



Internet Journal of Allied Health Sciences and Practice

Volume 18 | Number 2

Article 6

March 2020

An Examination of Policy and Procedure Practices of Secondary School Athletic Trainers

Micaela Dunbar-Gaynor
Adrian College, mdunbar-gaynor@adrian.edu

Ericka P. Zimmerman
Western Carolina University, epzimmerman@wcu.edu

Victor Liberi
Adrian College, vliberi@adrian.edu

Follow this and additional works at: <https://nsuworks.nova.edu/ijahsp>



Part of the [Sports Medicine Commons](#)

Recommended Citation

Dunbar-Gaynor M, Zimmerman EP, Liberi V. An Examination of Policy and Procedure Practices of Secondary School Athletic Trainers. *The Internet Journal of Allied Health Sciences and Practice*. 2020 Mar 17;18(2), Article 6.

This Manuscript is brought to you for free and open access by the College of Health Care Sciences at NSUWorks. It has been accepted for inclusion in *Internet Journal of Allied Health Sciences and Practice* by an authorized editor of NSUWorks. For more information, please contact nsuworks@nova.edu.

An Examination of Policy and Procedure Practices of Secondary School Athletic Trainers

Abstract

Purpose: The purpose of this study was to identify and describe the status of P&P practices of secondary school athletic trainers. **Methods:** Following an online informed consent confirmation, participants completed a Policies and Procedures Status questionnaire, including demographics. This was distributed to certified athletic trainers currently employed in the secondary school setting in the United States. The survey consisted of 49 questions about the status of P&Ps using one of the following responses: the practice is in operation and it appears in written form; the practice is in operation but does not appear in written form; the practice is not in operation but does appear in written form; and the practice is not in operation and it does not appear in written form. This study utilized descriptive statistics, consisting of means, frequencies, and percentages, to report results that described the current status of policies and procedures. **Results:** There was a total of 232 participants. 72.6% of secondary school athletic trainers had existing P&P manuals and 37.9% reported the P&P manual existed when they acquired the position. 31.9% who did not have an existing P&P manual upon starting their position never developed a manual. 45.7% of all P&Ps were reported to exist in both written and operational form and 25.9% reported having neither written nor operational forms of P&Ps. 54.5% used the BOC Guiding Principles for AT Policy and Procedure Development and 45.2% used the BOC Facility Principles document. **Conclusion:** The results revealed almost half of participants reported the risk management practices in the P&P manual were in operational and written form. P&Ps that have been described in NATA Position Statements were more likely to be in both written and operational form when compared to those that were not. Secondary school athletic trainers may have limited guidance and training in risk management, with even less guidance on resources specifically for developing and reviewing P&Ps.

Author Bio(s)

Micaela Dunbar-Gaynor, MS, ATC, EMT is a post-graduate student in Livonia, Michigan.

Ericka P. Zimmerman, EdD, LAT, ATC is an Associate Professor and School Director for the School of Health Sciences at Western Carolina University in Cullowhee, North Carolina.

Victor Liberi, MS, LAT, ATC is an Associate Professor of Exercise Science and Athletic Training at Adrian College in Adrian, Michigan.



The Internet Journal of Allied Health Sciences and Practice

Dedicated to allied health professional practice and education

Vol. 18 No. 2 ISSN 1540-580X

An Examination of Policy and Procedure Practices of Secondary School Athletic Trainers

Micaela Dunbar-Gaynor¹

Ericka P. Zimmerman²

Victor Liberi¹

1. Adrian College

2. Western Carolina University

United States

ABSTRACT

Purpose: The purpose of this study was to identify and describe the status of policy and procedure (P&P) practices of secondary school athletic trainers. **Methods:** Following an online informed consent confirmation, participants completed a Policies and Procedures Status questionnaire, including demographics. This was distributed to certified athletic trainers currently employed in the secondary school setting in the United States. The survey consisted of 49 questions about the status of P&Ps using one of the following responses: the practice is in operation and it appears in written form; the practice is in operation but does not appear in written form; the practice is not in operation but does appear in written form; and the practice is not in operation and it does not appear in written form. This study utilized descriptive statistics, consisting of means, frequencies, and percentages, to report results that described the current status of policies and procedures. **Results:** There was a total of 232 participants; 72.6% of secondary school athletic trainers had existing P&P manuals and 37.9% reported the P&P manual existed when they acquired the position; 31.9% who did not have an existing P&P manual upon starting their position never developed a manual; 45.7% of all P&Ps were reported to exist in both written and operational form; and 25.9% reported having neither written nor operational forms of P&Ps. Fifty four percent (54.5%) used the Board of Certification (BOC) Guiding Principles for AT Policy and Procedure Development and 45.2% used the BOC Facility Principles document. **Conclusion:** The results revealed almost half of participants reported the risk management practices in the P&P manual were operational and in written form. P&Ps that have been described in NATA Position Statements were more likely to be in both written and operational form when compared to those that were not. Secondary school athletic trainers may have limited guidance and training in risk management, with even less guidance on resources specifically for developing and reviewing P&Ps.

