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# A Historical Review of Secondary School Athletic Training Coverage in West Virginia

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# A HISTORICAL REVIEW OF SECONDARY SCHOOL ATHLETIC TRAINING COVERAGE IN WEST VIRGINIA

Thesis submitted to The Graduate College of Marshall University

In partial fulfillment of the Requirements for the degree of Master of Science

by

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**Marshall University** 

**April 20, 2005** 

#### **ABSTRACT**

# "A Historical Review of Secondary School Athletic Training Coverage in West Virginia"

by Brian W. Potter, BS, ATC, EMT-B

The purpose of this research is to review the history of athletic training in the secondary schools of West Virginia, as well as to determine how appropriate the current level of athletic healthcare is for West Virginia's secondary school athletes. Participation surveys from the WVSSAC, membership statistics from the NATA, Friday night football game reports, and documents from the WVDE were used to gather data. Since 1988 the total number of high schools with football and number of football athletes has decreased, while the total number of certified athletic trainers (ATCs) in West Virginia has increased. The number of ATCs working in West Virginia high schools sponsoring football has only minimally increased since 1991. Several reasons are proposed to explain these trends, including school consolidations, salary costs for ATCs, and lack of understanding of the value of ATCs. Future research in this area is clearly needed.

#### **ACKNOWLEDGMENTS**

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#### Chapter I

#### INTRODUCTION

Over the past several decades, athletic training has evolved into a highly specialized profession. The certified athletic trainer (ATC) is a unique allied healthcare provider specializing in the prevention, recognition, treatment, and rehabilitation of injuries and illnesses specific to the active population. Certified athletic trainers are employed in a variety of settings, including colleges and universities, outpatient rehabilitation clinics, professional sports, industrial/occupational settings, and high schools. The certified athletic trainer is often the first healthcare provider an athlete comes into contact with, and therefore plays a key role in ensuring that the athlete receives proper referral and follow-up care after an injury. In the ideal scenario, a certified athletic trainer is present for all practices and games and can quickly evaluate and treat injuries within minutes after they occur. However, in reality this scenario does not always occur, and the high school setting is one example of this. Many high schools only employ one certified athletic trainer to cover all sports, and some high schools do not even employ a certified athletic trainer. The National Federation of State High School Associations recently reported that for the 15<sup>th</sup> consecutive year the number of high school athletes in the United States has increased, bringing the total number of athletes to 6,903,552. Eleven-player football alone is sponsored by 13,680 schools, accounting for 1,034,209 athletes (NFHS Participation, 2005; NFHS 2003-2004). In November of 2004, the National Athletic Trainer's Association (NATA) reported that 7,238 certified athletic trainers were employed in the high school or high school/clinic settings (NATA, 2004). If it is assumed that all 7,238 certified athletic trainers work at

different schools sponsoring football, that would still leave 6,442 schools with football without the services of a certified athletic trainer. These statistics illustrate a nationwide problem of having significantly more high school athletes than what the current number of high school certified athletic trainers can provide care for. The state of West Virginia is not exempt from this trend, as numerous high schools do not employ a certified athletic trainer. While the West Virginia Department of Education (2004) does mandate that athletic trainers be present for high school varsity football practices and games, this policy does not guarantee the presence of a certified athletic trainer. Part of this policy is written to allow school systems to employ alternative healthcare providers in the event a certified athletic trainer cannot be employed. This allows the school systems to utilize personnel such as an EMT, paramedic, or nurse as the athletic trainer (West Virginia Dept. of Ed., 2004). West Virginia is one of only seven states with no state regulation over the practice of athletic training (Hunt, 2005). This allows other healthcare providers to call themselves athletic trainers and not violate any state laws. While these healthcare providers filling in as athletic trainers are often very well trained in their respective fields, they lack the specific training and experience in the prevention, treatment, and rehabilitation of athletic injuries. The purpose of this paper is to review the history of athletic training in West Virginia secondary schools, and to examine the appropriateness, or lack thereof, of athletic healthcare in West Virginia.

#### **LIMITATIONS**

As with any research, there are some limitations to this study which must be discussed:

- 1. There has been very little research done regarding athletic trainers in the secondary schools of West Virginia. Much of what has been compiled for this paper comes from historical documents, so as a result it is very hard to locate every past document regarding secondary school athletic trainers in West Virginia. The West Virginia Department of Education (WVDE) has either been unable to locate, or is missing, certain documents from the early years of the athletic trainer policy. In addition, the West Virginia Secondary Schools Activities Commission (WVSSAC) has been unable to locate, or is missing, data from the 1980s and parts of the 1990s.
- 2. There has been a lack of compliance by athletic trainers in West Virginia in completing and submitting game reports for football games. These reports will primarily be used to look at the number of certified athletic trainers in the state and number of games covered by physicians, so a lack of compliance leaves us without data for some schools in West Virginia.
- 3. Membership statistics for West Virginia have been obtained from the National Athletic Trainers Association (NATA) to show the total number of certified athletic trainers in West Virginia. There is likely some variance in these numbers due to some of the certified athletic trainers listed for West Virginia actually working in a bordering state.

## Chapter II

#### **REVIEW OF LITERATURE**

### **Athletic Trainers and Secondary Schools**

Before looking specifically at athletic training in West Virginia secondary schools, it is important to gain a basic understanding of athletic training in secondary schools nationwide. Participation in high school athletics is an important chapter in the lives of many teenagers. Many life lessons are learned through athletics, and friendships and memories from high school sports often last a lifetime. However, these experiences do not come without risks, as the possibility for injury exists in every sport (Powell & Barber-Foss, 1999).

It has been reported that around two million of the almost seven million high school athletes incur some type of injury each year (Powell & Barber-Foss, 1999). In a review of injuries during the 1995-1997 seasons for 10 high school sports, the NATA accumulated data for more than 75,000 player-seasons (one person on one team in one season). During the period of time studied, 23,566 reportable injuries occurred. All sports studied, with the exception of boys' and girls' soccer, showed the same or greater percentage of injuries during practices versus games (Powell & Barber-Foss, 1999). Earlier studies of secondary school athletic injuries also found that a larger percentage of injuries occurred during practices compared to competitions (Lyznicki, Riggs, & Champion, 1999; Garrick & Requa, 1978; Buxton, Okasaki, Ho, & McCarthy, 1995). Both the 1995-1997 study and a similar study done by the NATA from 1986-1989 found that 70-75% of the injuries that occurred were minor, requiring seven to eight days off or fewer (Lyznicki et al., 1999; Powell & Barber-Foss, 1999). While this statistic shows

that a majority of the injuries high school athletes incur are minor in nature, the possibility for more severe and even catastrophic injury exists.

The National Center for Catastrophic Sport Injury Research defines three categories of catastrophic injury as fatalities, non-fatalities with permanent functional disability, and serious injuries without resulting functional disability. They reported that during the 2002-2003 season there were three fatalities (all in football) directly related to high school sports, and 16 fatalities which were indirectly related to participation in sports. There were 28 total catastrophic injuries across all sports, with 20 of those injuries occurring in football. Between the years of 1982-2003 there have been a total of 528 catastrophic injuries, including 92 fatalities, in high school football alone (Mueller & Cantu, 2004). While these statistics seem to paint a bleak picture of athletics, catastrophic injuries are the exception, not the rule. What these statistics do show though is that injuries can and do occur, indicating the need for certified athletic trainers in the secondary school setting.

In the mid-1970s a bill was introduced in Congress that would have required schools to have an athletic trainer to help reduce the number of injuries related to participation in sports. While this bill did not reach the floor, Congress did pass a bill that mandated a study be conducted to determine the number of athletic injuries and deaths over a one year period, and the qualifications of any healthcare providers present when they occurred. This bill was signed in 1974, and the survey was conducted between 1975 and 1976. While the survey included data for both colleges and secondary schools, only the data from the 2,500 secondary schools surveyed will be discussed here. Football accounted for 325,957 injuries, or about half of all injuries in varsity sports.

Only 11% of public secondary schools and only 15% of private secondary schools had an athletic trainer on staff. Seventy-seven percent, or four out of every five public secondary schools reported that a coach most commonly provided on-site athletic health care. This data indicated that the national trend at this point in time was to rely on someone other than a certified athletic trainer to provide on-site health care to student-athletes. While the data from this survey clearly indicated a lack of appropriate athletic healthcare being provided to high school athletes, no further action was taken by Congress to mandate the presence of athletic trainers at all schools (U.S. Department of Health, Education, and Welfare, 1979).

Several professional organizations have shown support for the presence of certified athletic trainers in secondary schools. The National Athletic Trainers' Association has issued an official statement on ATCs in high schools which states:

"The National Athletic Trainer's Association as a leader in health care for the physically active believes that the prevention and treatment of injuries to student-athletes are a priority. The recognition and treatment of injuries to student athletes must be immediate. The medical delivery system for injured student-athletes needs a coordinator within the local school community who will facilitate the prevention, recognition, treatment, and reconditioning of sports related injuries. Therefore, it is the position of the National Athletic Trainers' Association that all secondary schools should provide the services of a full-time, on-site, certified athletic trainer (ATC) to student athletes." (NATA, 2005a)

A second official statement by the NATA (2005b) states that other allied health professionals do not have the same qualifications as a certified athletic trainer in regards

to providing proper assessment, treatment, and return-to-play decision making following an athletic injury. In addition, the NATA (2005b) states that decision making in the situations encountered by certified athletic trainers should not be left up to coaches or laypeople, as they lack the proper education and training to handle these situations. The American Academy of Family Physicians (AAFP) has also taken a stance on this issue stating, "The AAFP encourages high schools to have, whenever possible, a National Athletic Trainers Association (NATA)-certified or registered/licensed athletic trainer as an integral part of the high school athletic program. In June of 1998, the American Medical Association (AMA) also gave their endorsement for the employment of certified athletic trainers by secondary schools. In a report of the council on scientific affairs, the AMA stated:

"Although many high schools have coaching staffs dedicated to teaching appropriate sports skills and tactics, it cannot be assumed that all coaches are adequately trained or sufficiently motivated to monitor and treat the injuries that occur during practices and competitions. Few, if any, high schools provide daily physician coverage to meet these needs. To provide such coverage, coaches need the assistance of certified athletic trainers who can recognize and manage the wide variety of injuries and medical conditions that occur among high school athletes. Certified athletic trainers can provide more continuous and comprehensive on-site medical coverage, particularly at practices, where most injuries occur and when team physicians are seldom available." (Lyznicki et al., 1999)

As a result of this report, the AMA adopted several statements into policy. The AMA declared its belief that the Board of Education and Department of Health in each state should encourage the development of an Athletic Medicine Unit at every school offering athletics. They stated that the Athletic Medicine Unit should consist of a physician, a coordinator, which would preferably be a certified athletic trainer, and any additional medical personnel deemed necessary. The AMA also strongly encouraged high school administrators, coaches, and athletic directors to take the necessary steps to secure adequate funding to obtain the services of a certified athletic trainer. Finally, in light of the reality that not every high school will be able to obtain the services of a certified athletic trainer, the AMA recommends that all high school coaches are properly trained in emergency first aid and basic life support (Lyznicki et al., 1999).

