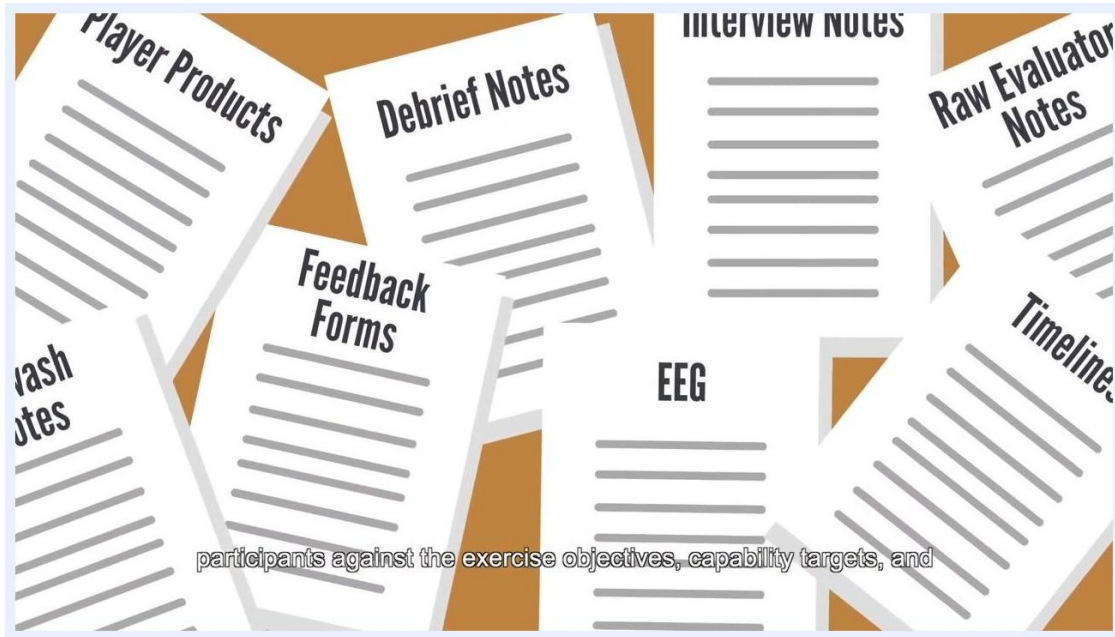
Equip your team with the tools needed to interpret exercise data, and encourage open collaboration and discussion among team members as they work through the analysis.



A group of people discussing findings in a coffee shop setting, with staff behind the counter, representing collaborative data analysis.

Timeline of Key Events

Begin by collecting every form of documentation generated during the exercise, including Player Products, Debrief Notes, Interview Notes, Raw Evaluator Notes, Feedback Forms, Exercise Evaluation Guides (EEGs), Timelines, and Hotwash Notes.



Various labeled exercise documents, including Player Products, Debrief Notes, Interview Notes, Raw Evaluator Notes, Feedback Forms, EEG, Timelines, and Hotwash Notes, spread out on a table.

Once the analysis is complete, hold an After-Action Meeting as an interactive session for senior leadership and key program managers. Bring together representatives from different jurisdictions or sectors to ensure a comprehensive review.



A large municipal building with a person standing in front, representing the venue used for the After-Action Meeting.

Hold this meeting in a formal setting, such as a community or municipal building, so all key stakeholders can participate.

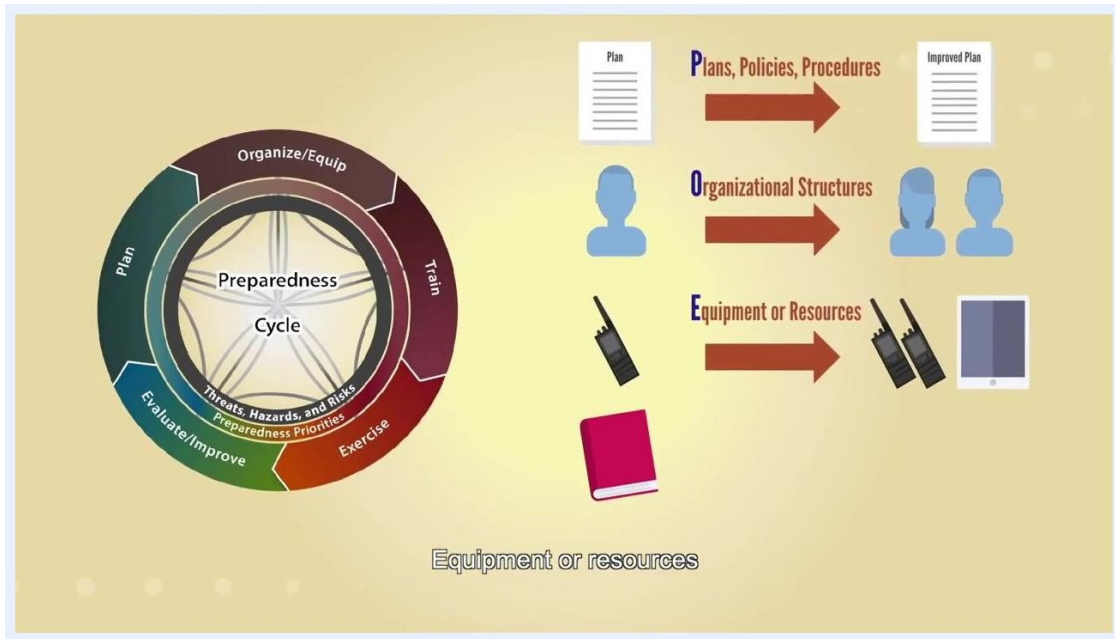
During the meeting, validate the analytical findings of the AAR, finalize the corrective actions listed in the IP, assign each action to a responsible party, and set concrete deadlines. Visual aids, such as a calendar marked with a specific date, help emphasize ownership and urgency.