Key Words: policy and procedure, secondary schools, athletic trainers, risk management

INTRODUCTION

Policy and procedure manuals assist in organizing the athletic training department's risk management policies. Risk management has been defined as "reducing or eliminating the risk of injury and death and potential subsequent liability that comes about through involvement with sport and recreation programs and services."¹ Risk management is a means to identify and decrease risk using a systematic plan of action.² To minimize risk of liability for athletic injuries, a comprehensive risk management plan is needed to guarantee that policies, procedures, and current practice standards are upheld.³ Practice standards and position statements, along with local and state laws, are used when creating or updating the policy and procedure manuals to incorporate the most current risk management strategies.

Policy and procedures manuals assist in organizing the athletic training department's risk management policies for daily functions as well as preparation for emergency situations. These manuals provide clarity and consistency for the athletic health care team with daily operations or emergency situations.⁴ Laws and regulations are updated at a rapid pace and it can be difficult to keep up with best practices as well as local, state, and federal laws. Annual update of policies and procedures in accordance with these laws keeps policy and procedure practices current, which can help with risk management and hopefully prevent litigation.⁴ Previous research assessing the extent which secondary school athletic trainers address important risk management topics within the policy and procedure manual is minimal.

As stated in the Board of Certification (BOC) *Guiding Principles for Athletic Training (AT) Policies and Procedure Development*, policies and procedures are a critical component of a risk management plan that provides clarity when dealing with issues and activities that are critical to health and safety, legal liabilities, and regulatory requirements.⁴ A policy and procedure manual guides operations in the AT facility. This can include daily functions such as documentation. It can also include response to injuries and emergencies from sudden cardiac arrest to environmental dangers. The National Athletic Trainers' Association (NATA) also published a sample outline of policies and procedures titled "standard operating policies and procedures" as a guideline for what an athletic training department should include in the manual.⁵

Additionally, the literature has suggested that the ATs have a very active role in the creation and continuous review of the athletic training department's policies and procedures. The athletic health care provider's role is to participate in the creation and execution of policies and procedures, as well as having written policies in place concerning injury-management, return-to-play decisions, and emergency action plans.⁶⁻⁹ One study reported the percentage of athletic trainers that had an established and written policy and procedure manual. The study examined policy and procedure practices of collegiate athletic trainers and reported that 79.7% of all those who responded to the survey had an existing written policy and procedure manual.¹⁰ Zimmerman¹⁰ separated the status of policies and procedures by categorizing them as being written or in operation – in operation meaning the policy is used.¹⁰ Based on responses, it was reported that 35.3% of respondents reported periodic review of the manual existing in written form and in operation, 32.3% only reported it existing in operation, 7.1% reported it was only written, and 25.3% reported it existed neither in written form nor in operation.¹⁰ Additionally, 33.1% had written and active operations to consult others in the development of the manual, 44.3% had active operations only, 3.9% had only written and 18.6% had neither.¹⁰

No previous research has identified the percentage of ATs in the secondary school setting that have an established policy and procedure manual. Moreover, previous research has not investigated the extent that the policy and procedure manual addresses individual risk management topics in the secondary school setting.

METHODS

The Policies and Procedures Questionnaire was distributed to 4000 ATs in the secondary school setting in the United States who were certified athletic trainers currently employed in the secondary school setting. The survey was conducted using a Google Form. A cover e-mail message described the purpose and importance of the study, with a link to the survey. Participants were asked to complete an informed consent form prior to completing the questionnaire. Participants completed the survey by clicking on the appropriate boxes. Two e-mail reminders were sent at two-week intervals. The Institutional Review Board at Adrian College approved this study.

