

Myth vs. **FACT**
A Rebuttal to the Diabetes in CA Schools Website
or
The **Whole** Truth

April 12, 2010

TO: CSNO Members

From: Nancy Spradling, Executive Director

The American Diabetes Association is currently sponsoring AB 1802 Hall. This legislation would allow a parent-designated "volunteer" to administer insulin to students in school. A website was recently created by "grassroots parent volunteers" in order to support AB 1802. The website contains a section called "**Myth vs Fact**", which contains what they consider to be myths, and then the alleged fact that facilitates their position that the legislation should be passed.

In our opinion, their "Fact vs Myth" is inaccurate, and misleading. CSNO takes issue with this document and the following is a rebuttal. Each "Myth" is from their website, as is each alleged "Fact".

Each "Actual Fact" is our response.

Myth:

Diabetes care needs are best managed with a routine schedule.

ALLEGED "FACT":

Diabetes care needs can occur at any time. For this reason, all persons who have direct responsibility for the supervision of a child with diabetes should be appropriately trained to support the child's care needs. **At least one person must be available at all times to assist a child with diabetes in all aspects of care, including administration of insulin.**

Actual Fact: Yes, at least one person SHOULD be available at all times to assist a child with diabetes. However, not all children need assistance with insulin. Many are self-sufficient, and developmentally capable of self-administration. Children who are capable of self-administration need trained school staff to understand diabetes and the signs and symptoms of high and low blood sugar. Children who are **not** capable of self-administration (because of age or other issues) need school staff trained to understand diabetes, **AS WELL AS** a licensed healthcare provider whose license allows them to administer medication as defined by California law.

Myth:

Only a licensed healthcare professional may administer insulin.

Alleged "Fact":

People without any medical training and of varying socioeconomic and educational backgrounds are routinely trained to safely administer insulin.

Existing state law (Ed Code and the Nurse Practice Act) already supports the administration of medication by unlicensed individuals in the school setting and elsewhere.

ACTUAL FACT: Family members and family friends can certainly be trained to administer insulin. However, it should be noted that they are trained to handle the sole responsibility of one individual- usually in the privacy of the home, and for a loved one or close family friend. The identified person usually knows the diabetic well and has minimal interruptions when administering medications. Further, there is usually only one **type** of medication to be administered by injection in the home setting. In the school setting, students receive their medication in the office where there are competing interests for attention and there can be multiple injectable medications in the refrigerator.

The California Nursing Practice Act **does not** allow delegation of nursing duties, including the administration of medication, to unlicensed people in ANY setting including the school setting (unless a family member or friend of the student or student's family). Current state law defines "*Administer*" as *the direct application of a drug or device to the body of a patient or research subject by injection, inhalation, ingestion, or other means.*

Physicians may delegate medication administration to Medical Assistants- within the confines of their own office or clinic- who have received a minimum of 10 hours training in the administration of medication. In every instance, prior to administration of medicine by a medical assistant, a licensed physician or another appropriate licensed person shall verify the correct medication and dosage. The supervising physician must authorize any technical supportive services performed by the medical assistant and that supervising physician must be physically present in the treatment facility when procedures are performed.

The California Board of Registered Nursing (BRN), which falls under the auspices of the California Department of Consumer Affairs, is a State governmental agency established by law to protect the public by regulating the practice of registered nurses. The BRN is responsible for implementation and enforcement of the Nursing Practice Act, which are the laws that regulate nursing education, licensure, practice, and discipline.

Existing California state law (Education Code 49414.5 and 49414, respectively) supports the administration of only 2 medications by unlicensed school staff: Glucagon and Epinephrine, which are considered emergency medications. These medications are necessary to save a life, and if administered will do no harm. No other medications can be administered by an unlicensed person in a school setting or any other setting, unless by a family member or friend of the student or student's family.

Insulin is not considered an emergency drug. An overdose of insulin can cause coma and death.

Myth:

There are plenty of nursing professionals to fill vacant positions in California's schools.

Alleged "Fact":

There is a severe shortage of nursing professionals in California that, according to the Board of Registered Nursing, has existed for 10 years and is projected to worsen well into the future.

So, despite current state budget woes, even if funding materialized to hire a nurse on every campus, **there aren't enough nursing professionals to fill the positions in our schools.**

ACTUAL FACT: There **are** enough licensed health professionals to serve these students. A licensed healthcare professional includes Licensed Vocational Nurses (LVNs), Licensed Practical Nurses (LPN's), and Registered Nurses (RNs). Many school districts utilize the services of these professionals, under the supervision of the Credentialed School Nurse in the school setting.