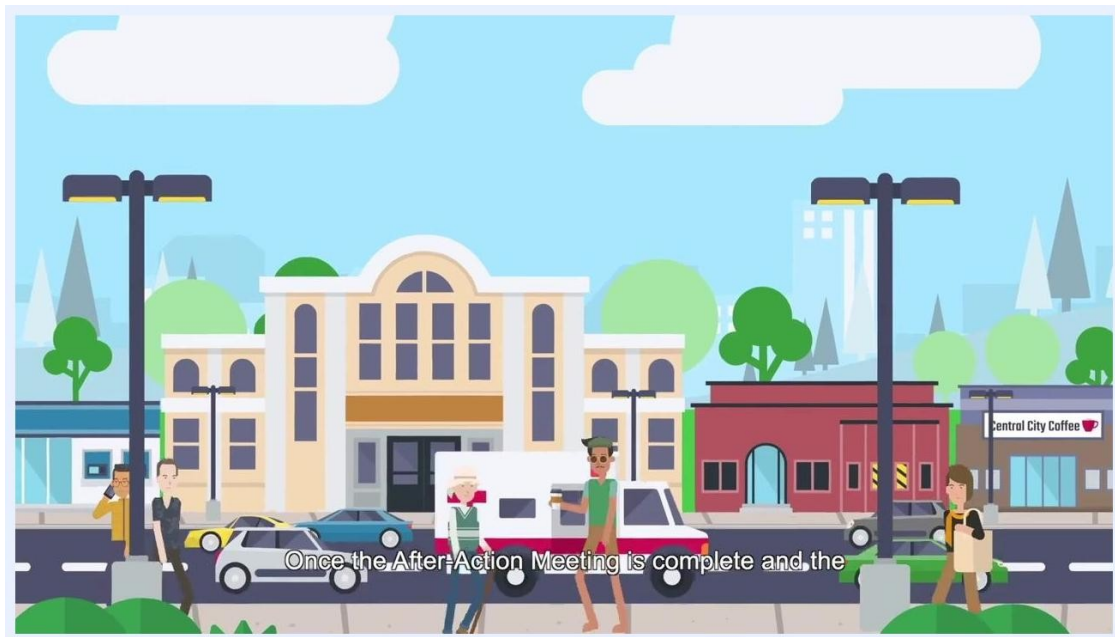
Three illustrated community panels—Bayport (beach cleanup), Central City (construction worker with clipboard), and Harvest Junction (farmer with checklist)—representing diverse community involvement in the meeting.

After the meeting concludes and the AAR and IP are finalized, ensure all stakeholders reach consensus on the report and plan before proceeding.

Finally, hand off responsibility for the corrective actions from the exercise team to senior leaders and the individuals accountable for implementation. Communicate roles and expectations clearly during this transition.



A meeting room with a presenter at a podium and a projected slide reading "Assign corrective actions – Adding deadlines," showing a calendar marked December 12, with participants seated at tables.



A town square with people, vehicles, and buildings, representing the community setting used to reach consensus on the report and plan.



A community scene with an ambulance and residents, symbolizing the transfer of responsibility for corrective actions.

Strengths

As you review exercise data, identify the strengths participants demonstrated. This is one of the two core outcomes of the review, alongside identifying areas needing improvement.

Areas for Improvement

Do not simply list what happened during the exercise. Instead, explore and document why events unfolded as they did, and consider the underlying causes for any discrepancies between planned and actual outcomes.