Survey Instrument

This was a descriptive study using two types of questions to describe policy and procedure status. The Policies and Procedures Status questionnaire was created by the current researcher with inspiration from Zimmerman's study on collegiate schools; this instrument had an acceptable reliability ($\alpha=.70$).¹⁰ The survey consisted of 49 questions about the status of specific policies and procedures using one of the following responses: the practice is in operation and it appears in written form; the practice is in operation but does not appear in written form; the practice is not in operation but does appear in written form; and the practice is not in operation and it does not appear in written form. Demographic questions were asked, including questions about age, sex,

state, employment setting, years employed total, years employed at current setting, employment model, work hours per week, level of education, educational path, resource use, and policy and procedure manual existence.

Data Collection and Analysis

Data were obtained from analysis of results utilizing the Statistical Package for Social Sciences (version 25, SPSS, Inc., Chicago, IL). This study utilized descriptive statistics consisting of means, frequencies, and percentages to report results that described the current status of policies and procedures.

RESULTS

From a sample size of 4000 (n=4000), 253 surveys were completed for a response rate of 6.33%. Of the 253 responses, 232 participants were selected for the final data analysis. The inclusion criteria for this study were 1) a certified athletic trainer, 2) currently working in the secondary school setting, and 3) living in the United States. Twenty-one participants were eliminated from the final analysis for not meeting the inclusion criteria: twenty participants reported not being currently employed at a secondary school and one participant was eliminated for not currently living in the United States.

Participants in this study reported a variety of degree levels: 28.9% (n=67) of participants earned a bachelor's degree, 69.0% (n=160) earned a master's degree and 1.7% (n=4) earned a doctoral degree; 0.4% (n=1) did not respond. The mean age of the participants was 37.9 ± 11.8 with a range of 22 to 70 years of age; 57.3% of participants were female (n=133), 41.8% were male (n=97) and 0.9% (n=2) did not respond. Additional demographic data are presented in Table 1.

Table 1. Demographic Information of Participants

| | N | Minimum | Maximum | M | SD |
|-----------------------------------|-----|---------|---------|------|------|
| Years of Certification | 230 | 1 | 46 | 14.2 | 10.8 |
| Years in Secondary School Setting | 231 | <1 | 42 | 11.8 | 9.9 |
| Years in Current Position | 230 | <1 | 35 | 8.5 | 8.1 |
| Average Hours Per Week | 230 | 7 | 80 | 42.0 | 14.5 |
| Age of Participant | 224 | 22 | 70 | 37.9 | 11.8 |

Individual Policy and Procedure Status

In the first part of the survey, 49 policies and procedures were identified and participants were prompted to describe the status of the policy or procedure using one of the following options: 1) the practice is in operation, and it appears in written form, 2) the practice is in operation, but it does not appear in written form, 3) the practice is not in operation, but it does appear in written form, 4) the practice is not in operation, and it does not appear in written form. These 49 variables were individually evaluated to examine the extent to which secondary school athletic trainers in the United States reported their policy and procedure manuals address these important risk management topics. Overall, the highest frequency for the status of policies and procedures evaluated in this study was the existence of both operational and written form (45.7%). This category was followed by the second highest category of neither written nor operational form (25.9%), followed by operational only (24.4%) and finally the least common category of policies and procedures existing in written form only (4.8%). Responses to individual items are listed in Table 2.

Table 2. Status of Individual Policies and Procedures in Secondary Schools (Percent)

| | Operation & Written | Operation Only | Written Only | Neither |
|---|---------------------|----------------|--------------|---------|
| Annual Review of P&P | 49.8% | 25.5% | 9.1% | 15.6% |
| Consulting the Physician on P&P | 33.6% | 30.6% | 10.3% | 25.4% |
| Consulting other ATs on P&P | 31.3% | 38.3% | 1.8% | 28.6% |
| Consulting EMS on P&P | 16.4% | 28.9% | 10.3% | 44.4% |
| Consulting Athletic Director on P&P | 44.0% | 40.5% | 3.0% | 12.5% |
| Consulting the School Nurse on P&P | 17.7% | 36.2% | 6.0% | 40.1% |
| Consulting Legal Counsel on P&P | 13.4% | 17.8% | 8.7% | 60.2% |
| Consulting School Counselor on P&P | 7.4% | 17.0% | 6.5% | 69.1% |
| In-service on HIPAA/FERPA & privacy | 26.3% | 21.1% | 7.3% | 45.3% |
| In-service on OSHA/Blood-borne pathogens training | 40.7% | 17.8% | 5.6% | 35.9% |
| In-service on CPR/AED training | 67.7% | 19.8% | 1.3% | 11.2% |
| In-service on Communicable Disease | 36.2% | 23.3% | 3.5% | 37.1% |
| Assumption of Risk | 53.5% | 13.8% | 4.7% | 28.0% |