A review of the literature has produced several articles discussing certified athletic trainers and secondary schools in individual states. The state of Hawaii has established an outstanding model for obtaining ATCs in secondary schools. In 1990-1991, a study was conducted to evaluate athletic health care in the 21 public high schools on the island of Oahu. None of the 21 schools had a certified athletic trainer on staff, and the six schools that claimed to have an ATC actually had a noncertified athletic trainer. Thirteen of the high schools listed a coach as the person assuming the role of athletic trainer, while two other schools have paramedics that serve as athletic trainers. In 17 schools the coach was designated as the "person responsible for the prevention and care of athletic injuries", while other schools listed the noncertified athletic trainer, a student trainer, and the school nurse. Only three schools reported all coaches being certified in

basic first aid, yet in two of the high schools the coach was primarily responsible for making a return to play decision after injury (McCarthy, Hiller, & McCarthy, 1991).

In 1991, Buxton, Okasaki, Ho, and McCarthy (1995) also began to collect data on secondary school athletic training in Hawaii. The data that they collected would serve as one step of a multifaceted approach to secure legislative funding to increase the number of certified athletic trainers in public secondary schools in Hawaii. The first phase of their approach consisted of an educational program directed towards parents, coaches, athletic directors, and school administrators. The purpose of this program was to raise awareness of the risks of participation in athletics, and to educate those in attendance about the many roles and benefits of the certified athletic trainer. The authors felt as though this program convinced those participating that athletic health care in Hawaii did not meet the accepted standards of care for high school sports. Following this educational program, a survey was sent out to evaluate athletic health care in all 61 of Hawaii's secondary schools (public and private). The return rate for the survey was 100%. The 38 public schools in the study reported 2,718 injuries throughout the course of the year. Fifty-seven percent of these injuries occurred during practices, with the remaining 48% occurring during games. In regards to injury severity, 79% of injuries were considered mild (missing one to seven days), 10% moderate (missing eight to 21 days), and 11% major (missing more than 21 days). Looking at the initial treatment provided following injury, eight percent of both mild and moderate injuries, and five percent of major injuries received no treatment at all (Buxton et al., 1995). A third phase of the project consisted of an extensive media campaign utilizing newspaper and television to continue to increase awareness of the issue of athletic health care.

Finally, the state athletic directors association began lobbying for better athletic healthcare. They approached the state legislature under the premise that the main issue needing to be dealt with related to educational health and safety. The efforts of the athletic directors led to the house and senate education committees backing the project and introducing a series of bills which ultimately led to the hiring of 38 certified athletic trainers, one for each public school. The legislature agreed to fund the program for two years as a pilot program, after which time it would be reevaluated to determine further actions (Buxton et al., 1995). This program has been so successful that not only has Hawaii kept ATCs in every public school, but just recently the state legislature agreed to hire 20 additional ATCs to be placed in the public school system. These additional ATCs will allow larger high schools to have two ATCs in each school (Hawaii, 2005).

While Hawaii has established an outstanding system of providing healthcare to secondary school athletes, that same standard of care is certainly not seen nationwide. Studies conducted in Michigan, Southern California, Connecticut, South Carolina, Louisiana, Alabama, Ohio, New York, and the city of Chicago reveal the inadequacy of healthcare provided to high school athletes (Lindaman, 1992; Vangsness, Hunt, Uram, & Kerlan, 1994; Cartland, 1985; Carek, Dunn, & Hawkins, 1999; Brunet & Giardina, 1984; Rowe & Robertson, 1986; Smith, 1999; Tucker, O'Bryan, Brodowski, Fromm, 1988; Tonino & Bollier, 2004; Porter, Noble, Bachman, & Hoover, 1980). Lindaman (1992) surveyed high schools in Michigan and found that only 41% of all responding schools had an athletic trainer available for at least one sport throughout the year, with only 70% being NATA certified. Of the responding schools that offered football, only 37% reported having athletic trainer coverage. Seventy-eight percent of varsity teams were

without athletic trainer coverage at any one point in time during the season. Interestingly, one-third of the athletic trainers from responding schools received no compensation for their services, with 30% of the certified athletic trainers also being volunteer (Lindaman, 1992). Based on the results of this study, Lindaman (1992) concluded that the medical care provided to interscholastic athletes in Michigan was not adequate.

Vangsness et al. (1994) surveyed 240 high schools in Southern California primarily looking at medical coverage of football. Only 69% of schools reported having an athletic trainer present for home games, while the percentage of schools having an athletic trainer at practices was not addressed in the study. Seventy-one percent of responding schools had a team physician or physicians for football. Among the paid coaches of the schools studied, 90.7% were CPR certified, while only 81.4% had received basic first aid training. Eighty-nine percent of schools had first aid or trauma kits, however, only 75.4% had a telephone close to the field. The lack of a nearby phone becomes a major issue because only 37.5% of schools reported having a staffed ambulance available at home games. If no ambulance is present and it becomes necessary to call for one, this process would take much longer without having a phone nearby. A 1985 study in Connecticut also found that schools lacked the services of a full time athletic trainer. Cartland (1985) surveyed 162 schools and found that only 25% had athletic trainers available at both home and away games. In addition, only 80% of schools had physician coverage at home games. One difference between Cartland's study and the study done in Southern California was that 100% of the responding schools in Connecticut reported ambulance coverage at games, either on-site or by radio (Cartland, 1985).

Carek et al. (1999) surveyed public and private high schools in South Carolina and reported 68% of schools having a team physician. They also reported that 82% of schools had an athletic trainer assigned to the football team; however, the exact qualifications of the athletic trainer were not studied. Forty-one percent of schools had football coaches that were trained in basic first aid, while only 30% of schools reported coaches were trained in CPR. In discussing the results of the study, Carek et al. (1999) noted that larger schools were more likely to have a physician at home football games; however, the smaller schools were more likely to have a coach with training in basic life support.

A similar trend was also observed in Louisiana in the early 1980s. Brunet and Giardina (1984) sent out questionnaires to 365 Louisiana high schools and received responses from 245. They found that 91% of injury evaluations during practice were performed by a coach or teacher/trainer, but only nine percent were performed by a coach or teacher/trainers. During games, 80% of injury evaluations were performed by a coach or teacher/trainer, 10% by a certified athletic trainer, and 49% by a physician. In the smaller high schools, they found fewer schools had a designated team physician. The authors also pointed out that, although a number of principals that completed the questionnaire indicated their schools had certified athletic trainers, there were only two certified athletic trainers in Louisiana at the time this research was conducted (Brunet & Giardina, 1984).

In the mid-1980s Rowe and Robertson (1986) evaluated the current knowledge of those persons designated as athletic trainers in the state of Alabama. They sent a questionnaire to all public and private high schools in Alabama that consisted of 30

questions related to anatomy, conditioning, diet, equipment, heat, physiology, and the care and treatment of athletic injuries. Out of the 127 persons responding, 88.9% were coaches. Eighty-eight percent of those that responded reported they had taken a course in athletic injuries and first aid. Interestingly, no NATA certified athletic trainers were included among the respondents. The data was divided into six categories that included anatomy, care and prevention, conditioning, diet/nutrition, equipment, and heat-related issues. Only 27% of respondents scored 70% or higher in all six categories. Only 24.4% of respondents recognized a strain as a musculoskeletal injury, while only 43.3% recognized paresthesia, loss of strength, and inability to move one arm as possible symptoms of a fractured cervical vertebrae. Additionally, only 35.4% knew that a possible complication of mononucleosis was rupturing the spleen. Rowe and Robertson (1986) concluded that 73% of the respondents "lacked sufficient knowledge in the care and prevention of athletic injuries." They also concluded that each school should have an NATA certified athletic trainer (Rowe and Robertson, 1986).

In 1999, Smith sent questionnaires to all certified and licensed athletic trainers within the state of Ohio to determine the consistency and quality of athletic training services within Ohio high schools. The results of this study showed a trend of better athletic training coverage in larger high schools. Seventy-five percent of Division I high schools had at least one full-time athletic trainer, compared to 50% of Division V schools, which reported no athletic trainer. In schools with part-time athletic trainers, the athletic trainer made more weekly visits to the school in the larger high schools compared to the smaller schools. Athletic trainers were present at 94% of varsity home football

games, but only at 89% of varsity away games. In most cases a doctor was present at games 25% of the time or less (Smith, 1999).

Tucker et al. (1988) sent questionnaires to all high schools in New York State and found that medical coverage of high school football needed to improve. When asked about the person assuming medical responsibility on the sidelines of football games, 76% reported routine physician coverage, while only two percent reported a certified athletic trainer fulfilling this role. Thirteen percent of schools stated they have neither a sideline physician nor ambulance present at games. Medical coverage of practices was far worse than games as only four percent of schools reported physician coverage of practices.

