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Assessment of Disaster Preparedness Among Select Children's Summer Camps in the United States

Andrew N. Hashikawa, Stuart Bradin

Department Of Emergency Medicine, University of Michigan, Ann Arbor/MI/United States of America

Study/Objective: We assessed disaster preparedness among selected camps nationally for a range of disasters.

Background: Man-made and natural disasters are increasingly common. Summer camps are at-risk for multiple pediatric casualties during a disaster. Degree of disaster preparedness among summer camps is unknown.

Methods: We partnered with a national, web-based, health records system (CampDoc.com) to send camp leadership (315 camps) a 14-question online survey of disaster preparedness. One response from each camp was selected in the following order of importance: 1) Owner, 2) Director, 3) Physician, 4) Nurse, 5) Medical Technician, 6) Office Staff, and 7) Other. Results were analyzed using descriptive statistics.

Results: A total of 181 camp responses were received, of which 169 were complete. Camp types were Overnight (59.7%); Day (20.7%); Medical/Special Needs (14.2%); and Other (5.5%). Survey respondents were Directors (52.1%), Nurses (14.2%), Office Staff (10.1%), Physicians (5.3%), Owners (5.3%), and Other (11.2%). Almost 18% of camps were located >20 miles from a major medical center, and 36% greater than five miles from police/fire departments. Many camps were missing emergency supplies: car/booster seats for evacuation (68%), shelter (35%), vehicles for evacuation (26%), quarantine isolation area (21.3%), or emergency supplies of extra water (20%) or food (17%). Plans were unavailable for the following: Power outage (23%); Lockdown (15%); Illness outbreak (15%); Tornado (11%); Evacuation for fire, flood, or Chemical spill (9%); and other severe weather (8%). Many camps did not have online emergency plans (53%); plans for special-needs children (38%); methods to rapidly communicate information to parents (25%); or methods to identify children for evacuation/reunification (40%). Respondents reported staff did routinely participate in disaster drills: Weather (37%); Evacuation (49%); or Lockdown (59%). The majority (75%) had not collaborated with medical organizations for planning.

Conclusion: A substantial proportion of camps were missing critical components of disaster planning. Future interventions must focus on increasing partnerships and developing disaster guidelines for summer camps.

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Challenging Assumptions: What do we Need to Address in our Disaster Risk Reduction Efforts?

Tudor A. Codreanu¹, Hanh Ngo¹, Andrew Robertson², Antonio Celenza¹

1. University of Western Australia, Perth/WA/Australia

2. Disaster Management, Regulation And Planning, Public Health Division, Department Of Health, Government of Western Australia, Perth/Australia

Study/Objective: To propose a novel, collective, and comprehensive measure of disaster survival knowledge and skills in the critical first 72 hours; explore its relationship with a series of independent predictors, including country-specific characteristics; and explore its relationship with independent predictors, perceived entities responsible for DRE, and selected interactions.

Background: Specific knowledge and skills are required, especially in the first 72 hours post-disaster, to bridge the time gap until essential services are restored and emergency services can focus on individuals' needs. This study explores disaster knowledge and preparedness in the first 72 hours, as a function of the individual's engagement in discussions about disasters, and several other factors (both at personal and community/country level), as well as the entities/organizations perceived by the individual as being responsible for disaster risk reduction education.

Methods: A prospective, cross-sectional survey of 3,829 final year high-school students was conducted in nine countries with different levels of disaster risk and economic development. Regression analyses examined the relationship between a 72-hour disaster preparedness composite outcome (ability to make water safe for drinking, knowledge of water potability, home evacuation skill, improvising a safe room) and a series of independent predictors.

Results: Respondents from countries with lower economic development were significantly better prepared for the first 72 hours post-disaster than those from developed countries (OR = 767.45; CI = 13.75-48,822.94; $P = .001$). While several independent predictors showed a significant main effect, combined disaster risk education efforts as a partnership between school and local government had the best predictive value (OR = 3.52; CI = 1.48-8.41; $P = .005$).

Conclusion: Disaster preparedness in final year high school students is significantly better in developing countries. Further improvement requires a convergent effort in aligning the most effective educational policies and actions to best address individual and community needs.

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