A group of evaluators seated around a table, each holding documents such as Player Products, Timelines, EEGs, Feedback Forms, and Debrief Notes, with a box labeled "Exercise Observations and Data" and coffee cups nearby.

Root Cause Analysis helps you move beyond surface-level symptoms to identify the underlying problem and its causes. Use a visual tool, such as a tree diagram, to distinguish between symptoms, the core problem, and the root cause.



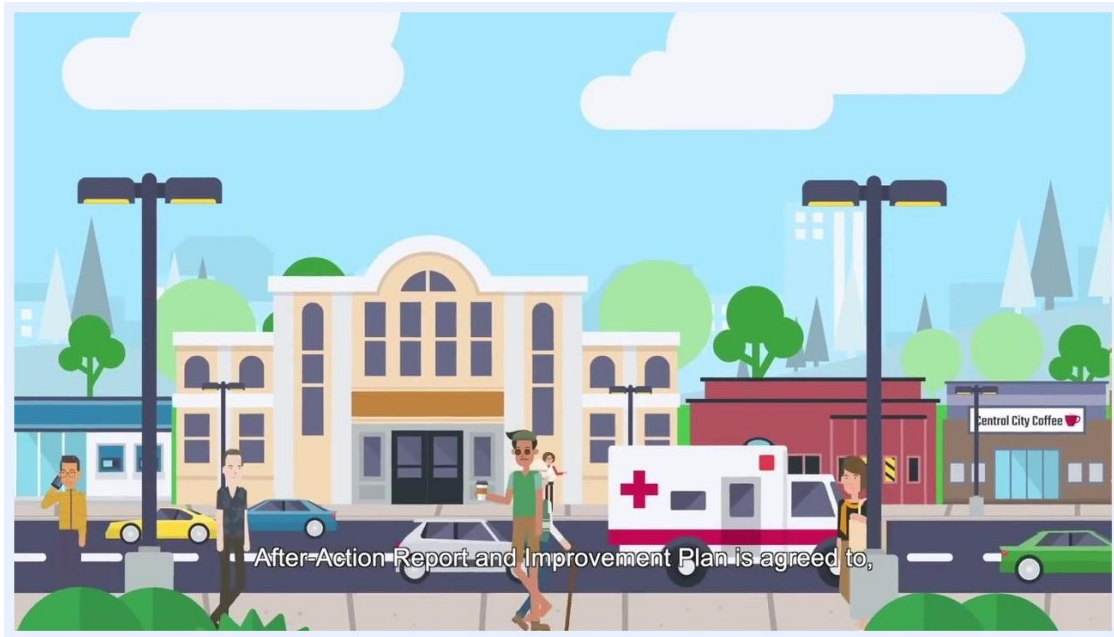
A tree diagram labeling the tree as "Symptom," the roots as "Problem," and the root branches as "Cause," with a person digging to represent root cause analysis.

Combine data synthesis, event reconstruction, trend analysis, and root cause analysis for a holistic review of exercise performance, and make sure the analysis supports actionable recommendations.



A four-panel illustration showing data synthesis, event reconstruction, trend analysis, and root cause analysis side by side, representing an integrated review approach.

Continuous improvement means periodically reviewing community capabilities to confirm readiness for threats, hazards, and risks. Foster an ongoing culture of assessment across homes, businesses, and infrastructure.



A cityscape depicting smoke and flooding, representing the simulation of threats and hazards for evaluation purposes.