The two studies that probably best illustrate the problem of insufficient medical coverage for high schools focus on Chicago area high schools. In 1980, Porter et al. interviewed 191 high schools in the Chicago area and found that a physician was available to at least one team on a regular basis in only 10.8% of Chicago public schools. No Chicago public school reported having a team physician that covered all sports. Only 12.5% reported having a physician that covered home football games. An athletic trainer was on the staff of 10% of Chicago public schools, however, a full-time athletic trainer to serve the boys' programs was only found in 2.5 percent of the Chicago public schools. Tonino and Bollier conducted a similar study in 2004, and found little had changed regarding medical coverage of Chicago public high schools. The athletic directors at all 77 Chicago public high schools were sent questionnaires. A response rate of 76.6% was received. Out of the 47 high schools with football, 10.6% had a physician present at games. This result is very similar to that seen in the 1980 study. Only 8.5 percent of schools had an athletic trainer present during football games, and only one school

reported having an athletic trainer present at practices. Paramedics provided the remainder of game coverage, with 89.4% of schools reporting their presence at games. Interestingly, no schools made arrangements for an on site ambulance during games. Due to the lack of other personnel being present at practices, coaches were responsible for handling medical problems during practices in 97.9% of schools (Tonino & Bollier, 2004).

## **Athletic Training in West Virginia High Schools**

Having gained an appreciation of athletic training in secondary schools nationwide, this section will provide a historical perspective of athletic training in West Virginia secondary schools. While we know that prior to 1980 there were athletic trainers scattered throughout a few high schools, the prevalence of athletic trainers in the high schools of West Virginia began to gradually increase with the introduction of State Board Policy 2422-13 (now Policy 5112). This section will primarily focus on the history of Policy 5112, and the current efforts of certified athletic trainers in West Virginia to obtain licensure.

History of Policy 5112. In April of 1980, a formal policy statement was drafted concerning athletic trainers in the secondary schools of West Virginia. In May of the same year this draft policy was revised, presented to the State Board of Education for comments, and distributed for public comment. On June 13, 1980, the State Board approved the "Policy of the West Virginia Board of Education on Athletic Trainers in the Public Schools of West Virginia", effective August 13, 1980. In April of 1981, the State Board amended Policy 2422-13 (see appendix B) and distributed copies for public comment. The amendments to Policy 2422-13 were approved and became effective May

8, 1981, The purpose of Policy 2422-13 was to "provide for the professional development of an individual to function as a state certified athletic trainer to improve the health care of student athletes in the public schools of West Virginia." This policy contained an outline of both short-term and long-term plans to address the need for athletic trainers in the public schools. Among other things, the short-term plan included the development of regulations and operational policies regarding athletic training, as well as implementation of training workshops for those individuals designated to serve as athletic trainers by county school systems. The policy mandated that by the start of the 1980-1981 school year one individual from each senior high school offering football must have completed one of the training workshops. The long-term plan mandated that by the 1985-1986 school year every county board of education must employ a state certified athletic trainer for middle, junior, and senior high school football programs. The long-term plan also involved reporting of injuries within 48 hours to the state department so that the effectiveness of Policy 2422-13 could be evaluated. Additionally this policy required that school systems not able to obtain the services of an athletic trainer submit a letter to the State Superintendent to inform him of the inability to obtain an athletic trainer, and how the school system planned to become compliant with the policy by the 1985-1986 school year. In addition to outlining these short and long-term goals, Policy 2422-13 also detailed the certification procedures governing athletic trainers. The policy stated that, "Any individual may be issued an authorization to serve as an athletic trainer from June 30, 1980, through June 30, 1981, upon a) recommendation of the county superintendent, b) completion of a state approved athletic trainer workshop during the Summer of 1980, c) verification of completion of the requirements for a bachelor's degree from an accredited institution of higher education, and d) application to the West Virginia Department of Education." These authorizations were to be non-renewable with the stipulation that they be converted to a permit for athletic trainer by completing six semester hours of credit from a state approved athletic training program. Once an individual obtained a permit for athletic trainer, they were supposed to complete six additional credit hours in the approved athletic training program for each year they renewed the permit. Within five years, the permit athletic trainer was to have completed the athletic training program and thus obtained a Professional Service Certificate from the State Board of Education (WVDE memo from Roy Truby, 5/11/81).

In June of 1983, the role of the athletic trainer in West Virginia secondary schools was further defined when the State Board of Education adopted policies 5013.1 and 5112.1. The development and adoption of these two policies served to replace policy 2422-13. Policy 5013.1 described the roles and functions of the athletic trainer serving in the public schools, while policy 5112 described the certification requirements and program objectives to be followed in order to obtain an endorsement for athletic trainer on a provisional professional certificate. Policy 5013.1 described the athletic trainer as possessing "the essential knowledge, skills, attitudes, and credentials necessary to carry out the practices of prevention, evaluation, initial care, and physical rehabilitation of injuries sustained by students engaged in public school athletic and related programs (WVDE memo from Roy Truby, 6/13/83)." The roles of the athletic trainer were classified as: a) instructor/advisor, b) evaluator, c) emergency care giver, d) rehabilitation agent, and e) program administrator. The final portion of the policy discussed the

governing principles for employment and assignment of athletic trainers in the public schools. These principles were listed as follows:

- "1. An individual must serve as an athletic trainer without simultaneous coaching responsibilities in the same sport.
- 2. An athletic trainer must be in attendance at all county board of education sanctioned football practices and games except when excused by the county superintendent or designee.
- 3. The decision whether or not a student athlete participates in a practice or game is the responsibility of the athletic trainer except in the presence of a physician who has the ultimate decision-making responsibility.
- 4. All rules and regulations promulgated in West Virginia Board of Education Policy No. 5112 shall be adhered to (WVDE memo from Roy Truby, 6/13/81)."

While Policy 5013.1 laid the framework for the athletic trainer's role in the high school, Policy 5112.1 was created to guide the development of athletic training programs in institutions of higher education. It would be beyond the scope of this paper to discuss this Policy in detail at this time.

While the original intent of Policy 2422-13 was good, it became evident that many school systems would not be able to become compliant by the 1985-1986 school year as originally stated. As a result, in March of 1984 a draft statement to revise the compliance portion of the policy was presented (WVDE memo from Therese M. Wilson, 3/29/84). This policy revision was approved May 31, 1984 and extended mandatory compliance until the 1987-1988 school year for middle and junior high schools. The only stipulation was that school systems unable to become compliant by 1985-1986 were to submit evidence showing that all efforts to become compliant had been exhausted, and they were to outline their plans to become compliant by the new deadline (WVDE memo from Therese M. Wilson, 5/21/84).

In June of 1985, significant revisions were again made to Policy 5112. The mandatory compliance rule for senior high schools was maintained for the 1985-1986 school year, but compliance was once again extended another year for middle and junior high schools. The second major revision that was made allowed for school systems to obtain a waiver from the State Department of Education in the event that a certified athletic trainer could not be employed. A school system obtaining a waiver was to show documentation that a certified athletic trainer could not be employed, their plan for employing one in the future, and how alternate services would be provided to athletes until a certified athletic trainer could be hired (WVDE memo from Roy Truby, 6/21/85).

The trend of revising the athletic trainer policies continued with proposed revisions in May of 1988. These revisions received approval July 11 of the same year. One of the most significant changes was once again extending mandatory compliance by middle and junior high schools to the 1990-1991 school year. Since the 1985-1986 school year had obviously passed, the policy's wording of mandatory compliance for senior high schools was changed to simply state that every county board of education must employ an athletic trainer for senior high school football practices and games, unless a waiver is obtained. Another significant change to the policy included no longer mandating the reporting of injuries to the Secondary Schools Activities Commission. The final major revision that was made at this time was to move the governing principles for employment and assignment of athletic trainers in the public schools of West Virginia from Policy 5013.1 to Policy 5112 (WVDE memo from Tom McNeel, 5/25/88).

In July of 1990 a memo was sent to the Athletic Trainer Policy Review Committee from Kathy Roten, which contained more proposed revisions to policy 5112.

In 1989-1990, only 35% of the 140 high schools in West Virginia with football teams had certified athletic trainers. Fifteen percent of these schools had athletic trainers working with an expired permit or certificate, six percent had athletic trainers working on permit, 19% were granted waivers to the athletic trainer policy, and 26% of these schools had no athletic trainer on record. As a result of these statistics, the biggest proposed revision to policy 5112 was no longer mandating middle and junior high schools to have athletic trainer coverage, but merely recommending it. The second proposed revision was the establishment of an Athletic Trainer Review Board to approve or deny waiver requests. These proposed revisions were later approved and became a part of policy 5112.

Policy 5112 would not be revised again until 1995, when significant changes were again proposed and approved. A major reason for the changes that were made at this point in time was a continued lack of athletic trainers available in West Virginia. Policy 5112 was therefore amended to allow NATABOC certified athletic trainers to receive West Virginia Department of Education Authorization as an athletic trainer, with the hopes of increasing the number of athletic trainers in West Virginia's public schools. The second major change to the policy in 1995 was to rescind Policy 5013.1. The changes made to Policy 5112 over the years made Policy 5013.1 no longer necessary, thus making this action possible (Executive summary from WV Board of Education on Policy 5112, Jan. 1995; WV Board of Education meeting, RESA report Feb. 10, 1995). Following these revisions to Policy 5112, the Policy existed with no additional changes until 2004. In 2004, the revisions to Policy 5112 (see Appendix A) included eliminating all sections pertaining to obtaining a waiver, including the Athletic Trainer Review Board. The amended Policy 5112 states that in the event a certified athletic trainer can

not be obtained, a county may employ another healthcare provider such as a physician, nurse, chiropractor, paramedic, etc. under a limited athletic trainer authorization. The Policy also further defines the role of the permit athletic trainer and any individual working under the limited athletic trainer authorization. The policy states, "The duties of individuals with limited football trainer authorization are limited to evaluation, initial care, and referral of injuries sustained by students engaged in public school athletics (WVDE, 2004)." These revisions clearly show that there is a difference in the roles and capabilities of the certified athletic trainer and the permit athletic trainer or individual working under the limited athletic trainer authorization. After what seemed like several years of Policy 5112 taking steps backwards, these most recent policy revisions are certainly a step back in the right direction at providing better athletic healthcare to the secondary school athletes of West Virginia.