| | | | | |
|---------------------------------------|--------------|--------------|-------------|--------------|
| Confidentiality/Security | 54.4% | 24.8% | 3.5% | 17.4% |
| Release of Information | 53.9% | 22.8% | 3.0% | 20.3% |
| PPE Completion/Documentation | 82.3% | 10.0% | 2.2% | 5.6% |
| Consent to Treat | 70.7% | 15.1% | 1.3% | 12.9% |
| Concussion Baseline Testing | 72.4% | 10.8% | 3.5% | 13.4% |
| EAP in Venues | 81.9% | 9.5% | 4.7% | 3.9% |
| Concussion Management | 88.7% | 6.9% | 1.7% | 2.6% |
| Spinal Injury | 55.6% | 37.1% | 1.3% | 6.0% |
| Equipment Removal | 47.4% | 43.1% | 1.7% | 7.8% |
| Asthma | 53.5% | 37.0% | 1.3% | 8.3% |
| Heat Illness | 70.0% | 21.7% | 3.5% | 4.8% |
| Weather Emergency | 74.5% | 17.3% | 2.6% | 5.6% |
| Exertional Sickling | 37.0% | 33.5% | 2.2% | 27.4% |
| Weapons Management | 43.7% | 14.7% | 8.2% | 33.3% |
| Sudden Cardiac Arrest | 71.9% | 20.4% | 3.0% | 4.8% |
| Wound Care | 56.5% | 33.2% | 1.7% | 8.6% |
| Chemical/Substance Abuse | 37.2% | 26.8% | 6.1% | 29.9% |
| Physical/Sexual/Emotional Abuse | 54.8% | 19.6% | 3.0% | 22.6% |
| Diabetes | 48.9% | 30.3% | 1.3% | 19.5% |
| Eating Disorder | 31.0% | 32.8% | 3.9% | 32.3% |
| Pregnancy | 10.8% | 25% | 7.8% | 56.5% |
| Weight Management | 26.3% | 33.2% | 35.0% | 37.1% |
| Return to Play | 74.6% | 19.8% | 0.9% | 4.7% |
| Prescription Drug Storage/Use | 41.7% | 13.9% | 5.2% | 39.1% |
| OTC Drug Storage/Use | 48.3% | 16.5% | 4.8% | 30.4% |
| Referral to a Physician | 54.6% | 37.5% | 2.2% | 10.8% |
| Referral to a Physical Therapist | 35.8% | 33.6% | 2.6% | 28.0% |
| Referral to a Nutritionist | 9.9% | 28.9% | 7.3% | 53.9% |
| Referral for Mental Health | 26.8% | 34.2% | 5.2% | 33.8% |
| Modality Annual Inspection | 34.6% | 28.1% | 3.5% | 33.8% |
| Facility Cleaning | 37.1% | 38.8% | 4.3% | 18.8% |
| GFI Annual Inspection | 28.5% | 24.6% | 4.0% | 43.0% |
| Athletic Trainer Job Outline | 75.0% | 11.6% | 3.5% | 9.9% |
| Physician Job Outline | 46.3% | 24.2% | 3.9% | 25.5% |
| Athletic Training Student Job Outline | 45.2% | 16.2% | 4.0% | 34.7% |
| Graduate Assistant Job Outline | 21.4% | 9.2% | 3.1% | 66.4% |
| Overall | 45.7% | 24.4% | 4.8% | 25.9% |

Note: N = 232, P&P = policies and procedures manual.

Policy and Procedure Manual

In addition to the status of individual policies and procedures, participants were asked about the existence of a completed P&P manual both currently and preceding their arrival at the secondary school. A majority of participants indicated a P&P manual was in existence (72.6%); however, it was not in existence before they arrived at the secondary school (62.1%). Policy and procedure manual information can be seen in Tables 3 and 4. Table 5 indicates BOC resources utilized in the development of P&Ps.

