

Health and Safety Practices of Public Elementary Schools in Atimonan District, Division of Quezon: Basis for A Strengthened Contingency Plan

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Abstract. This comparative-descriptive study determined the health and safety practices of public elementary schools in the Atimonan District, Division of Quezon, across School Years 2023 and 2026. Specifically, it assessed the level of availability of health and safety kits, medical devices, school emergency kits, aid kits, and teachers' emergency kits; the level of adherence to safety guidelines; the level of implementation of health and safety measures; and the challenges encountered by students, teachers, and school personnel. Seventy-eight (78) respondents composed of school heads, School DRRM coordinators, and Barangay DRRM coordinators were included through total enumeration. Data were gathered using a researcher-made questionnaire and validated through direct observations in schools, then analyzed using weighted mean, standard deviation, and Mann-Whitney U test. Findings revealed that the availability of health and safety resources and adherence to safety guidelines remained generally stable across both school years, indicating no significant differences. However, a significant decline was observed in the implementation of health and safety measures, while challenges encountered by respondents significantly increased over time. These results indicate that although resources and policies were sustained, gaps exist in actual implementation and operational execution. Based on these findings, a Strengthened Contingency Plan (SHIELD) was developed to address implementation gaps, enhance coordination, and strengthen school preparedness and resilience to ensure a safe and supportive learning environment.

Introduction

Educational institutions play a vital role in promoting and maintaining the health and safety of learners and school personnel, as these are essential components of a conducive and effective learning environment. Schools serve as primary venues where learners spend a significant portion of their time; thus, ensuring a safe, secure, and healthy environment is crucial not only for their physical well-being but also for their academic performance, mental health, and overall development. A school that prioritizes health and safety creates an atmosphere where learners can actively participate, engage in meaningful learning experiences, and develop holistically.

In support of this, national policies and educational standards mandate public elementary schools to implement comprehensive health and safety practices. In recent years, particularly in the post-pandemic period, there has been an increased global and national emphasis on strengthening school health systems, disaster risk reduction, and emergency preparedness in basic education. Schools are now expected to adopt more resilient and responsive health protocols, including improved disease surveillance, enhanced sanitation practices, mental health and psychosocial support services, and strengthened emergency response mechanisms. These include the provision and availability of health and safety kits, adherence to established school safety guidelines, and the effective implementation of health and safety measures such as health monitoring systems, school clinic services, emergency preparedness protocols, and communication strategies. These practices are designed to minimize risks associated with accidents, communicable diseases, disasters, and other hazards that may occur within the school setting. Furthermore, the collaboration of schools with local government units, health authorities, and other stakeholders strengthens the delivery and sustainability of these safety initiatives.

The availability of health and safety kits is one of the most fundamental components of school preparedness. These kits, which include health and hygiene materials, emergency kits for learners, medical devices, first aid kits, and teacher emergency kits, enable immediate response to health-related incidents and emergencies. When properly maintained and readily accessible, these resources help prevent the escalation of injuries and illnesses, thereby ensuring the continuous safety of learners and school personnel. However, disparities in resource allocation and maintenance practices may affect the adequacy and functionality of these kits across schools.

Equally important is the adherence to school safety guidelines, which ensures that safety standards are consistently observed within the school environment. This includes maintaining safe learning facilities, implementing effective school disaster management systems, and integrating risk reduction and resilience education into school practices. Adherence to these guidelines not only reduces vulnerabilities to hazards but also promotes a culture of safety and preparedness among learners and school personnel. Nevertheless, varying levels of compliance and implementation may influence the effectiveness of these safety measures.

In addition, the implementation of school health and safety measures plays a crucial role in protecting the well-being of the school community. These measures include the collection and reporting of health information, daily health monitoring, temperature checks, provision of school clinic services, delivery of health education and communication, psychosocial support, and the presence of isolation facilities. When effectively implemented, these measures contribute to early detection of health risks, timely intervention, and the prevention of disease transmission within schools. However, the successful implementation of these practices is often challenged by factors related to students, teachers, and the school system itself. Despite existing policies and structured programs, challenges continue to affect the implementation of health and safety practices in public elementary schools, including student awareness and compliance issues, teacher workload and training limitations, and inadequate school resources and facilities. These concerns highlight the need to assess the current status of school health and safety practices.