Athletic Training Licensure Efforts in West Virginia. It is evident from the history of the West Virginia athletic trainer policy that obtaining qualified athletic trainers for the secondary schools of West Virginia has been very difficult. One contributing factor to this difficulty is a lack of state regulation over the practice of athletic training in West Virginia. As mentioned earlier, West Virginia is one of only seven states that do not have any regulation over the practice of athletic training (Hunt, 2005). What this means is that basically anyone can call themselves an athletic trainer, whether they have the formal training and certification in athletic training or certification in some other healthcare field. The consequences of having no state regulation is that the public can not be assured that those persons calling themselves athletic trainers actually have the education, training, and certification necessary to actually be an athletic trainer.

In the mid-1980s discussion began regarding the process of obtaining licensure for athletic trainers in West Virginia. By the mid-1990s an attempt was made to introduce legislation that would regulate the practice of athletic training in West Virginia, however, this initial attempt at licensure died (personal communication with R. Daniel Martin, Ed.D., March 7, 2005). It would not be until 2000 that the issue of athletic trainer licensure again came to the forefront. At that time the membership of the West Virginia Athletic Trainers' Association (WVATA) was polled and enough interest was generated to validate pursuing a lobbyist to spearhead the push for licensure. In January of 2001, a meeting was held to discuss the plans for the upcoming legislative session. During the 2001 legislative session a study resolution was approved by both the State Senate and House of Representatives. The study resolution would have allowed monthly debates over why athletic trainers should have licensure; however, a lack of interest from the WVATA membership prevented this from happening. The remainder of 2001 and 2002 was spent contacting legislators, continuing to seek support from the membership of the WVATA for the licensure effort, and actually focusing on writing the bill. The bill was initially submitted in January of 2003, but died before any action was taken on it. In February of 2004, the bill was resubmitted and came before the Government and Organization Committee. This committee mandated that a sunrise application be completed before further action could be taken on the bill, so the bill did not make it out of committee during the 2004 legislative session. The sunrise application was a series of questions pertaining to why athletic trainers should have a licensure board. The sunrise application was completed during the spring and summer of 2004 and then turned in (personal communication with Joe Blauser, MS, ATC, March 4, 2005). Most recently in February of 2005, the bill was again resubmitted to both the Senate and the House and progressed from the Government and Organization Committee to the Finance Committee in both the Senate and the House. However, as the legislative session neared its end, concerns voiced by the state physical therapy and chiropractors' associations led to the bill dying in committee once again. In June of 2005, the executive committee of the WVATA will meet with representatives from the physical therapy and chiropractors' associations during the West Virginia chiropractors' meeting in an attempt to answer questions and settle differences. The licensure bill will then be resubmitted during the 2006 legislative session (personal communication with Robert Cable, MS, ATC, EMT-B by phone, April 13, 2005). The passage of this athletic training licensure act would be a major step towards improving the quality of healthcare for West Virginia's secondary school athletes.

Outreach Athletic Trainers. A very small number of high schools in West Virginia employ a full-time certified athletic trainer, either strictly as an athletic trainer or as a teacher/athletic trainer. Probably the most common way that West Virginia high schools obtain the services of a certified athletic trainer is by contracting with local clinics or hospitals. In this type of situation, the certified athletic trainer works during the morning and early afternoon in the clinic or hospital treating patients before going to the school to cover practices or games in the afternoon and evening. Several clinics across the state participate in this type of model, but the largest providers of outreach athletic trainers are programs either directly through, or affiliated with, West Virginia University and Marshall University. In 1984 Marshall University began contracting a graduate assistant athletic trainer to provide athletic training services to Huntington High School.

In the years since, Marshall has increased the number of graduate assistant athletic trainers and contracted with Cabell Midland, as well spending a few years covering high schools in nearby Ohio and Kentucky. Healthsouth Western Hills in Parkersburg, West Virginia established an outreach athletic training program in 1997 that is affiliated with Marshall University. Graduate assistant athletic trainers from Marshall, along with fulltime staff from Healthsouth currently provide coverage for four Parkersburg area high schools. In 1994, Charleston Area Medical Center began providing athletic training services to many of the Kanawha county high schools. Graduate assistant athletic trainers from Marshall are also a major part of the coverage provided by this program In Morgantown, West Virginia, West Virginia University began (Martin, 2001b). utilizing graduate assistant athletic trainers to provide outreach athletic training services in 1992. This program is coordinated by Healthworks, a local clinic, and currently provides every day athletic training services to seven high schools in Morgantown and the surrounding area (personal communication with John Spiker, PT, ATC, March 29, 2005).

## Chapter III

#### **METHODS**

In order to evaluate the effectiveness of Policy 5112 and determine the appropriateness of medical coverage for West Virginia's secondary school athletes, data was obtained from a variety of sources. Since Policy 5112 was designed to ensure coverage for football, we will limit our evaluation of data to football only. Participation surveys were obtained from the West Virginia Secondary Schools Activities Commission (WVSSAC) to look at number of schools with football each year, as well as the total number of athletes participating in football. The total number of certified athletic trainers in West Virginia was obtained from the NATA's membership statistics. Friday night football game reports collected by R. Daniel Martin Ed.D., ATC at Marshall University and submitted to the WVSSAC will be used to determine the number of schools that report having an ATC. Limited data regarding the numbers of athletic trainers in the early 1980s has also been obtained from West Virginia Department of Education documents. The data collected will be analyzed using descriptive statistics, and primarily used to show trends over the past 10-15 years.

## Chapter IV

## **RESULTS**

The earliest data obtained that evaluates the effectiveness of Policy 5112 is from 1983-1984 (see appendix C). According to the West Virginia Board of Education, 65 of 138 schools reported having someone with an athletic trainer specialization, while 73

Table 1: Trend data regarding ATC coverage of WV high school football

Year	Schools with FB	<u>Total FB</u> Athletes	Total ATCs in WV	FB Schools Reporting an ATC
2004	unavailable	Unavailable	177	33
2003	108	5,398	187	32
2002	123	6,166	185	33
2001	125	6,232	175	31
2000	125	6,033	163	33
1999	124	6,061	146	unavailable
1998	126	5,871	153	unavailable
1997	130	6,549	144	24
1996	unavailable	6,857	139	unavailable
1995	131	6,905	unavailable	15
1994	128	6,591	116	25
1993	128	6,280	103	19
1992	133	6,450	unavailable	18
1991	135	6,295	unavailable	13
1990	unavailable	unavailable	unavailable	unavailable
1989	140	unavailable	unavailable	unavailable
1988	140	6,946	unavailable	unavailable
1987	unavailable	unavailable	unavailable	unavailable
1986	138	unavailable	unavailable	unavailable
1985	unavailable	unavailable	unavailable	unavailable
1984	unavailable	unavailable	unavailable	unavailable
1983	unavailable	unavailable	unavailable	unavailable
1982	unavailable	unavailable	unavailable	unavailable
1981	141	unavailable	unavailable	unavailable

schools reported having either no athletic trainer or someone without an athletic trainer specialization. Out of the 65 personnel with an athletic trainer specialization, 86% (56) were permit athletic trainers, while only 14% (nine) held a professional certificate. While the exact number of ATCs can not be obtained from this data, any ATCs that covered

high school football at this time would have fallen within the 14% of personnel with an athletic trainer specialization. The remainder of the data obtained covers primarily from 1988-2004, as shown in Table 1. The total number of WVSSAC member schools has decreased from 163 in 1988 to 134 in 2003. Since 1988, the total number of high schools sponsoring football has decreased by 32, from 140 to 108 in 2003. The total number of athletes participating in football has fluctuated some throughout the 1990s and early 2000s, but overall has decreased by 1,548 since 1988 (WVSSAC participation surveys).

Table 2: Trend data from football game reports

Year	Home FB Games	Ambulance Present	Phone at Field	<u>Physician at</u> <u>Game</u>
2004	544	506 (93%)	518 (95.2%)	260 (47.8%)
2003	493	475 (96.3%)	487 (98.8%)	207 (42%)
2002	503	478 (95%)	495 (98.4%)	262 (52.1%)
2001	574	552 (96.1%)	558 (97%)	311 (54.1%)
2000	577	542 (94%)	542 (94%)	308 (53%)
1999	548	540 (98%)	537 (98%)	261 (47%)
1998	Unavailable	Unavailable	unavailable	unavailable
1997	Unavailable	Unavailable	unavailable	unavailable
1996	Unavailable	Unavailable	unavailable	unavailable
1995	Unavailable	Unavailable	unavailable	unavailable
1994	574	562 (98%)	559 (97.4%)	312 (54.4%)

Since 1993 the total number of certified athletic trainers in West Virginia has steadily increased from 103 to 177 in 2004 (statistics received from NATA membership office). The actual number of these certified athletic trainers working in West Virginia high schools with football though has only increased from 13 in 1991 to 33 in 2004 (Martin, 1999, 2000, 2001a; Martin, Toney, & Leaman, 2002; Martin, Shuman, & Leaman, 2003; Martin & Shuman, 2004; Rawson, 1998). In 1993 there were fewer certified athletic trainers in West Virginia than there were number of schools sponsoring football. In 2003 there were 79 more certified athletic trainers in West Virginia than number of schools

sponsoring football, yet the actual number of ATCs covering football has only increased by 20 since 1991.

Data from football game reports (Table 2, also see Appendix E) shows that since 1994 the percentage of games during which an ambulance was present has decreased from 98% to 93% in 2004. The percentage of games in which there was a phone located at the field has steadily been at 97 or 98%, but dropped to 95.2% in 2004. The percentage of games in which a physician was present ranged from 54.4% in 1994 to 42% in 2003, with 47.8% of games being covered in 2004.

In 1983-1984 an athletic trainer salary survey was conducted by the West Virginia Department of Education, and repeated in 1996. The majority of all 55 counties responded to the survey, however, it is difficult to draw specific comparisons from the data because of the variety of salary scales reported. This data (see appendix D) has been compiled to provide an overview of athletic trainer salary trends between 1983-1984 and 1996.

