



Human Error Tabletop Exercise



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Human Error Tabletop Exercise

Human errors result from mistakes in perception, thought, or action. They can include failing to perform or follow through on a task, completing a procedure incorrectly, misapplying instructions, or ignoring possible dangers or concerning behaviors. Even though they occur unintentionally, human errors can jeopardize the safety of every student, employee, volunteer, and visitor in our schools. Learning to recognize and mitigate human error is just as important as any other aspect of emergency preparedness.

Policies and practices alone cannot protect a school from human error. When a kindergartener goes missing after a teacher leaves a hallway door open to “quickly grab something from the car,” the violation is not a policy issue; it is a human error issue. Every human is susceptible to human error, but we can reduce human error incidents in schools by building awareness.

Most human error incidents fall into one of three groups: rule-based mistakes, knowledge-based mistakes, and mistakes of action.

- **Rule-based mistakes** result from implementing unclear, poorly developed rules or misapplying rules that are otherwise effective.
- **Knowledge-based mistakes** result from providing employees with poor or insufficient instruction regarding policies, practices, and procedures.
- **Mistakes of action** occur through deviations from rules, standards, and safe operating practices.

Finding the root cause of these violations (often an environmental, physical, or personal factor) is essential to avoiding future errors.

In this tabletop exercise, imagine that you are a member of your school district’s emergency planning

Human error is an unintentional failure in the way we perceive, think, or behave.

team. You only have access to resources and systems that your district currently has in place. Consider and discuss how interactions between human errors and your existing procedures, policies, and practices could endanger students and staff members.

This tabletop presents a fictional scenario followed by additional information (“injects”) on how the scenario unfolds. Follow each inject and consider its what-if questions to think through ways that human error could impede your school safety plans. Use the provided human error discussion questions to consider how you would respond to various incidents and how you could update your emergency operations plan (EOP) and your individual schools’ EOPs.

At the end of each set of discussion questions, pause and consider the following with your group:

1. What is the root cause of the human error in the provided incident?
2. What category of human error does the incident reflect—rule-based mistakes, knowledge-based mistakes, or mistakes of action?
3. How did the human error affect the course of action?
4. What updates could you make to your district’s EOP, policies, procedures, and training methods to prevent human error?

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Scenario #1

It is 7:00 on a January evening. The weather report predicts that wintry weather will move into the area the following day during school hours. Although such a forecast seems to merit school closures, your district closed its schools last week because of a similar forecast that did not materialize. When the predicted wintry weather did not arrive, parents responded negatively and claimed that administrators had overreacted to the weather forecast.

Additional information is presented in Inject #1.



Inject #1

Your school district convenes a meeting with its school safety planning team to discuss options. You decide to open schools the next day and proceed with a mostly normal school schedule. Some after-school activities and field trips will be canceled.

Discussion Questions

Please answer the following for each question: (1) What form of human error preceded each situation, and (2) what would your next steps be? As you consider your answers, take time to explore worst-case scenarios, as well as existing protocols in your EOP (e.g., early-release protocols). Look for blind spots where human error incidents might occur. Have a volunteer record your responses to inform the debriefing portion of this tabletop exercise.

1. Transportation
 - b. What steps would you need to take to ensure that school buses could take students home if the district were to issue an early release on short notice?
 - i. What if you discovered that the staff members who coordinate bus transportation are at an off-site conference and unable to initiate an early release?
 - c. Would your schools allow students to walk home in wintry conditions?
 - i. Who would make this decision?
 - ii. How would you communicate this decision to staff members?
 - iii. What if staff members misunderstood the communication and allowed some students to walk home too early?