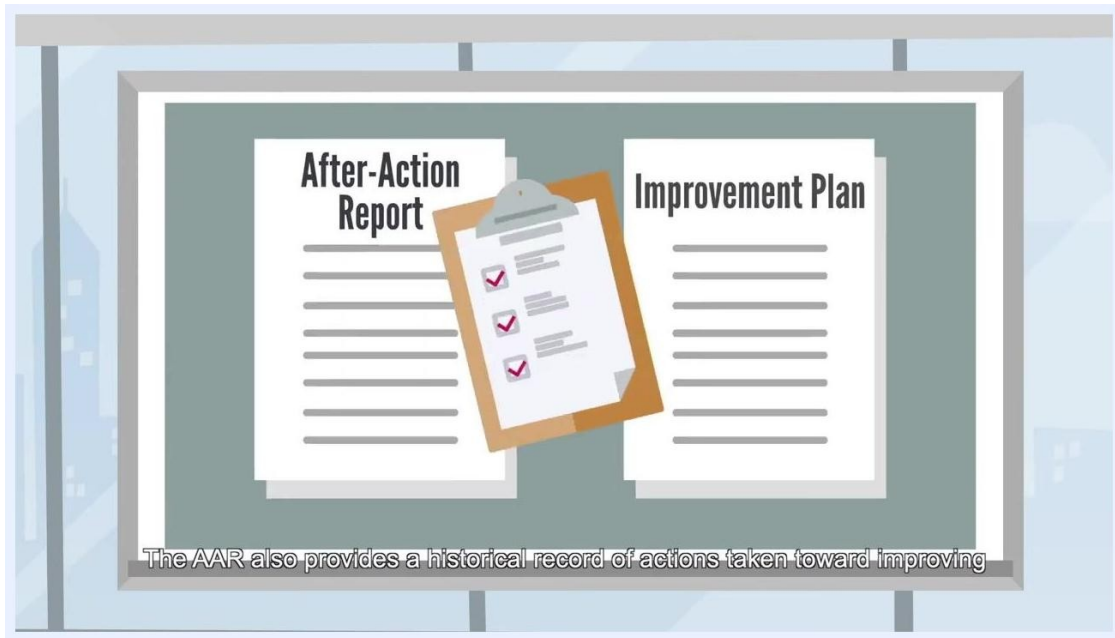
After each exercise, analyze outcomes to determine what worked well and what needs enhancement, and prepare for potential threats by simulating scenarios such as smoke or flooding to evaluate responses.



A cityscape with homes and buildings enclosed under a protective dome, symbolizing community-wide continuous improvement.

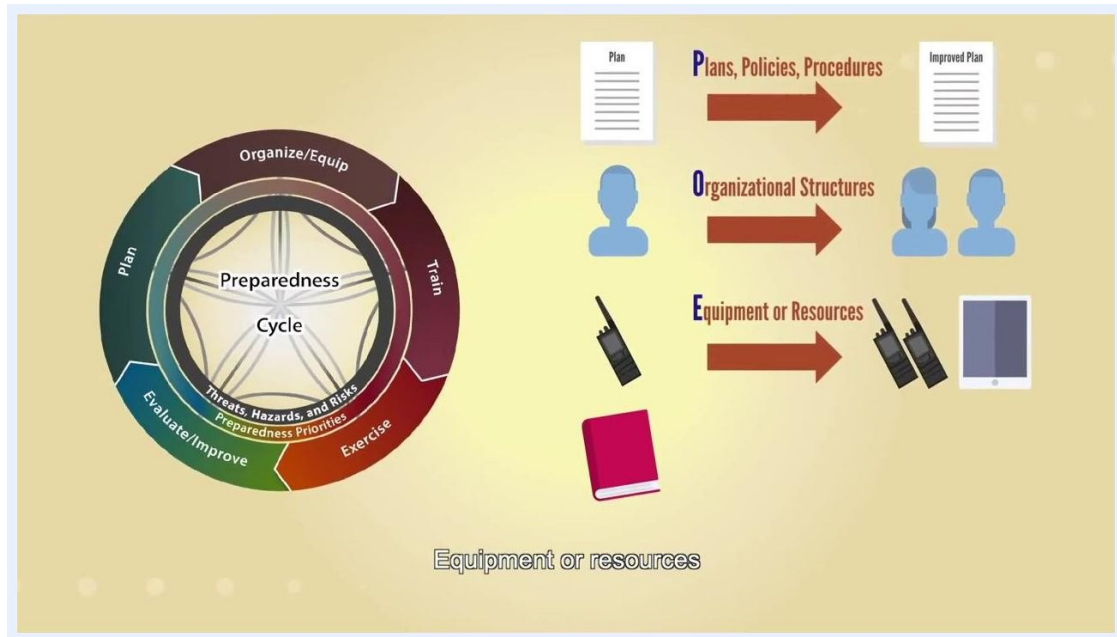
Corrective Action Plan

Summarize the outcomes of the exercise in the AAR/IP, which should include an overview of the exercise, observations and analysis of capabilities, and a list of corrective actions.



A coffee cup labeled "After-Action Report and Improvement Plans" beside a chocolate donut with sprinkles, symbolizing the completion and review process.

Corrective actions are the actionable steps that resolve capability gaps identified during the exercise. Illustrate the gap between the current capability level and the desired capability level to clarify why improvement is needed.