### Chapter V

#### DISCUSSION

While the data collected and evaluated is limited, it is still provides a very clear picture of athletic training coverage in West Virginia's secondary schools. The data shows that the number of West Virginia high schools sponsoring football has decreased, and probably one of the biggest reasons for this has been school consolidation. Between the years 1985-2005, a subgroup of 100 West Virginia high schools consolidated down to 25 high schools (History, 2005). While certainly not all of those 100 schools sponsored football teams, we know that many of them did, and can therefore conclude that closing and consolidation have attributed to the decrease in high schools sponsoring football. Consolidation also helps to explain the decrease in the number of athletes participating in football. Consider the example of four high schools that sponsored football consolidating into one school. If each of the original four high school football teams had a roster of 50 athletes, that would mean a roster of 200 athletes at the new high school. It would clearly be unreasonable to have a 200 member football team in a West Virginia high school, so the athletes that are cut or do not go out for football at the new school would contribute to decreasing the total number of football athletes across the state. A decrease in the total number of football athletes means that there are fewer athletes per athletic trainer to provide care for.

The major issue that the data brings to light though, is the level of athletic healthcare provided to West Virginia high school football teams. In 1976, Bowers concluded that medical coverage of West Virginia high school athletic programs was inadequate. While there has been some improvement since that time, this review of

Policy 5112 and the limited amount of data available regarding medical coverage of West Virginia high school football shows that coverage is still not adequate. The data shows a consistent trend of having a very limited number of ATCs that cover West Virginia high school football teams. Policy 5112 of the West Virginia Department of Education was created in 1980 with the goal of improving the quality of athletic healthcare in West Virginia's high schools. The 1995 revision to the policy even allowed NATABOC certified athletic trainers to receive authorization as an athletic trainer in West Virginia, with the goal of increasing the number of athletic trainers in the high schools. It would be hard to say that Policy 5112 has been as effective as originally intended though. West Virginia Department of Education and football game report data have shown that a consistently low number of ATCs cover football. Additional research on medical coverage of secondary school athletics in West Virginia has been very limited, however, studies conducted by Leaman (1988) and Culicerto (2001) have also shown deficiencies in the level of coverage. Leaman (1988) surveyed 155 West Virginia high schools, receiving a response from 58 schools. Thirty-eight percent of responding schools were found to be noncompliant with Policy 5112; however, the number of schools becoming compliant through obtaining a waiver was not included in this survey due to a lack of data regarding the waivers. Leaman (1988) also pointed out that the low response rate for this study made a statement in and of itself as to the lack of importance school administrators were placing on becoming compliant with Policy 5112. Culicerto (2001) conducted personal and telephone interviews to determine the level of athletic training coverage at 15 middle schools in southern West Virginia. Sixty-seven percent of these middle schools did not report having an athletic trainer, 13% had permit athletic trainers, 13% had state certified athletic trainers, and seven percent reported coverage from students working towards athletic trainer certification. The middle schools without any athletic trainer reported that coaches provided initial care following an injury, which is certainly not an ideal situation.

There are likely several factors that have contributed to the ineffectiveness of Policy 5112, and thus the lack of appropriate medical coverage for West Virginia's high school athletes. Instead of hiring a full-time ATC, it is much less expensive for school systems to simply hire an alternative healthcare provider on a temporary authorization for athletic trainer. Instead of paying a full-time salary and benefits, the school system can simply provide the temporary athletic trainer with a stipend. In situations where a school system does obtain a certified athletic trainer on a part-time basis, it is still sometimes more costly to pay that person's stipend as opposed to a non-certified athletic trainer. An example of this is taken from the 1996 salary survey (see appendix C) in which Wayne County paid \$2,700 for a certified athletic trainer, but only paid \$1,500 for a permit athletic trainer (WVDE salary survey, 1996). Since we know that most West Virginia high schools do only provide a stipend for the position of athletic trainer, it becomes very difficult to attract ATCs for the position unless they hold dual certification as a teacher/athletic trainer or are contracted to the high school through a clinic or hospital. Another major reason for a lack of ATCs in West Virginia high schools is a general lack of understanding regarding the value of athletic trainers. In February of 1985 a bill was introduced in the West Virginia legislature which would have prevented the West Virginia Board of Education and the WVSSAC from making it mandatory that schools hire an athletic trainer (Harman, 1985). While this bill fortunately did not pass, it shows

the lack of support for athletic trainers at the time. Gould and Deivert (2003) surveyed secondary-school administrators from NATA district four and found that most of the administrators had accurate knowledge about what athletic trainers do. However, when asked about an adequate salary for an ATC, the range most commonly given by the administrators was less than the average salary for a high school athletic trainer. In addition, 45.3% of the administrators reported that they did not employ an ATC, despite having a belief than an ATC was the most qualified person to treat athletic injuries. These statistics show that the administrators did not fully recognize the benefits of employing a certified athletic trainer. While West Virginia is not a part of NATA district four, the results of the Gould and Deivert (2003) study are likely consistent with a nationwide problem of a lack of understanding regarding the profession of athletic training. In regards to the deficiencies in athletic medical coverage in Ohio, Smith (1999) stated, "In an attempt to find solutions to these problems, we can actually educate coaches and school administration about the profession of athletic training and rectify their understanding of proper medical personnel and the consequences of that deficiency." If secondary school administrators do not fully realize the value of having an ATC on staff, they are not going to make it a high priority to hire an ATC.

In addition to a lack of ATC coverage of high school football in West Virginia, football game reports have brought to light several other issues regarding the comprehensive medical coverage of high school football. The first issue is not having an ambulance present at 100% of football games. In 2004, seven percent of games were played without an ambulance present. The risk of injury inherent to the sport of football has already been discussed, as well as the potential for serious or potentially catastrophic

injury (Mueller & Cantu, 2004). In the event that a serious injury occurs, time is of the essence in ensuring that the injured athlete receives the most appropriate medical care. Once an athlete is injured, the clock starts on what is known as the "golden hour"; a term that refers to the ideal maximum amount of time that passes between the injury and the arrival of the injured person to an operating room for any necessary surgery (Limmer, O'Keefe, Grant, Murray, & Bergeron, 2001). If an ambulance is not present at the game, part of the golden hour ticks away while awaiting the arrival of an ambulance to the field for packaging and transport of the injured athlete. This delay in care could ultimately affect the outcome for the injured athlete. Probably the biggest reason that there has not been ambulance coverage of 100% of football games is that most areas of West Virginia are rural. Many of these rural areas rely on volunteer Emergency Medical Services (EMS) agencies that typically have the responsibility of providing emergency care to the entire community or county in which they reside. If an emergency call is dispatched prior to or during the football game, the EMS crew must respond to that emergency. Even in the event that a community has a paid EMS agency, there is often only one crew on duty and they would also have to potentially leave the football game to respond to emergency calls. In addition, a paid EMS agency may have enough personnel to cover a football game in addition to the regular duty crew, but to pay two crews at once is more costly and many agencies cannot afford to do so. While rural EMS systems, a lack of volunteer EMS personnel, and an inability to pay multiple crews to be on duty are probably the most likely reasons for not having 100% ambulance coverage of games, another possible reason is a lack of communication between athletic trainers and EMS personnel. For years there has been a "turf war" issue between athletic trainers and EMS

personnel, regarding who is in charge when it comes to providing care for an injured athlete on the field. It is possible that an EMS agency could choose not to be present at football games because of a past argument that has occurred or something of that nature. It is important that athletic trainers get to know and communicate with the EMS personnel in their community to ensure that everyone understands their roles and responsibilities in an on-field emergency (Kleiner, 1998). Both athletic trainers and EMS personnel are critical members of the athletic healthcare team, and only when they cooperate can the injured athlete receive the highest level of medical care. A second issue that goes hand in hand with a lack of ambulance presence at games is the lack of a phone at the field for contacting EMS if they are not present and an emergency situation occurs. In 2004 there were nine games in which there was both a lack of EMS presence and no phone at the field (Martin & Shuman, 2004). In the event that an emergency occurred at one of these locations, the time delay in getting the injured athlete appropriate medical care would be significantly higher than it should be. Those schools that do not have a landline phone at the football field should certainly consider having a cell phone on the sidelines. A potential issue with cell phones though is that the football fields in some rural areas may fall in a coverage "dead spot". In these cases it is imperative that the school have a landline phone installed at the field.

The final issue that the game reports bring to light is the lack of physician coverage of football games. Since 1999, the percentage of games with a physician present has ranged from 42%-54%. This trend shows that there have consistently been a large number of football games in which a physician was not present. Studies done in Southern California, Connecticut, and South Carolina all showed that 71%, 80%, and

68% of schools respectively, reported having a team physician for football games (Vangsness et al., 1994; Cartland, 1985; Carek et al., 1999). In the Chicago public school studies from 1980 and 2004, the percentage of schools with team physicians present at home games went from 12.5% to 10.6% (Porter et al., 1980; Tonino & Bollier, 2004). When compared to other states, West Virginia appears to be middle of the road when it comes to physician coverage of high school football games. However, it is clearly not adequate to have 50% or more games in which a physician is not present. A couple of factors probably help to explain the lack of physician coverage of football games. The majority of high school football team physicians volunteer their time as a service to the school. Giving up Friday nights for most of the fall, especially considering the long hours that physicians generally work to begin with, and not receiving any pay for doing so is not very attractive. In addition, being a team physician for a football team most certainly raises the premiums for a physician's malpractice insurance. So, in actuality, not only is the physician volunteering their time, but it is actually costing that physician money to be the team physician. It is hard to sell a job to someone when it actually costs that person money to do the job.

#### RECOMMENDATIONS

It is clear that West Virginia Department of Education Policy 5112 has not been as effective as originally intended, and therefore the level of athletic healthcare provided to West Virginia's secondary school athletes is inadequate. This paper is certainly not written with the intention of providing all the answers to correct this problem, but some recommendations for improving athletic healthcare in West Virginia's secondary schools will be included here.

