

# SB 187: School nurse seizure action plans



## Executive Summary

Epilepsy is the most common brain disorder worldwide. It can cause sudden seizures that range from mild to severe and life-threatening. Due to this variation, people with epilepsy will require different medications and treatments in response to their seizures. Approximately 470,000 children have epilepsy in the United States, and children make up about 25% of people with epilepsy worldwide.<sup>1</sup> Students with epilepsy who experience seizures while at school can often be treated onsite and recover, but they may still be at risk of health complications and academic achievement deficits if they experience serious seizures that are not treated properly. SB 187, known as “Will’s Law”, would require school nurses in Missouri to construct a seizure action plan for children who have epilepsy or other seizure disorders in consultation with parents. These plans contain individualized procedural guidelines for seizure treatment. This bill would also require that notice be given to school employees who interact with students with seizure disorders, and that they be trained every two years in seizure disorder response with a curriculum approved by the Department of Elementary and Secondary Education. SB 187 would also protect school employees from being held liable for good faith acts in responding to seizures. As of 2020, five states have passed similar legislation (KY, IN, TX, IL, NJ).

## Highlights

- Students with epilepsy or other seizure disorders **face potential health risks in a school setting and are at risk of learning loss.**
- Correct administration of a seizure rescue medication can **prevent the need for emergency medical services and missed schooling.**
- Survey data indicates that existing training for school nurses **increases confidence in their ability to diagnose and respond to seizures.**

## Limitations

- It is difficult to measure the effectiveness of seizure action plans at a large scale due to a lack of data availability and reporting. Small-scale studies suggest that seizure action plans do not reduce the overall number of doctor’s visits and medication use, but the effect on health outcomes is unclear.

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## Research Background

### Childhood epilepsy & schools

About 470,000 children are diagnosed with epilepsy in the United States. Compared to their peers without seizure disorders, children with epilepsy are no different in terms of academic

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achievement (e.g., test scores, graduation rates). However, they do face unique risks of learning loss due to a variety of factors.<sup>2</sup> Students who experience seizures at school may go home after experiencing a seizure, and may miss school days due to medical appointments.<sup>3</sup> Anxiety and depression symptoms, which can hinder learning, are also common in children and adolescents with epilepsy.<sup>4</sup> To address these academic risks, health organizations, including the CDC, recommend that students have a seizure action plan prepared which specifies how observers can appropriately respond to their seizure events.<sup>5</sup>

### **Career Preparation in Missouri Middle Schools**

Schools are settings where children commonly experience seizures away from the supervision of their parent or guardian, so many school districts have adopted seizure action plans to ensure that students are able to be treated if they experience a seizure. Seizure action plans are documents that provide individualized details about epilepsy symptoms, medications, and preferred treatment or response protocols (e.g., when/whether to call an ambulance, what kind of medication to administer). Since these details may vary between different people, these documents provide school nurses and employees with specific information about how to respond appropriately to a given seizure event. The MO Department of Health and Senior Services has a seizure action plan template available, as do many Missouri school districts.<sup>6</sup> Correct administration of a seizure rescue medication can prevent the need for emergency medical services, which may be invasive and costly, so proper information and seizure response training can help individuals who experience a seizure avoid more drastic treatments and costs.<sup>7</sup> It is also typically more difficult to stop a prolonged seizure than a brief one, and longer seizures usually necessitate longer recovery periods, so a rapid, prepared response is crucial to avoiding further health complications.

Surveys of school nurses indicate that they may be able to identify and treat common types of seizures, but are not confident about certain treatments and do not always have specific information about individual students who experience seizures.<sup>8</sup> Nurses with different licensure and experience levels have different levels of exposure to diagnosing and treating seizures, so training and additional information can help close these gaps.<sup>4</sup> Some elementary school teachers also indicate that they do not feel comfortable with their ability to respond appropriately to a student having a seizure.<sup>9</sup> Providing school employees with training and seizure action plans can improve their ability to respond appropriately to seizures, but data in this area is sparse, so large-scale studies on health outcomes are lacking. Studies to date do not demonstrate clear benefits on health outcomes related to school seizure action plans, and indicate that seizure action plans do not reduce overall health care utilization.<sup>10</sup>

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