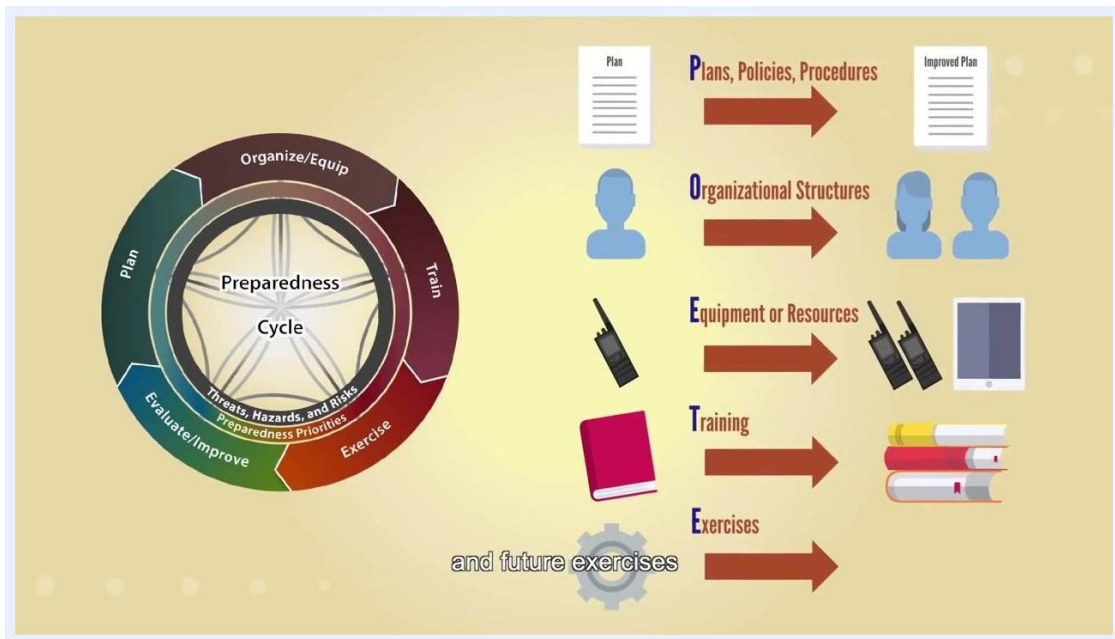


A coffee cup diagram with two labeled lines, "Desired Capability Level" above and "Current Capability Level" below, representing the gap that corrective actions must close.

Design corrective actions to produce clear outputs, which may include:

- Updates to plans, policies, and procedures
- Changes to organizational structures
- Acquisition or reallocation of equipment or resources
- Enhanced training programs

- Additional or revised exercises



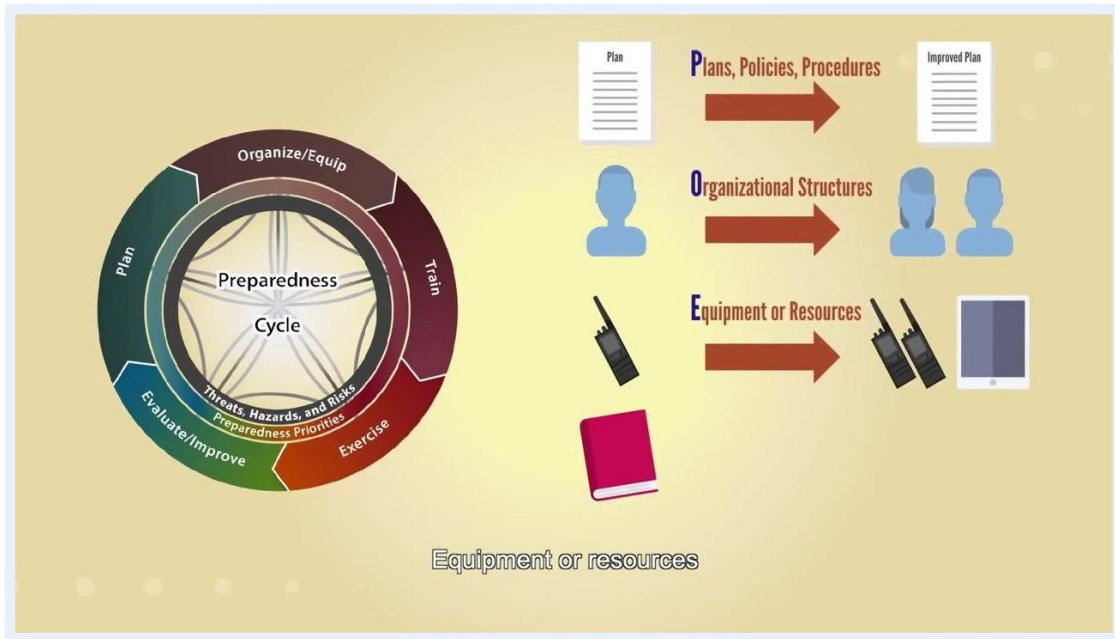
A Preparedness Cycle diagram with arrows pointing to Plans, Policies, and Procedures; Organizational Structures; Equipment or Resources; Training; and Exercises, showing where corrective actions apply.