1. The highest standard of care is provided to athletes when a comprehensive athletic healthcare team is in place and working cooperatively. While there are many members and specialties represented within the athletic healthcare team, the primary members should include a certified athletic trainer and team physician. The certified athletic trainer is the most qualified person to provide initial evaluation, treatment, and rehabilitation following an athletic injury and high schools have been strongly encouraged to employ the services of an ATC (Almquist et al., 2004; Almquist, 2001; NATA, 2005; Lyznicki et al., 1999). The certified athletic trainer should be the one that coordinates the athletic healthcare team, ensuring good communication between all members (Lyznicki et al., 1999). As previously discussed, a physician was not present for just over half of the football games played, so it becomes even more critical to have a certified athletic trainer present to provide initial evaluation and care when injuries occur. In addition, physicians are rarely able to attend practice sessions. Since an equal or greater number of injuries occur during practices when compared to games, the availability of a certified athletic trainer is important to ensure that both practice and game injuries receive proper care (Powell & Barber-Foss, 1999; Lyznicki et al., 1999; Garrick & Requa, 1978; Buxton et al., 1995). In the absence of a physician or certified athletic trainer, coaches are left with the responsibility of providing initial assessment and care of athletic injuries. This is a frightening situation due to the lack of knowledge and training most coaches have in dealing with injuries. In 2000, Robinson surveyed West Virginia high schools and found that only 33.3% of the 120 coaches that responded were certified in both first aid and CPR. Sixty-six percent of the responding coaches reported not being certified in either first aid or CPR. How can someone with no training in first aid or CPR be expected to provide a level of care that is anywhere close to the accepted standard? The bottom line is that coaches are not an appropriate level of medical coverage, and efforts must be made to ensure that coaches are not put in situations where they have to care for athletic injuries. The only way to ensure this is for schools to employ ATCs.

2. The question comes up as to how to convince schools to hire ATCs, since it is obviously cheaper to just allow an EMT, paramedic, permit athletic trainer, or other healthcare provider to fulfill the role of athletic trainer. Education of the public, secondary school administrators, and the WVDE regarding the importance and value of hiring ATCs will help achieve this goal. Athletic trainers in Hawaii used an educational campaign as part of their multifaceted approach that has been very successful in getting, and keeping, ATCs at all high schools (Buxton et al., 1995). While the original intentions of WVDE Policy 5112 were to improve the level of athletic healthcare in West Virginia, progress towards improving that healthcare has been very slow. The WVDE has not enforced the policy as strictly as they should have initially. Numerous revisions have been made that extended mandatory compliance, and allowed for a waiver to be obtained in the event a national or state certified athletic trainer could not be found. In addition, there should have been better documentation and monitoring of those persons given a permit for athletic trainer while they worked towards certification. By educating personnel with the WVDE, it may serve to place stricter enforcement of Policy 5112 higher on their agenda. Stricter enforcement and future revisions of the Policy would place more pressure on local school systems to obtain more qualified personnel, such as

- an ATC, to serve as athletic trainer. It appears as though this process has slowly begun, as the 2004 revision to Policy 5112 is certainly a step back in the right direction.
- 3. It is important to make the general public, and especially parents, more aware of what the roles and responsibilities of the certified athletic trainer are. If enough parents are convinced that the level of care their child will receive if injured is inadequate, they will begin to push local school systems to hire more qualified professionals to provide care. Additionally, if school system administrators are shown the value an ATC has in decreasing the potential liability the school system faces if a coach makes a wrong decision in providing care for an injured athlete, the administrators will begin to strongly consider hiring ATCs. Unfortunately, administrators might not come to this realization until an athlete receives improper care from a coach and litigation is brought against the school system.
- 4. While the NATA and AMA strongly recommend that schools employ a full-time ATC (Almquist et al., 2004; NATA 2005, Lyznicki, et al., 1999), Almquist et al. (2004) discuss other models that exist for obtaining the services of an ATC. It is sometimes possible for a high school to employ a teacher/athletic trainer. This type of position is really two full-time jobs crammed into one, so the major downfall is the tremendous amount of time required to do both jobs effectively. This significant time commitment might lead to the teacher/athletic trainer getting burned out quickly, and therefore leaving the position to work elsewhere. A second type of position that is similar to the teacher/athletic trainer model is the split-position ATC. This might consist of the athletic trainer also working as an assistant athletic director, substitute teacher, strength coach, or other similar positions. While this is certainly a cost-effective approach, the major

downfall is again the amount of time required to do two jobs effectively. In addition, scheduling conflicts between the two roles might exist, and the reality is that a split-position job is not very attractive to many ATCs. Another cost-effective approach is to contract the services of an ATC from a local clinic or hospital (Almquist et al., 2004). One of the downsides to this approach though, is that the ATC is not on-site during the school day. While any model the school system uses to obtain the services of an ATC will ensure better healthcare for student-athletes, clearly the best model is to employ an ATC full-time.

5. Since approximately 50% of football games in West Virginia are played without a physician present, it is important that schools actively recruit team physicians to improve this statistic. Another benefit of employing an ATC is that they can take over this responsibility of communicating with and recruiting potential team physicians. While the issue of increasing malpractice premiums likely keeps many physicians from serving as a team physician for football, there are ways in which the school can make the position more attractive. The school may be able to add the team physician on their insurance policy, or simply agree to pay the difference of the physician's malpractice premium. In the event a school cannot afford to help pay the insurance premium, they can provide other benefits to the physician such as a certain number of tickets to each football game, tickets to other sporting events besides football, and school logo apparel.

#### **Future Research**

As mentioned earlier, very little research on secondary school athletic trainers in West Virginia has been conducted. While the data that has been compiled for this paper shows some basic trends, there is clearly a need for future research on this topic.

- 1. As WVDE Policy 5112 continues to be revised, and those changes implemented in the schools, there needs to be better data collection and reporting regarding the numbers of certified athletic trainers. This data can than be used to even more objectively determine the effectiveness of Policy 5112.
- 2. Future studies could focus on the actual qualifications of those persons holding a temporary authorization for athletic trainer.
- 3. Future studies should look at the amount of funding allocated to each school system, and by each school system, for athletic training services.
- 4. Future studies are needed to determine the number of West Virginia ATCs that are full-time, outreach, and graduate assistants.
- 5. Research should be conducted to look at number of athletic training students from West Virginia colleges and universities that actually stay in West Virginia to practice athletic training. It may be possible for the state department to work in conjunction with colleges and universities to offer some sort of incentives to keep these students in state after graduation.

#### CONCLUSIONS

Participation in athletics carries with it the risk of injury, and West Virginia's athletes are not exempt from this risk. When an injury occurs, it is critical that athletes receive proper care and referral to prevent long term sequela. Certified athletic trainers contain the knowledge and skills necessary to provide proper assessment, initial care, treatment, and rehabilitation of injuries and illnesses specific to athletes. However, the number of certified athletic trainers in West Virginia high schools sponsoring football is quite small compared to the total number of schools with football. While the WVDE

recognized the need for better athletic healthcare over two decades ago when they implemented Policy 5112, this policy has been only minimally effective. There have been numerous revisions to the policy over the past 24 years, continually allowing school systems to slide by at the lowest level of compliance. The result is an inadequate level of athletic healthcare for West Virginia's secondary school athletes. Administrators, coaches, parents, and WVDE personnel need to be educated regarding this inappropriate level of athletic healthcare, and school systems in West Virginia need to be encouraged to hire certified athletic trainers. In addition, schools need to do a better job recruiting team physicians to work with football, thus providing a more comprehensive athletic healthcare team. Hopefully this paper will draw attention to these issues in West Virginia and be a stepping stone towards better athletic healthcare for West Virginia's high school athletes.

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#### Appendix A



#### **TITLE 126**

#### PROCEDURAL RULE

#### **BOARD OF EDUCATION**

#### **SERIES 118**

#### **Athletic Trainers in the Public Schools of West Virginia (5112)**

#### 126-118-1. General.

- 1.1. Scope. The purpose of this athletic trainer policy is to improve the health care of student athletes in the public schools of West Virginia. This legislative rule describes the role of athletic trainers and individuals with limited football trainer authorization in the public schools of West Virginia and provides for their licensure and professional development.
  - 1.2. Authority. W.Va. Constitution, Article XII, §2; and W.Va. Code §18-2-5.
  - 1.3. Filing Date. April 19, 2004.
  - 1.4. Effective Date. May 20, 2004.
- 1.5. Repeal of Former Rule. This procedural rule amends W.Va. 126CSR118, Athletic Trainers in the Public Schools of West Virginia," filed February 24, 1995 and effective March 27, 1995.

#### 126-118-2. General Rules.

2.1. Each county board of education shall employ an athletic trainer(s) or an individual(s) with limited football trainer authorization defined under section 3.4.

to serve during senior high school football practices and games. High schools that do not have an athletic trainer or an individual with limited athletic trainer authorization may not participate in football practices and games.

- 2.2. Each county board of education is encouraged to employ an athletic trainer for middle and junior high school football practices and games.
- 2.3. County superintendents are encouraged to assign an athletic trainer to work with other school athletic programs.
- 2.4. Athletic Trainers employed to serve in any public school capacity must adhere to the certification requirements set forth in this policy and Policy 5202, Minimum\_Requirements for the Licensure of Professional/Paraprofessional Personnel and Advanced Salary Classifications (126CSR136).

#### 126-118-3. Licensure Governing Athletic Trainers (Policy 5202).

- 3.1. Athletic Trainer. The Professional Service Certificate endorsed for athletic trainer stands alone, shall not require other certificates as a prerequisite, and must be renewed in accordance with renewal requirements for professional certificates approved by the West Virginia Department of Education (WVDE).
  Only an individual who holds a bachelor's degree from an accredited institution of higher education and has completed a state approved athletic trainer program, (including the content test) through an accredited institution of higher education shall be eligible for the Professional Service Certificate endorsed for athletic trainer.
- 3.2. Authorized Athletic Trainer. An Authorization endorsed for athletic trainer may be issued to an individual who holds certification through the National

Athletic Trainers Association Board of Certification (NATABOC). The

Authorization may be reissued annually upon application to the WVDE Office of

Professional Preparation with documentation of valid NATABOC certification and
the recommendation of the superintendent of the employing county.