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- d. How would your schools ensure that each student who walks home reaches their home safely?
 - i. What if the staff members assigned to this task failed in their duty because they are supervising the remaining students in the school buildings?
2. Communications and Warning
- a. With whom would you need to communicate to initiate an early release?
 - i. How would you contact school principals?
 - b. Does your district's emergency protocol include communicating with law enforcement to ensure that crossing guards will monitor traffic during the early release?
 - i. What if the staff member assigned to this duty were to forget to contact law enforcement and the early release were to occur without crossing guards present?
 - c. Do your plans include a parental communication protocol to inform parents of release decisions and instructions?
 - i. What if some students were not to be picked up for early release because a staff member misunderstood instructions and communicated incorrectly with parents?
 - d. Does your communication protocol for parents of students with disabilities include instructions on when and how to pick up their children from school?
 - i. What would happen if a technological error with the communication system blocked communication with parents?
 - e. Do you have a communication protocol for contacting neighboring school districts to learn how they plan to prepare for and respond to the weather conditions?

- i. What if your staff members were to fail to contact the other school districts before the weather worsens and disrupts the roads and communications?

Now that your team has discussed these questions, read Inject #2 to see how the hypothetical scenario continues to unfold.

Inject #2

Weather conditions worsen throughout the school day, to the point that your district decides to issue an early release. Before the students can leave, the weather conditions deteriorate further. The lights begin to flicker, and the weather bureau reports the arrival of an unexpected snowstorm that will quickly turn into freezing rain and sleet. Bus drivers report that the streets are freezing over and becoming impassable. The school district's phone lines falter, and even cellphone service becomes sporadic.

Discussion Questions

Now answer the following questions:

1. Decision-Making and Communication Around Early Releases
 - a. If the district were to revoke its early release decision, how would this change affect school operations?
 - i. What if teachers left their classes unattended in order to check on their own family members?
 - b. If the district were to decide to hold students in the schools for safety, how would it communicate this decision to all the schools and parents?
 - i. What would happen if staff members used their cellphones to tell their parent friends to rush to the schools to pick up their children?

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- c. How would the district communicate the decision to hold students without upsetting or frightening the students and staff members?
 - i. What if some staff members were to misunderstand the communications and respond in a way that unintentionally scares students?
2. Sheltering in Place
 - a. Does your emergency protocol include shelter-in-place procedures?
 - ii. If so, would you prepare to implement that protocol at this time, or would you wait for additional weather updates?
 - iii. Have you trained all of your principals on implementing shelter-in-place procedures?
 - i. What if some of the principals were to panic after realizing that their schools are not equipped to keep staff members and students overnight?
3. Communication with External Partners
 - a. Does your protocol include a way to communicate shelter-in-place decisions with local emergency management?
 - i. What if the staff member assigned to the task were to forget to contact local emergency management?
 - b. Do your schools have backup communication devices (such as satellite phones) for emergency communications with local emergency management?
 - i. What if employees misplaced the devices a few weeks earlier and failed to report the loss because the satellite phones are rarely used?

Now that your team has discussed these questions, keep reading to see how the hypothetical scenario unfolds with Inject #3.

Inject #3

It is now 3:00 p.m., the usual time for dismissal. The storm has turned into freezing rain, making every road impassable. A power surge knocks the backup generators offline, which causes the emergency lights to flicker on and off, and there are periods of darkness. The phone lines go down, and even cellphone service becomes unreliable as the storm blocks signals from radio towers. Switching from the radio to the weather monitor, you learn that the weather bureau predicts worsening conditions and says that all roads and bridges are unsafe for travel. Students and staff members grow restless from worry and watch the worsening weather conditions from classroom windows.

Discussion Questions

Answer the following questions:

1. Shelter-in-Place Planning
 - a. At this point, would you consider telling your schools to shelter in place?
 - i. How would you prepare to implement this decision?
 - ii. What if your schools' food service members forgot to stock enough nonperishable food for a shelter-in-place event?
 - b. Do the school emergency plans include a protocol for keeping students at school for several hours after the school day?
 - i. What steps would you take if this protocol does not exist?
 - ii. What if conditions were to improve in the evening but school buses were not available to take students home?
 - iii. What if the district were to make the decision to release students but schools misunderstood or did not receive the communication and refused to send students home?