Reference the Preparedness Cycle to show how each corrective action fits into the broader context of continuous improvement.

Apply the SMART criteria to every corrective action:

- **Specific:** Address the five W's—Who, What, When, Where, and Why—by naming the responsible person, the exact task, the timeline, the location, and the reason for the action.
- **Measurable:** Include numeric or descriptive measures of quantity, quality, or cost, using tools such as rulers, tape measures, or calculators to quantify progress.
- **Achievable:** Keep the action within the control, influence, and resources of the responsible owner.
- **Relevant:** Confirm the action is instrumental to the mission of the jurisdiction or organization, and engage stakeholders to validate that alignment.

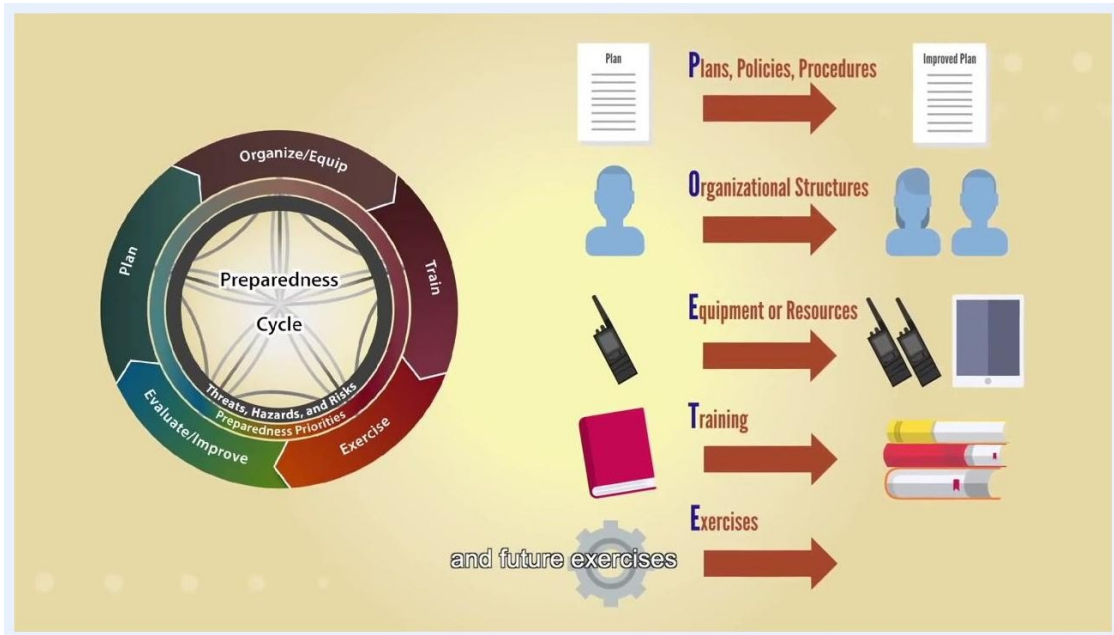
- Time-bound: Assign a specific and reasonable timeframe for completion, and use visual aids such as clocks and calendars to track deadlines and progress.



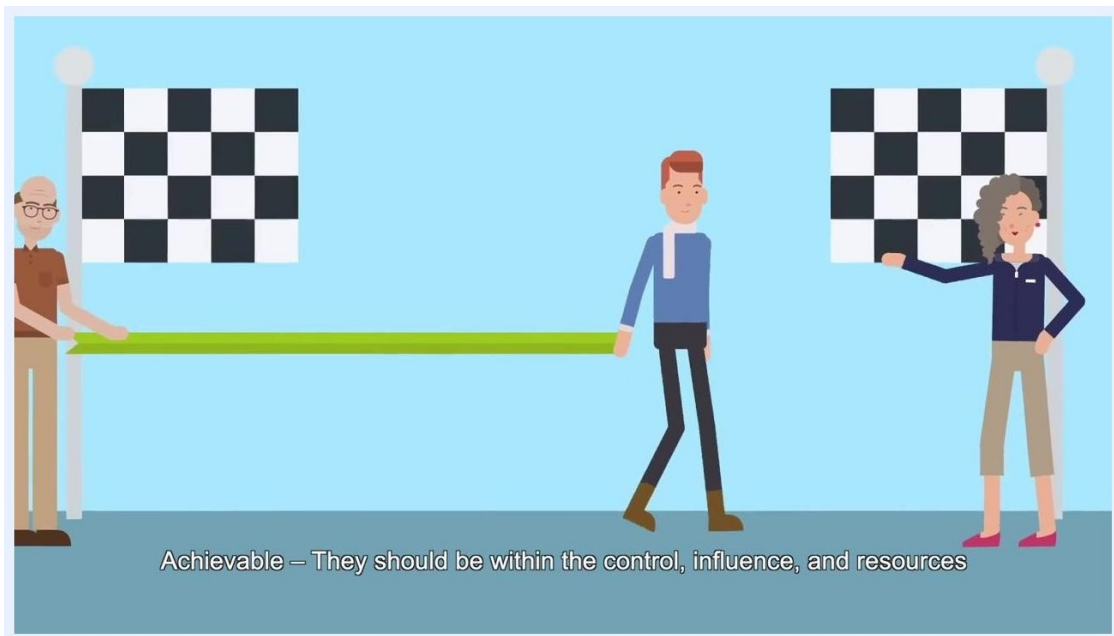
A city street scene showing people performing different tasks, illustrating the need to specify the five W's in each corrective action.