- 3.3. Permit Athletic Trainer. A Permit for Full-Time Employment endorsed for athletic trainer may be granted by the WVDE to an individual who holds a minimum of a bachelor's degree and has completed six (6) semester hours of credit applicable to an approved athletic trainer program. (See Policy 5202, Minimum Requirements for the Licensure of Professional/Paraprofessional Personnel and Advanced Salary Classifications (126CSR136) for information regarding issuance and renewal of permits.) Individuals with an Athletic Trainer permit must attend an athletic trainer workshop/clinic sanctioned by the West Virginia Secondary Schools Activities Commission (WVSSAC) on an annual basis.
- 3.4. Limited Football Trainer Authorization. If an athletic trainer can not be obtained, county boards of education shall employ a licensed health care provider which may include one of the following: physician, registered nurse, licensed practical nurse, chiropractor, physical therapist, occupational therapist, physicians assistant, paramedic, emergency medical technician. To qualify for limited football trainer authorization, county boards of education must:
- 3.4.1. post the position of athletic trainer or individual to receive limited football trainer authorization with a closing date on or before May 1.
- 3.4.2. employ an athletic trainer. If an athletic trainer cannot be employed, county boards of education shall select a licensed health care provider to apply

for limited football trainer authorization.

- 3.4.3. require the individual(s) seeking limited football trainer authorization to attend an athletic trainer workshop/clinic sanctioned by the WVSSAC.
- 3.4.4. require the individual(s) seeking limited football trainer authorization to complete and submit the Application for Limited Football Trainer Authorization to the WVDE Office of Professional Preparation by July 1.

#### §126-118- 4. Continuing Education Requirements.

4.1. The renewal, conversion, and permanent status of the Professional Service Certificate will be in keeping with continuing education guidelines approved by the West Virginia Board of Education in conformity with the School Laws of West Virginia related to the Professional Certificate.

#### §126-118- 5. Professional Development.

- 5.1 . Programs for the professional development of athletic trainers shall comply with the program standards for athletic trainers approved by the West Virginia Board of Education. The issuance and renewal of certificates and the review, approval, and monitoring of professional development programs for athletic trainers shall be under the jurisdiction of the West Virginia Board of Education through the West Virginia Department of Education.
  - 5.2. Any individual employed as an athletic trainer by a county board of education on the basis of a professional certificate, authorization or permit shall participate in county and state approved continuing education programs based on a Systematic Program of Continuing Education for Public School Personnel in West Virginia. In the development of county continuing education programs for athletic trainers, consideration shall be given to statewide needs assessment data related to the roles and responsibilities of athletic trainers.

#### §126-118-6. General Role Description.

6.1. Role of the Athletic Trainer and Authorized Athletic Trainer. The athletic trainer possesses the essential knowledge, skills, attitudes, and credentials necessary to carry out the practices of prevention, evaluation, initial care, and physical rehabilitation of injuries sustained by students engaged in public school athletics. The athletic trainer has responsibility for the development, implementation,

and management of the athletic training program.

6.2. Role of the Permit Athletic Trainer and Limited Football Trainer Authorization. The duties of individuals with limited football trainer authorization are limited to evaluation, initial care, and referral of injuries sustained by students engaged in public school athletics.

#### §126-118-7. Governing Principles.

- 7.1. An individual serving as an athletic trainer or individuals with limited football trainer authorization may not have simultaneous coaching responsibilities in the same sport.
- 7.2. An athletic trainer or an individual with limited football trainer authorization must be in attendance at all senior high school football practices and games.
- 7.2.1. County superintendents may grant excuses from this requirement for individual practices or games based on illness, accident or unforeseen events.
  - 7.2.2. When an athletic trainer or an individual with limited football trainer authorization is not in attendance because of an illness, accident or other unforeseen event, the county superintendent must secure the attendance of other persons with specialized health related training.
  - 7.3. It is the responsibility of the athletic trainer or individual with limited football trainer authorization to determine whether or not an injured student athlete participates in a game or practice.

#### §126-118-8. Severability.

8.1. If any provision of this rule or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this rule.

West Virginia Department of Education

#### State Board Policy No. 2422.13

POLICY OF THE WEST VIRGINIA BOARD OF EDUCATION ON ATHLETIC TRAINERS IN THE PUBLIC SCHOOLS OF WEST VIRGINIA

May 8, 1981

#### Purpose

The purpose of the athletic trainer policy is to provide for the professional development of an individual to function as a state certified athletic trainer to improve the health care of student athletes in the public schools of West Virginia.

#### Rationale

Each year students throughout the nation are seriously injured while participating in athletic programs. Recent research and newspaper reports indicate dramatic incidents of athletic injuries in the United States. Obviously, there is no way to eliminate completely the inherent hazards associated with athletics. However, recent studies demonstrate that athletic trainers could provide leadership and services which would aid in the prevention, treatment, and rehabilitation of athletic injuries.

The West Virginia Board of Education is deeply concerned with the health and physical well-being of students participating in public school athletic programs. Therefore, the State Board promulgates this policy regarding athletic training as a means for providing safer athletic programs for students.

# SHORT TERM PLAN TO ADDRESS THE IMMEDIATE NEED FOR ATHLETIC TRAINING PROGRAMS

In an effort to address the immediate need of providing safer athletic programs for students in West Virginia public schools, the following objectives are established for 1980-81:

- To develop standards, regulations, and operational policies regarding the professional development of athletic trainers and practices of athletic training with regard to the prevention, treatment, and rehabilitation of athletic injuries in public schools.
- To maintain the Interim Advisory Council to advise the West Virginia Department of Education in matters related to the curriculum of athletic training and services provided by athletic trainers.

- To facilitate awareness-level attitudes by coaches, school administrators, and interested individuals on the importance of athletic trainers.
- 4. To provide awareness-level information to coaches, school administrators, and/or other individuals recommended by the county superintendent related to specific content in athletic training programs that is applicable to the prevention, treatment, and rehabilitation of athletic related injuries.
- To develop and disseminate information to the citizens of West Virginia related to the need for fully trained and certificated athletic trainers.
- 6. To initiate training workshops for coaches, school administrators, and/or other individuals recommended by the county superintendent that a) are designed to include learning experiences at the information and practice levels with evaluation procedures for individual participants, and b) may result in the issuance of an authorization to serve as an athletic trainer.
- To encourage county school boards to employ individuals holding valid professional certificates or permits endorsed to serve as an athletic trainer, and to authorize payment of such individuals through the school aid formula or as other funding sources may permit.

By the beginning of the 1980-81 school year, each county superintendent shall assure the State Superintendent and West Virginia Board of Education that at least one individual from each senior high school which has a football program has completed one of the workshops offered during the Summer of 1980.

#### LONG TERM PLAN TO ADDRESS THE NEED FOR ATHLETIC TRAINERS

In an effort to address the long-term need for safer athletic programs and the professional development of athletic trainers in the areas of prevention, treatment, and rehabilitation services to public school students participating in athletic programs, the following objectives are established for 1981-85.

- To further develop and refine standards, regulations, and operational policies regarding athletic trainers, athletic trainer professional development programs, and the practices of athletic training.
- To establish the West Virginia Advisory Council on Athletic Training appointed by the West Virginia Board of Education upon the recommendation of the State Superintendent of Schools to advise the West Virginia Department of Education in matters related to the curriculum of athletic training and services provided by state certified athletic trainers.

- 3. To provide continuing education experiences and explore the feasibility of professional development workshops which are designed to include learning experiences at the information and practice levels with evaluation procedures for individual participants and may result in the issuance of an authorization to serve as an athletic trainer.
- To continue the development and dissemination of information to the citizens of West Virginia related to the need for trained state certified athletic trainers.
- To require by the 1985-86 school year and thereafter that each county board of education employ a state certified athletic trainer(s) for county board sanctioned middle, junior, and senior high school football programs.
- 6. To require until the 1985-86 school year a state certified athletic trainer(s) on the basis of a valid certificate or permit endorsed for athletic training to serve middle, junior, and senior high school football programs sanctioned by county boards of education. Additionally, judicious assignment by county school administrators of athletic trainers to work with other school system athletic programs and related school programs is encouraged and permissible.
- 7. To evaluate the effectiveness of the policy of the West Virginia Board of Education as a means for providing safer athletic programs in the county school systems. To this end all head coaches of their respective sports shall report athletic injuries requiring post game/practice treatment by either the athletic trainer or a physician within 48 hours of the beginning of such treatment to the State Department of Education in accordance with established reporting procedures. This reporting procedure shall take effect on July 1, 1981.
- 8. County superintendents of school systems not having individuals serving as athletic trainers on a valid certificate or permit endorsed for athletic training for the 1981-82 school year and each year thereafter until June 30, 1985, shall submit to the State Superintendent of Schools a letter Informing him of the inability to locate an individual and outlining county plans to meet the State Board certification mandate regarding the 1965-85 school year. This letter shall be submitted no later than August 1 of each year.

#### CERTIFICATION PROCEDURES GOVERNING ATHLETIC TRAINERS

#### Authority

Athletic trainers shall come under the definition of professional educators as specified in §18-1-1 and §18A-1-1 of the School Laws of West Virginia.

# Eligibility for an Authorization to Serve as Athletic Trainer During the 1980-81 School Year

Any individual may be issued an authorization to serve as an athletic trainer from June 30, 1980, through June 30, 1981, upon the a) recommendation of the county superintendent b) completion of a state approved athletic trainer workshop during the Summer of 1980, c) verification of completion of the requirements for a bachelor's degree from an accredited institution of higher education, and d) application to the West Virginia Department of Education.

Such authorizations are non-renewable and must be converted to a Permit for athletic trainer on the basis of completion of six semester hours of credit from a West Virginia state approved athletic training program within the time period of the authorization.

The issuance of such authorizations shall be subject to the rules and regulations governing authorizations as established by the West Virginia Board of Education.