Table 3. Status of Policy and Procedure Manual

| | N | Yes | No |
|-----------------------------------|-----|-------|-------|
| Currently Established P&P Manual | 230 | 72.6% | 27.4% |
| Previously Established P&P Manual | 232 | 37.9% | 62.1% |

Table 4. Changes to Policy and Procedure Manual

| If Previously Established | % |
|---|----------|
| I adopted the existing policies and procedures manual. | 35.2% |
| I created a new policies and procedures manual. | 11.4% |
| I made changes to the existing policies and procedures manual. | 53.4% |
| If Not Previously Established | |
| I developed a new policies and procedures manual. | 64.5% |
| I did not develop a policies and procedures manual. | 31.9% |
| I assigned the task of developing the policies and procedures manual to someone else. | 3.6% |

Table 5. Board of Certification (BOC) Resources Used

| | N | Yes | No |
|--|----------|------------|-----------|
| BOC Guiding Principles for AT Policy & Procedure Development | 231 | 54.5% | 45.5% |
| BOC Facility Principles | 230 | 45.2% | 54.8% |

DISCUSSION

The purpose of this study was to determine the extent to which secondary school P&P manuals exist and address important risk management topics. Policy and procedure practices exist in order to organize the athletic training department's risk management practices in preparation for every day and emergency situations. In order to improve organization and preparedness in secondary school athletic training departments, the current status of P&P manuals must be observed; unfortunately, there is little research on the status of P&P manuals in secondary schools.

This study identified nearly three-quarters (72.6%) of secondary school athletic trainers participating in the study had existing P&P manuals (Table 3). Of those athletic trainers that reported having an existing manual in the secondary school setting, less than half (37.9%) reported the P&P manual existed when they acquired the position (Table 4). A third of the participants (31.9%) who did not have an existing P&P manual to work with upon starting their position never developed a manual (Table 4). P&Ps provide guidance and structure to athletic trainers to optimize the standard of care for the patients. In the secondary school athletic training room, the development, implementation, and revision of P&Ps is often the responsibility of the athletic trainer. However, the secondary school athletic trainer may have limited guidance and training in risk management, with even less guidance on resources specifically for the P&P manual. A clearinghouse does not exist that provides best practices in risk management or P&P development for the secondary school athletic training room. There are, however, professional position statements and multi-disciplinary consensus statements that outline best practices. In addition, there is no accrediting body with established standards governing athletic training facilities as there are for other health care professions, such as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) or the Commission on Accreditation of Rehabilitation Facilities (CARF). However, the BOC does offer several tools outlining best practices for facilities, policies, and procedures.^{4,11}

To be effective, P&Ps should be in written form and operationalized into daily practice. According to the review of 49 different policies and procedures, the highest frequency for the status of P&Ps evaluated in this study was the existence of both operational and written form (45.7%), followed by the second highest category of neither written nor operational form (25.9%), followed by operational only (24.4%) and finally the least common category of policies and procedure existing in written form only (4.8%) (Table 2). These results follow the same pattern as Zimmerman's research on collegiate athletic training department P&Ps.¹⁰ The data suggests athletic trainers, whether in the secondary school or university setting, are not consistently developing and implementing P&Ps both in a written form and operationalizing them into daily practice. What is not known is why there is an inconsistency. Athletic trainers could be unaware of professional position statements and multi-disciplinary consensus statements that outline best practices. The employment status of athletic trainers could also be a factor; for example, an athletic trainer employed part-time or hourly/contractually may not have the time to draft and implement a P&P compared to one who is employed full-time by the secondary school.

The BOC Facility Principles is a tool for assessing policies, procedures, and facilities in athletic healthcare settings.¹¹ Published in 2013, this tool has specific information on Electrical Safety and Privacy and Confidentiality.¹¹ In this study, 43.0% of secondary school athletic trainers indicated they did not have a written or operational P&P for GFI annual inspection, and 45.4% did not have

a P&P for periodic in-services on HIPAA/FERPA. This study did ask secondary school athletic trainers if they used the BOC Facility Principles as a resource, with 45.2% responding "yes" (Table 5).¹¹ Results from this study suggest a lack of awareness or use of resources by half of secondary school athletic trainers. What is unknown from this study is why or how secondary school athletic trainers have determined which P&Ps should be developed, and if developed, why they might not be in written and operational form.