Furthermore, examining changes over time is essential in evaluating progress and identifying trends and gaps. A comparative analysis of 2023 and 2026 provides insights into improvements and persistent challenges, supporting a data-driven understanding of school safety practices.

The results of this study will serve as a basis for a strengthened contingency plan aimed at improving school preparedness, response mechanisms, and overall safety for learners and personnel.

Methodology

This study utilized a **descriptive-comparative research design** to examine and compare the health and safety practices of public elementary schools in Atimonan District, Division of Quezon. It specifically assessed the availability of health and safety kits, adherence to safety guidelines, implementation of health and safety measures, and challenges encountered during School Years 2023 and 2026. The descriptive component was used to present the status of practices based on a 2023 survey, while the comparative component analyzed differences between the 2023 data and 2026 observational findings to identify trends, gaps, and changes over time without manipulating variables.

The study was conducted in **26 public elementary schools in Atimonan District, Quezon Province**, involving a total enumeration of **78 respondents**, composed of school heads, School DRRM coordinators, and Barangay DRRM coordinators. For the 2023 phase, data were gathered through a structured researcher-made questionnaire, while the 2026 phase involved direct observation to validate actual implementation of health and safety practices. This combination of survey and observation ensured more reliable and comprehensive data. The researcher also obtained necessary permissions before data collection and ensured coordination with school and community stakeholders.

The research instrument was a validated **researcher-made questionnaire** based on DepEd, DOH, and related policy guidelines, supported by direct observation to strengthen data accuracy. Data were analyzed using **mean and standard deviation** to describe levels of practices, while the **Mann-Whitney U test** was used to determine significant differences between the two school years. A Likert scale was used to interpret availability, adherence, implementation, and level of challenges. The findings were further used as basis for proposing a strengthened contingency plan to improve school health and safety systems.

Results and Discussion

This chapter presents, analyzes, and interprets the data gathered from the survey questionnaire and the researcher's on-site observations on the health and safety practices of public elementary schools in Atimonan District, Division of Quezon,

comparing School Years 2023 and 2026. The presentation is organized based on the study's Statement of the Problem (SOP), focusing on three major areas: (1) availability of school health and safety kits, (2) adherence to school safety guidelines, (3) implementation of health and safety measures, and (4) challenges encountered. Descriptive statistics such as mean and standard deviation were used to determine the level of practices, while the Mann-Whitney U test was used to determine significant differences between the two school years.

Based on the findings observed by the researcher and reported by the respondents, the availability of school health and safety kits remained stable at a Fully Available level across both school years. However, variations were observed across sub-indicators such as health and hygiene kits, emergency kits for learners, medical devices, school emergency kits, aid kits, and teacher emergency kits, with some showing slight improvements while others declined. In terms of adherence to school safety guidelines, results revealed a consistently High Level of Practice across safe learning facilities, school disaster management, and risk reduction and resilience education, although slight decreases were observed in some indicators. For the implementation of school health and safety measures, findings showed a decline from Highly Practiced to Moderately Practiced, particularly in temperature checks, school clinic services, isolation facilities, and daily operational monitoring, as confirmed through researcher observations. Meanwhile, education and communication and psychosocial support showed slight improvement or relative stability.

In terms of challenges encountered, results revealed a gradual increase in student-, teacher-, and school-related challenges from 2023 to 2026, although still interpreted as Slightly Serious Challenges. These include issues on compliance and awareness among students, workload and resource limitations among teachers, and insufficient facilities, manpower, and coordination at the school level. Overall, the Mann-Whitney U test revealed that there is no significant difference in the availability of health and safety kits and adherence to safety guidelines, while significant differences were found in the implementation of health and safety measures and challenges encountered. This indicates that while structural resources and policies remain stable, the actual implementation and operational effectiveness have declined over time. These findings, as validated through researcher observation, highlight the need to strengthen monitoring systems, improve resource utilization, and enhance implementation strategies to ensure the sustainability of school health and safety practices, as addressed in the proposed SHIELD contingency plan.

Conclusion and Recommendations

This study examined the health and safety practices of public elementary schools in the Atimonan District, Division of Quezon, focusing on the availability of health and safety kits, adherence to safety guidelines, implementation of health and safety measures, and challenges encountered by respondents. A comparative-descriptive research design was employed involving 78 respondents, utilizing data gathered through survey questionnaires in 2023 and researcher observation in 2026. Weighted mean and Mann-Whitney U test were used to analyze the data. The study aimed to determine the level of health and safety practices over time and identify significant differences between the two school years, which served as the basis for developing the SHIELD (Strengthening Health and Integrated Emergency Level Defense in Schools) Contingency Plan.