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- c. Does each school's emergency plan include a protocol for explaining decisions to students in a trauma-informed, reassuring manner?
 - i. Are all staff members trained to properly convey difficult news to students?
 - ii. What if some staff members misunderstood communications and told their students to gather their belongings for dismissal?
- d. How would a power outage affect the schools?
 - i. Do staff members know how to reactivate the backup generators?
 - ii. What if the power were to stay out and no one knew how to restart the backup generators?
 - iii. What if operations staff members failed to test the emergency lights and the lights malfunctioned/shut off during the snowstorm?
- e. Do you have provisions in your shelter-in-place protocol to accommodate students and staff members with special needs?
 - i. How would a power outage affect specific populations, such as students and staff members with disabilities, access and functional needs, and medicinal requirements?
 - ii. How would you identify and address their needs in the midst of the emergency?
 - iii. What if the part-time school nurses left the schools early because administrative staff members had forgotten to alert them of shelter-in-place duties?

This concludes the exercise.

Conclusion

Now that you have concluded the exercise, it is time to debrief with your team and develop an after-action report to document lessons learned and changes you want to make to your school EOPs. In your debriefing, consider the following:

1. What did the exercise demonstrate about how your school district would respond to this type of emergency event?
2. What went well in the exercise?
3. What lessons did you learn?
4. What did the exercise reveal about the impact of human error in school safety planning/activation of emergency procedures?
5. How can this exercise guide human error awareness training for your district's school staff members?
6. How will you revise your EOPs and annexes?

Additional Development

The following resources provide additional support for handling the events presented in this tabletop exercise's fictional scenario. Exploring them can help you to fill in any knowledge or procedure gaps that you discovered. Self-education is a great way to proactively avoid human error.

[After-Action Reports: Capturing Lessons Learned and Identifying Areas of Improvement](#), Fact Sheet (REMS TA Center). After an emergency, it is important to gather feedback on the effectiveness of the school district's response. This fact sheet leads you through the process of completing an after-action report, which can help identify instances of human error that contributed to the emergency or difficulties during the response.

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[Be Prepared for a Power Outage](#), Fact Sheet (Federal Emergency Management Agency [FEMA]). This fact sheet shares information about power outages, as well as preparedness and protective actions that individuals can take to stay safe before, during, and after a power outage. Developing safety checklists and action steps based on such information can help avoid human error before, during, and after an emergency.

[Planning Considerations: Evacuation and Shelter-in-Place](#), Publication (FEMA). Reading guidance documents such as this one can help you to anticipate decision points and action steps that may invite human error.

[Power Outages](#), Web Page (FEMA). This webpage details actions to take before, during, and after a power outage. It also provides links to related information, such as generator safety, food safety, and safety considerations for those with disabilities or access and functional needs. Reading resources such as this before an emergency can help inform your EOP and prevent human error.

[Power Outage Tabletop Exercise](#), Training Exercise (REMS TA Center). Why not try another tabletop to strengthen your knowledge and look for instances of human error? This tabletop provides additional considerations for a school power outage scenario.

[Resources on Trauma-Informed Care for Schools Before, During, and After Possible Emergency Events](#), Publication (REMS TA Center). Trauma-informed care is an important part of a positive school climate and reducing instances of human error. This document lists resources on trauma-informed care, educator resilience, psychological first aid, and social, emotional, and behavioral recovery planning that are geared toward schools.

[The Role of School Facility Managers in School Safety Efforts](#), Webinar (REMS TA Center). When each staff member knows their role and follows through on their responsibilities, human errors are less likely to occur. This webinar explores the role of school facility managers in supporting school emergency operations plan development, including power outage planning.

[Shelter-in-Place Sample Annex](#), Publication (REMS TA Center). Functional annexes are an important part of any school EOP. By reviewing them regularly, schools can avoid human error while knowing what to do within their given circumstances.

[Multihazard Emergency Planning for Schools Site Index](#), Web Page (FEMA). This index links users to a variety of topic-specific emergency planning resources. Learning to anticipate emergency needs and preparing in advance is a great way to grow in avoiding human error.

[Shelter](#), Web Page (FEMA). Sheltering in place was a large part of the fictional scenario in this tabletop exercise. This webpage provides additional information on how to shelter well.

[Training Packages](#), Training (REMS TA Center). Training in advance for a variety of emergencies can help schools avoid knowledge-based mistakes.

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