In this study, secondary school athletic trainers were asked who they consulted when developing and reviewing P&Ps. The responses indicate secondary school athletic trainers did not have a written or operational policy in place for consulting personnel on the development and review of policies and procedures, including supervising physician (25.4%), emergency medical personnel (44.4%), athletic director (12.5%), school nurse (40.1%), school counselor (69.1%), other athletic trainers (28.6%), and legal counsel (60.2%). In contrast, secondary school athletic trainers reported having P&Ps in written and operational form for situations with a high probability of interacting with other healthcare or administrative personnel, such as emergency action plans (EAP) in venues (81.9%), spinal injury (55.6%), heat illness (70.0%), sudden cardiac arrest (71.9%), or concussion management (88.7%). These findings are consistent with the 2018 study by Valovich McLeod, et al, who surveyed secondary school Athletic Directors in Arizona.⁹ Ninety five percent (95%) of secondary schools had an EAP; only 27% reported the EAP was reviewed and approved by a physician.⁹ Scarneo et al found 89.1% of secondary school athletic trainers had an EAP policy.¹² The team physician (25%) was involved in the creation of the EAP. Earlier studies reported fifty percent of secondary schools had an EAP policy, including North Carolina (55.8%), Ohio (53%), and Vermont (55%).¹³⁻¹⁵

Valovich also reported 98% of secondary schools had a concussion guideline, which is higher than the results of this study (88.7%).⁹ Seventy one percent (71%) of the concussion guidelines in the Valovich study had school board approval but no mention of consulting, review, or approval by a health care professional. A difference was noted in the Valovich study with regards to heat illness.⁹ Forty four percent (44.7%) of secondary schools reported a heat illness policy compared to our findings of 70%; there was no mention of consultation, review, or approval by a health care professional.⁹ It appears secondary school athletic trainers are more likely to have a P&P for life-threatening situations; however, there is inconsistency in consulting other health care professionals in the development, review, and approval of these policies.

There appears to be a disconnect between developing a P&P manual and seeking input in the development and review of the P&P. The researchers in this study found that P&Ps covered in NATA Position Statements were more likely to be in both written and operation form of secondary school athletic trainers' P&P manuals. In other healthcare facilities or organizations, the policies and procedures would be reviewed by healthcare providers, supervisors, risk managers, and legal counsel. Results of this study suggest a lack of support in the area of risk management and policy and procedure development. Athletic trainers may need formal guidance on developing and implementing policies and procedures. This would include the various resources available, including federal and case law, professional position statements, and professional publications, such as the BOC Facility Principles and the BOC Guiding Principles for AT Policy and Procedure Development.^{4,11} This study did ask secondary school athletic trainers if they used either of the BOC documents; the BOC Guiding Principles for AT Policy and Procedure Development was a resource for over half (54.5%) of the high school athletic trainers and the BOC Facility Principles was a resource for 45.2% (Table 5).^{4,11}

High school athletic trainers serve in the capacity of risk manager for the athletic training room and services, in addition to their other duties and responsibilities. This is different from other health care professions, where an individual is specifically hired or a committee is established to be the risk manager for a healthcare facility. This study suggests that secondary school athletic trainers, as healthcare professionals, recognize the importance of risk management practices and having P&Ps. However, the extent to which secondary school athletic training departments across the United States engage in risk management practices is inconsistent. The findings of this study indicate inconsistency in the implementation of risk management practices in a policy and procedure manual with respect to whether a policy and procedure is in written form and is in actual operational use.

LIMITATIONS

There are limitations acknowledged in this study. The researchers in this study assumed that the participants were both knowledgeable and honest about the status of their P&P manuals. This study did not evaluate each individual P&P for compliance with best practices.