Overall findings revealed that the availability of health and safety kits remained stable from SY 2023 to SY 2026, with no significant difference observed, indicating sustained provision of essential resources. Likewise, adherence to school safety guidelines remained consistently high and statistically unchanged, showing continued compliance with established safety standards. However, a significant decline was found in the implementation of health and safety measures, particularly in temperature monitoring, school clinic services, and isolation facilities, indicating weaker execution of operational health protocols in SY 2026. In addition, challenges encountered by teachers, learners, and school personnel significantly increased over time, particularly in terms of workload, resource limitations, staffing, and facility constraints.

In conclusion, while schools maintained stable access to health and safety resources and consistently adhered to safety guidelines, the effectiveness of implementation declined, accompanied by increasing challenges that affected overall operational efficiency. These findings suggest that the sustainability of school health and safety practices depends not only on the availability of resources and policies but more importantly on consistent implementation and adequate institutional support. Based on these results, it is recommended that schools strengthen implementation mechanisms, enhance monitoring systems, and provide continuous capacity-building for stakeholders. The adoption of the SHIELD Contingency Plan is strongly recommended to address identified gaps, improve coordination, and reinforce school preparedness and resilience.

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Competing Interests Statement

The authors declare that there are no known competing financial or personal relationships that could have influenced the findings, interpretation, or presentation of this study.

Data Availability Statement

The data used in this study were obtained from survey responses and researcher observation conducted for academic purposes. The datasets are not publicly available due to ethical considerations and institutional restrictions, but may be made available from the corresponding author upon reasonable request, subject to approval.

References

- Campbell, R. (2021). *School isolation rooms and infection control in educational settings*. <https://scholar.google.com>
- Centers for Disease Control and Prevention. (2021). *School health guidelines to prevent disease transmission*. <https://www.cdc.gov/healthyschools>
- Cruz, M. (2022). *School clinic services and health protocol implementation in Philippine schools*. <https://scholar.google.com>
- DepEd. (2019). *DepEd Order No. 32, s. 2019: Policy guidelines on school-based DRRM*. <https://www.deped.gov.ph>
- DepEd. (2020). *DepEd Order No. 14, s. 2020: Guidelines on the required health standards in basic education schools*. <https://www.deped.gov.ph>
- DepEd & Department of Health. (2022). *Joint Memorandum Circular No. 1, s. 2022*. <https://www.deped.gov.ph>
- Esposito, S., Cotugno, N., & Principi, N. (2021). *School health safety compliance and implementation challenges*. <https://scholar.google.com>
- Garcia, A. B., et al. (2023). *School health kits and monitoring systems*. <https://scholar.google.com>
- Hemachandra, K., Haigh, R., & Amaratunga, D. (2021). *Multi-stakeholder collaboration in disaster risk reduction*. <https://scholar.google.com>
- Johnson, B., & Carter, D. (2021). *Classroom overcrowding and compliance with health protocols*. <https://scholar.google.com>
- Kim, J., & Park, S. (2019). *Integrated school health systems and student outcomes*. <https://scholar.google.com>
- Lee, S., et al. (2022). *Psychosocial support in schools during crises*. <https://scholar.google.com>
- Shaw, R., Sakurai, A., & Oikawa, Y. (2021). *Disaster resilience education in schools*. <https://scholar.google.com>
- UNDRR, UNESCO, & UNICEF. (2017). *Comprehensive school safety framework*. <https://www.preventionweb.net>
- United Nations Office for Disaster Risk Reduction. (2020). *Global assessment report on disaster risk reduction*. <https://www.undrr.org>
- UNESCO. (2021). *Reimagining our futures together: A new social contract for education*. <https://unesdoc.unesco.org>
- UNICEF. (2020). *School health systems and emergency preparedness*. <https://www.unicef.org>
- UNICEF. (2021). *Safe schools and WASH programs*. <https://www.unicef.org>

World Health Organization. (2020). *Considerations for school-related public health measures in the context of COVID-19*. <https://www.who.int/publications/i/item/considerations-for-school-related-public-health-measures-in-the-context-of-covid-19>

World Health Organization. (2021). *School sanitation and hygiene guidelines*. <https://www.who.int>

Appendices

No appendices are attached to this study.