Corrective actions form the foundation of the Improvement Plan. Apply them across every relevant environment—coastal, urban, and rural—and assign a responsible party in each area to oversee implementation, using checklists to monitor progress.

Involve the entire team in developing the final AAR and IP so that everyone shares a common understanding of the findings and the path forward.



A group of people holding a ruler, a tape measure, and a calculator, representing measurable corrective actions.



Three people holding a green bar between two checkered flags, representing teamwork toward achievable, mission-relevant goals.



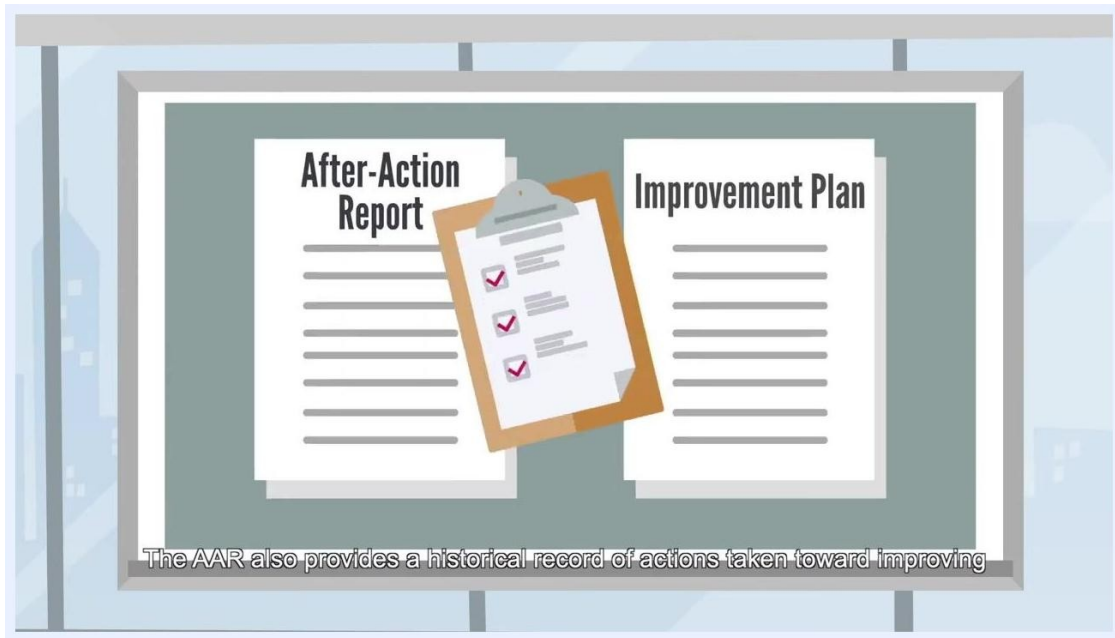
Three community panels—Bayport, Central City, and Harvest Junction—each showing a local representative with a checklist or clipboard.



A diverse group of people standing together holding coffee cups, with a cityscape in the background, representing collaborative report development.