CONCLUSION

There is little research on the status of secondary school P&P manuals. From this study, it has been reported that approximately three-fourths of participants currently had an existing P&P manual. Less than half of participants had a P&P manual when they began working in the current secondary school athletic training position. The status of P&Ps was separated into four categories for the purpose of this study: operational and written, operational only, written only, and neither. The results revealed that almost half of participants reported that the risk management practices in the P&P manual were in operational and written form. The second highest report was the option of neither written nor operational, the third category was for operational only and the final category was for written. This pattern mimicked Zimmerman's results during a similar study on collegiate athletic training departments.¹⁰

This study establishes a baseline of current risk management practices in the secondary school athletic training settings for the profession of athletic training in the area of policy and procedures manuals. The results of the study provide the foundation for identifying best practices in risk management, expanding the knowledge of practicing athletic trainers, and developing readily available resources in risk management. Future research exploring specific or individual policies and procedures could help add to the narrative of secondary school policy and procedure manuals, risk management practices, and standard of care.

REFERENCES

1. Spengler JO, Connaughton DP, & Pittman AT. *Risk Management in Sport and Recreation*. Champaign, IL: Human Kinetics; 2006.
2. Anderson B & Parr A. Risk management: Determining the standard of care. *Athl Ther Today*. 2006; 11(1), 6-9.
3. Lyznicki JM, Riggs JA, & Champion HC. Certified athletic trainers in secondary schools: Report of the council on scientific affairs, American Medical Association. *J Athl Train*. 1999;34(3), 272–276 [PMID: 16558576]
4. Board of Certification, Inc. *Guiding principles for AT policy and procedure development*. Retrieved from http://www.bocatc.org/system/comfy/cms/files/files/000/000/529/original/Guiding_Principles_for_AT_Policies_and_Procedures.pdf. Published 2016. Accessed March 15, 2019.
5. NATA. *Standard operating policies and procedures*. Retrieved from: <https://www.nata.org/blog/jordanb/secondary-school-resources>. Published 2014. Accessed March 15, 2019.
6. Almquist J, Valovich McLeod TC, Cavanna A, et al. Summary statement: Appropriate medical care for the secondary school-aged athlete. *J Athl Train*. 2008; 43(4), 416–427. doi: 10.4085/1062-6050-43.4.416 [PMID: 18668175]
7. Courson R, Goldenberg M, Adams KG, et al. Inter-association consensus statement on best practices for sports medicine management for secondary schools and colleges. *J Athl Train*. 2014; 49(1), 128–137. doi: 10.4085/1062-6050-49.1.06 [PMID: 24499040]
8. Paddack M, DeWolf R, Covassin T, & Kontos A. Policies, procedures, and practices regarding sport-related concussion in community college athletes. *J Athl Train*. 2016; 51(1), 82–88. doi: 10.4085/1062-6050-51.2.01 [PMID: 26765512]
9. Valovich McLeod TC & Cardenas JF. Emergency preparedness of secondary school athletic programs in Arizona. *J Athl Train*. 2018. doi: 10.4085/1062-6050-35-18. [Epub ahead of print] [PMID: 30517023]
10. Zimmerman EP. Risk management practices of collegiate athletic trainers: An examination of policies and procedures. *Dissertation Abstracts International Section A: Humanities and Social Sciences*. 2018. 68(10-A): 4165. <https://login.proxy195.nclive.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2008-99070-015&site=ehost-live&scope=site>. Accessed March 16, 2019.
11. Board of Certification, Inc. *BOC facility principles*. Retrieved from http://www.bocatc.org/system/document_versions/versions/42/original/boc-facility-principles20170615.pdf?1497543426. Published 2013. Accessed March 15, 2019.
12. Scarneo SE, DiStefano LJ, Stearns RL, Register-Mihalik JK, Denegar CR, and Casa DJ. Emergency action planning in secondary school athletics: A comprehensive evaluation of current adoption of best practice standards. *J Athl Train*. 2019; 54(1), 99-105. doi.org/10.4085/1062-6050-82-18 [PMID: 30676786]
13. Monroe A, Rosenbaum DA, Davis S. Emergency planning for sudden cardiac events in North Carolina high schools. *NC Med J*. 2009; 70(3):198–204 [PMID: 19653601]
14. Lear A, Hoang MH, Zyzanski SJ. Preventing sudden cardiac death: automated external defibrillators in Ohio high schools. *J Athl Train*. 2015; 50(10):1054–1058. doi: 10.4085/1062-6050-50.8.01 [PMID: 26381367]

-
15. Wasilko SM, Lisle DK. Automated external defibrillators and emergency planning for sudden cardiac arrest in Vermont high schools: a rural state's perspective. *Sports Health*. 2013;5(6):548– 552. doi: 10.1177/1941738113484250 [PMID: 24427431]