An iterative public health process: Implementing novel hands-on learning to increase knowledge of emergency preparedness techniques in students.

Background

- Public Health Emergency Preparedness: "Capability of the public health and health care systems, communities, and individuals, to prevent, protect against, quickly respond to, and recover from health emergencies" (1)
- Young populations (teens and young) adults) and those with lower education levels are less likely to practice emergency preparedness habits (2).
- Experiential learning has great impacts on quality improvement learning (3).

Process

My Role:

Identify safety issues facing a group during an outdoor field experience. Develop emergency preparedness plan and communicate it with the audience.

Goal:

Expose students to emergency preparedness techniques through activities including bear patrol duties, first aid info session, fire starting activity, hiking safety game, and winter emergency tips handout.



Figure 1. Header from Bear Patrol sign up sheet for bear safety duties



Figure 2. Photo of the students' bracelets at the end of the day with the winner in the middle

Many students did not take their copy of the "Winter Emergency Kit" hand out at the end of the second field experience.



Scan the QR code above with your phones camera to view this document for yourself.

Hailey Peterson – Fall 2019

Students were very engaged in novel emergency preparedness activities such as fire starting, and activities with incentives such as the rubber band game for hiking safety.



Figure 3. Photo of two students tending to the fire they built together as a pod

Younger populations are less aware of emergency preparedness practices (2). In this study, I found that activities that are new to students as well as incentives, are more likely to pique their interest. Therefore, games, incentives, and novel activities should be used in public health programming to increase the awareness and experience of emergency preparedness activities and techniques among the younger population. Some limitations of this study were that there is no way to guarantee participation and there was not an ideal amount of time to cover these emergency preparedness techniques in more depth. In order to work around these limitations, I had to plan accordingly to increase engagement and use my time efficiently. In the future, I would like to research how increasing student's emergency preparedness knowledge and experience affects their attitudes toward nature and camping.



(1) Nelson, C., Lurie, N., Wasserman, J., & Zakowski, S. (2007). Conceptualizing and defining public health emergency preparedness. American Journal of Public Health, 97(S1), S9-11.

Health Communication: The 2015 MERS Outbreak in South Korea. *Health Communication*, 1-11. (3) Goldman, J. M., Kuper, A., & Wong, B. (2018). How Theory Can Inform Our Understanding of Experiential Learning in Quality

(2) Lee, M., You, M., & Ju, Y. (2019). The Effects of Social Determinants on Public Health Emergency Preparedness Mediated by Improvement Education. Academic Medicine, 93(12), 1784-1790.



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Discussion

Figure 4. Photo from a look out mount on Oberg mountain