Appendices

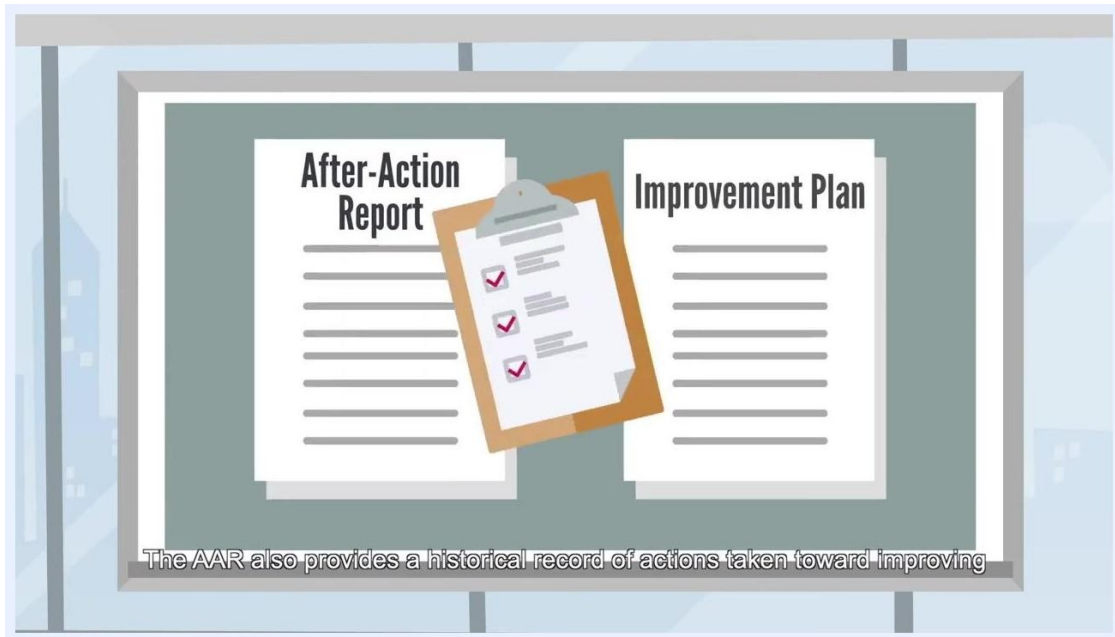
Keep the AAR and IP as reference documents: they provide a historical record of the actions taken to improve capabilities and create opportunities to share preparedness insights and best practices with other jurisdictions.



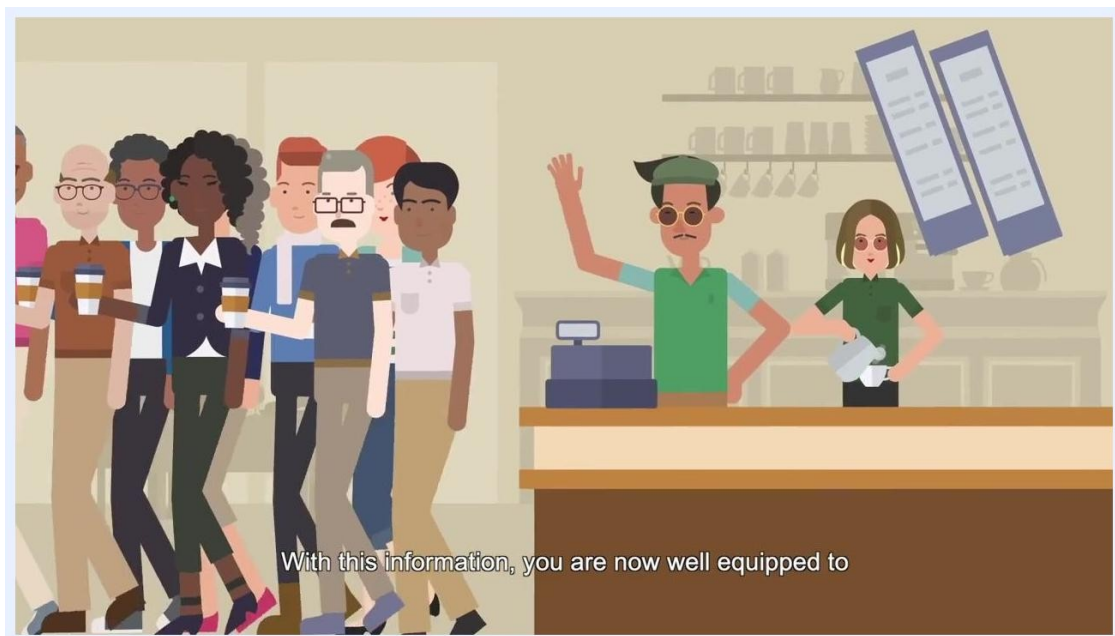
Two documents pinned to a board, one labeled "After-Action Report" and the other "Improvement Plan," with a checklist clipboard between them.

Maintain a record of corrective actions and improvements for future reference and accountability.

For additional procedures and best practices, consult the January 2020 Homeland Security Exercise and Evaluation Program Doctrine, along with related official resources such as FEMA documentation and the Exercise Cycle diagram.



A close-up of a checklist clipboard, representing the ongoing tracking of corrective actions and improvements.



A close-up of a coffee cup with the text: "For more information, please reference the January 2020 Homeland Security Exercise and Evaluation Program Doctrine," alongside FEMA and Exercise Cycle references.