#### Issuance of Permits

A First Class Permit endorsed for athletic trainer may be issued valid for one year upon verification that the individual:

- has been admitted to a state approved program for athletic trainers in an accredited institution of higher education,
- has filed a professional commitment through the county superintendent with the West Virginia Department of Education to complete the program within five years, and
- 3. has completed six semester hours in that program.

Six additional semester hours in the approved program for athletic trainers must be completed each year for renewal of the permit.

All requirements for the endorsement on a Professional Service Certificate must be completed within five years of admission to the approved program for athletic trainers.

Permits shall be issued subject to approval by the West Virginia Board of Education each year and in accord with the rules and regulations governing Permits as established by the West Virginia Board of Education.

#### Issuance of Professional Service Certificate

In accordance with the authority of the State Superintendent of Schools and with standards and requirements approved by the West Virginia Board of Education (School Laws of West Virginia, 18A-3-2) to authorize the issuance of professional certificates beyond the professional teaching and administrative certificates, athletic trainers shall be certificated under the category of a Professional Service Certificate. The endorsement on the Professional Service Certificate may stand alone, shall not require other certificates as a prerequisite, and must be renewed in accordance with renewal requirements for professional certificates approved by the West Virginia Board of Education. Only an Individual who holds a bachelors degree from an accredited institution of higher education, has completed a state approved athletic trainer program in an accredited institution of higher education, and has the recommendation of the institution of higher education shall be eligible for the Professional Service Certificate endorsed for athletic trainer.

#### Continuing Education Requirements

- The renewal, conversion, and permanent status of the Professional Service Certificate will be in keeping with continuing education guidelines approved by the West Virginia Board of Education in conformity with the School Laws of West Virginia related to the Professional Certificate.
- 2. Any individual employed as an athletic trainer by a county school system on the basis of an authorization, permit, or professional certificate shall participate in county and state approved continuing education programs based on A Systematic Program of Continuing Education for Public School Personnel in West Virginia. In the development of county continuing education programs for athletic trainers, consideration should be given to statewide needs assessment data related to the roles and responsibilities of athletic trainers.

#### Approval of Educational Personnel Programs

Programs for the professional development of athletic trainers shall comply with the <u>Guidelines for Developing Experimental Educational Personnel Preparation Programs until program standards for athletic trainers are approved by the West Virginia Board of Education.</u>

The issuance and renewal of certificates and the review, approval, and monitoring of professional development programs for athletic trainers shall be under the jurisdiction of the West Virginia Board of Education through the West Virginia Department of Education, the Bureau of Learning Systems, and the Division of Professional Development Systems.

#### NEED FOR COOPERATIVE EFFORTS

The West Virginia Board of Education, in its interest to create safer athletic programs in the public schools, endorses cooperative efforts in the implementation of this policy by the West Virginia Department of Education, county school systems, and institutions of higher education which have or plan to develop and implement state approved professional development programs for athletic trainers by the 1982-83 school year.

6

1983-1984 Statistics on Athletic Trainers in Secondary Schools

Appendix C

Classification	<b>Total Schools</b>	Percentage	Permit	Professional Certification
No AT employed	37	27%		
Personnel with no AT specialization	36	26%		
Personnel with AT specialization	65	47%	86%	14%
Total	138	100%		

Appendix D

West Virginia Department of Education Athletic Trainer Salary Survey Comparison

County	1984 Salaries	1996 Salaries
Barbour	\$1100/yr.	\$3,000
Berkeley	1300/yr.	1800
Boone	no supplement	1000 + Aug.+ 50/JV game
Braxton	1650/yr.	N/A
Brooke	2898/yrhead, 1610/yrasst.	N/A
Cabell	700/yr.+ 65 semi-monthly	4200
Calhoun	150/month	3000
Clay	60/month	6600 + one month
Doddridge	500/yr.+1 month salary	1725 + 20 days
Fayette	300/yrFB coach, 800/yr. if not	1000
Gilmer	500/yr.+20 days salary	1800
Grant	One months salary	N/A
Greenbrier	75/month	2700
Hampshire	2000/yr.	1600-FB, 750-others, 50/yr. exp.
Hancock	2800/yr.	5500-8250
Tidiloock	2000/y1.	Certified-1400+4% salary, Waiver- 950+2%
Hardy	N/A	salary
Harrison	800/yr.+20 days teacher salary	920 + 20 days
Jackson	1560/yr.	4520
Jefferson	500/yr.+1 month salary	1500 + 20 days
Kanawha	900/yr.	3650 (average)
Lewis	1200/yr.	N/A
Lincoln	500/yr.	900 + 15 days
Logan	300/per sport+1 month salary	10/hour
Marion	300/yr.+1 month salary	1100 + 15 days
Marshall	4810/yr. (SeptMay)	14000
Mason	900/yr.	2255-3006
Mercer	7%-Head Coach, 5%-Asst.	3100
Mineral	1200/yr.	1650
Mingo	N/A	1000
Monogalia	1800/yr.	3000
Monroe	518/yr.+part teachers salary	3015.39
Morgan	1350/yr.	2500
McDowell	200/yr.	1075 + one month
Nicholas	600/yr.+ 1/2 month salary	1500 + August
Ohio	1680/yr.	3825
Pendleton	3% basic salary	2100
Pleasants	N/A	4080
ricasanis	200/yrcoach, 400/yr.+part salary if	4000
Pocahontas	not	2000
Preston	N/A	2550
Putnam	1900/yr. (515 hrs. minimum contract)	4200
Raleigh	750/yr.+20 days salary	1000 + 4 weeks
Randolph	800/yr.	1700 + 4 weeks
Ritchie	400/yr.	800 + 20 days
Roane	100/month	515
Noane	100/111011111	

Summers	750/yr.+1 month salary	2900
Taylor	2100/yr.	3850 + 20 days
Tucker	6% basic salary	950 + 20 days
Tyler	350/yr.+ 1/2 month salary	5000
Upshur	1000/yr.+ 1 month salary	1800 + one month
Wayne	2500/yr., 1500/yr. if permit AT	Certificate-2700, Permit-1500
Webster	500/yr.	N/A
Wetzel	875/yr.	N/A
Wirt	1000/yr.	2500
Wyoming	500/yr.+ 1 month salary	500 + 20 days

**Appendix E**Selected slides taken from Martin & Shuman (2004) presentation.

	Total Games	Ambulance	e Available
A	212	194	(91.5%)
AA	190	180	(94.7%)
AAA	142	132	(93%)
Totals	544	506	(93%)



# Home Trainer Credentials/school

	ATC	WVS	WVP	waiver	other
A	7	11	9	8	7
AA	6	12	5	8	5
AAA	20	6	0	0	1
#/%	33	29	14	16	13

# Availability Of Physician At Home Games-2004

100		A	AA	AAA	
	YES	85	84	91	260
CONTRACTOR SERVICE	NO	132	101	51	284

#### **Curriculum Vitae**

1 Campus View Drive Vienna, WV 26105 Phone (304)671-6780 E-mail: bpotter\_atc@charter.net

### **Brian William Potter**

Work experience

#### **Graduate Assistant Athletic Trainer**

July 2003-present Vienna, WV

Healthsouth Western Hills

- Head Athletic Trainer at Parkersburg South High School with primary responsibilities including: prevention, treatment, rehabilitation, and documentation of injuries; communication with parents, coaches, and physicians; facilitating referrals when necessary; ordering and inventory of supplies.
- Additional responsibilities included working with patients in the clinic setting and assisting with coverage of several large events including WV State Cross Country meet, WV State Softball Tournament, West Virginia Intercollegiate Athletic Conference Softball Tournament, high school track meets, wrestling tournaments, and Fall Games of the WV Special Olympics.

#### **Orthopedics Internship**

January 2005-April 2005

Parkersburg Orthopedic Associates

Parkersburg, WV

 150 hour internship with local orthopedic surgeons during which time I observed numerous patient evaluations and several surgeries. I had the opportunity to view numerous x-rays and MRIs, as well as observe several office procedures including cortisone and hyalgan injections, aspiration of joint fluid, removal of stitches, and casting of fractures.

#### **Emergency Medical Technician-Basic/Driver**

1998-present Morgan County Rescue Service Berkeley Springs, WV

 Affiliation with EMS began as a volunteer member while still in high school. Became WV State Certified EMT-B July of 2002 and have been on the part-time paid staff since March of 2003.

#### **Summer Camp Medical Staff**

Summer 2002 Summer Camps Slippery Rock University

 Provided first aid coverage for a variety of summer camps including football, basketball, baseball, volleyball, softball, and cross country

Education

2003-present Marshall University Huntington, WV

#### Master of Science/Health and PE

- will graduate May 2005
- Thesis topic: Historical review of athletic training in WV and the appropriateness of medical coverage of WV high school sports

1999-2003 West Virginia Wesleyan College Buckhannon, WV **Bachelor of Science/Athletic Training** 

- CAAHEP Accredited Undergraduate Athletic Training Program
- Graduated Summa Cum Laude, GPA 3.9 (4.0 scale)
- Psychology Minor
- Past President of the Student Athletic Trainer's Club

#### Awards Received

- NATA Research and Education Foundation Graduate Scholarship (2003)
- 2003 WVWC Senior Leadership in Athletic Training Award
- 2003 WVWC Senior Key Award
- NATA Research and Education Foundation Undergraduate Scholarship (2002)
- 2002 WVWC Outstanding Junior in Physical Education
- 2002 WVWC Outstanding Student Athletic Trainer
- 2002 Who's Who Among Students in American Universities and Colleges
- National Honor Society in Psychology
- Alpha Lambda Delta freshman honorary
- Eagle Scout B.S.A.

# Professional memberships

- National Athletic Trainer's Association (certified June 2003, #060302226)
- West Virginia Athletic Trainer's Association

#### Presentations

• 2003 WVATA Annual Conference Wheeling, WV

Sudden Cardiac Death in Athletics: The Athletic Trainer's Role and the Importance of Automated External Defibrillators

• 2002 WVATA Annual Conference Wheeling, WV

Distal Biceps Tendon Rupture