School Nurses’ Perceived Barriers & Perceptual Influences When Implementing AED Programs

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School Nurses

“School nurses have minority status in the educational environment of a school” (DeSisto & DeSisto, 2004, p. 229)

Louisiana School Nurses

- In a 2009 national survey of school nurses, 13 out of 50 states met the nurse-student ratio of NASN 1:750 (DeSisto, 2009).
- LA School nurse ratios ranged from 1:450 to 1:3000 (Boudreaux, 2016).
Self-efficacy

“The stronger the perceived self-efficacy, the more likely are persons to select challenging tasks, the longer they persist at them, and the more likely they are to perform them successfully” (Bandura, 1986, p. 397)

Ability to Influence Major Health Care Decisions in The School Setting

Self-efficacy

- Exactly True
- Most True
- Hardly True
- Not at all
Ability to Express Professional Views Freely on Important School Health Care Issues

Self efficacy

- Exactly True
- Mod True
- Hardly True
- Not at all

Ability to Obtain Administrative Support with Health Care Program Implementation

Self efficacy

- Exactly True
- Mod True
- Hardly True
- Not at all

LA School Nurse General Self Efficacy Scores

- 98% can solve difficult problems with enough effort
- 81% can overcome opposition
- 95% can easily accomplish goals
- 97% can deal effectively with unexpected events
- 97% can handle unforeseen situations due to resourcefulness
- 97% can remain calm when facing difficulties with internal coping abilities
- 98% can find several solutions to a problem
- 97% CAN HANDLE WHAT COMES THEIR WAY
Sudden Cardiac Death in The School Setting

- In a 2005 national-based survey of school nurses, 30% of school nurses lacked confidence in the ability to respond accordingly to Sudden Cardiac Death (SCD), as compared to 12% in the response to respiratory distress (Olympia, Wan & Alner, 2005).

SCD Incidence

- 1 per 100,000 students a year in high school athletes (Maron, 2003)
- 4.4 per 100,000 students a year in high school athletes (Drezner et al., 2009)
- 1 per 43,000 student-athlete per year (Harmon et al., 2011)
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- 250,000-350,000 out-of-hospital SCD in U.S. (Sanna et al., 2008)
- 8 per 100,000 out-of-hospital SCD in children & adolescents (Atkins et al., 2009)

AHA 2015 OHCA Guidelines

- Recognition & Activation
- Immediate, High-Quality CPR
- Rapid Defibrillation
- Basic & Advanced EMS
- ALS & Post-Arrest Care
AEDs should be available to all athletes experiencing SCD in competition, training & practice within five minutes of collapse (Link et al., 2015).
Barriers Across the U.S.

- Financial Resources
- Medical-Legal Concerns
- Uncertainty of Where to Place AED
- Established School Policy

Barriers in LA

- COST (35%)
- Staff support & Participation (27%)
- Maintenance (25%)
- Lack of Policy
- Fear

Areas of Improvement for LA

- Medical Director
- Link to EMS
- Mock Drills
- EAP
R.S. 40:1236.13
- Tested & maintained according to manufacturer guidelines
- A licensed physician or APN with prescription authority is involved in
  - Training
  - Emergency medical service notification
  - Maintenance

R.S. 40:1236.13
- AED users receive appropriate CPR & AED training from a national recognized CPR & AED course
- EMS is activated when using AED
- Any use of AED is reported to MD or NP
- Notification to Bureau of Emergency Medical Services of DHH
- Notification of AED location to local EMS
- If funding available- AED for all high schools

How are LA schools complying with R.S. 40:1236.13 law?
- 42.3% under supervision of MD or ANP
- 41.1% do not have MD or ANP supervising program
- 6.3% do not know
- 9.9% N/A
How are LA schools complying with R.S. 40:1236.13 law?

- **54.1%** are linked to local EMS
- **17.1%** are not linked to local EMS
- **23.4%** do not know
- **5.4%** N/A
Have you notified the Bureau of Emergency Medical Services of LA Department of Health & Hospitals of your AED program?

How are LA schools complying with R.S. 40:1236.13 law?

- **81.1 %** CPR training every 2 years (which course using?)
- **8.1 %** are not retraining employees in CPR
- **5.4 %** do not know
- **5.4 %** N/A

![Pie chart showing LA Schools CPR training](chart.png)
How are LA schools complying with R.S. 40:1236.13 law?

- 84.7% incorporate regular AED maintenance checks
- 1.8% do not
- 9.0% do not know
- 4.5% N/A

LA Schools Maintenance

Evidence-Based Practice

Essential Elements of AED programs (Aufderheide et al., 2006)

✓ planned & practiced response
✓ Training of rescuers in CPR & AED
✓ Link to local EMS
✓ Continuous quality improvement of program
Evidence-Based Practice

“Every school or institution that sponsors athletic activities should have a written and structured EAP” (Drezner et al., 2007, p. 143).

LA schools & EAPs

- 50% have EAPs
- 23% do not
- 21.6% do not know

LA schools

![Pie chart showing the distribution of EAPs in LA schools.](image-url)
LA Schools & Mock Drills
• 36% do mock drills
• 54% do not
• 4% do not know

LA Schools

Mock Drills

YES
NO
Unknown
N/A

LA House Bill No. 123
Each high school shall have an AED on its premise (Teddy Daigle & Shane Ozene Act)
References


# References