School districts identify their funding priorities. School districts may choose to have many credentialed school nurses or little to no nursing services, however it is **not** because of an actual shortage of nurses. It is a decision based on the school district's funding priorities and the willingness or unwillingness to expend resources on nursing services.

In many areas of the State, newly graduated and experienced licensed Registered Nurses (RN's) are unable to find jobs in hospitals. Some programs are finding that 50% of their newly graduated newly licensed nurses are unable to find employment as an RN - and some programs have as many as 80% unable to find employment.

Many LVNs are being phased out of hospitals. While it may seem like there may not be enough credential schools nurses, the reality is that the use of other licensed healthcare professionals will allow us to provide safe services to the students with diabetes. It will also allow safe services to many other students in California schools who have acute and chronic health issues that requires nursing services, such as asthma and seizures, who also need safe and effective services.

Myth:

Having a ‘nurse only’ policy adequately meets the needs of children with diabetes.

Alleged “FACT”:

California has one of the worst student to school nurse ratios in the nation...2700:1 vs. the recommended level of 750:1.

Less than 50% of all California school districts have a school nurse. Of those that do, many school nurses roam from building to building and, in many cases, visit a campus but a few hours a week, if at all.

Not only does this directly impact daily care by making children needlessly wait thereby enduring prolonged periods of out-of-range glucose levels, it also dangerous and fails to meet a child's needs in an "emergency" situation, impairs cognitive function and ability to learn, increases risk of complications both short- and long-term, fails to create a seamless transition between home life and school life, and disregards the psychosocial aspects of living with the condition.

ACTUAL FACT: California’s ratio of school nurses to students IS abysmal because some districts refuse to see it as a funding priority. Steps should and must occur to provide necessary services to all California children in our schools, especially those with medical conditions. Let us be clear, however, that for children with diabetes a mix of licensed and unlicensed staff are necessary. An emergency, for a child with diabetes, is too much insulin and low blood sugar, and in this situation, emergency glucagon should be available, and **CAN** be administered by a trained unlicensed school staff member.

For the children who are in need of their insulin often during the school day, which is not considered to be an “emergency” situation and who are not capable of self-administration, a nurse - albeit credentialed school nurse, RN or LVN under the supervision of the Credentialed School Nurse - should be the one to administer. There are many districts that utilize a combination of Credentialed School Nurses, RN’s or LVNs (working under their scope of practice, which requires the supervision of the Credentialed School Nurse on a school site) who are able to meet the medical needs of children with diabetes. Nurses are needed because insulin is on the top 10 list of Institute for Safe Medication Practices most dangerous drugs. Having a nurse:

- prevents an ACTUAL “emergency” caused by an overdose of insulin
- ensures that students who have a “prolonged period of out of range glucose levels” have a nurse providing the care that is necessary to assess and case manage a child who may not be handling the aspects of his or her illness. Case management works in conjunction with the parent, school and the physician for the many aspects of diabetic care in the school setting. Unlicensed persons are not trained to work in this arena, nor do they have the authority that licensure and credentialing bestow.
- allows for case management of a student that may need adjustments to their insulin dosages, while their activity levels change or when they are experiencing growth spurts.

A “nurse only” policy ONLY applies to the administration of insulin, NOT to all of the other many aspects of diabetes care.

Myth:

Unlicensed individuals who volunteer to be trained to administer insulin are essentially performing the practice of nursing and, therefore, are in violation of the Nurse Practice Act.

Alleged "Fact":

Each child who needs help with insulin administration at school is required to provide to the school a written document containing explicit medication instructions from the child's treating physician. Subsequent to their being properly trained, **unlicensed voluntary school personnel follow the written healthcare plan's instructions and are NOT asked to make dosing determinations.**

Many diabetes parents are also available by phone throughout the day and are eager to answer questions from school personnel at any time.

ACTUAL FACT: A number of factors can affect a student's blood glucose and need for insulin. According to the Juvenile Diabetes Research Foundation, "People with type 1 diabetes often struggle to determine how much insulin to inject. In a simple and perfect world, this question would have an easy answer (e.g. always eat a certain amount of food and inject a certain amount of insulin). However, in reality there is no way to know how much insulin to inject with 100% accuracy. Many factors influence how much insulin people need to get to the desired "perfect balance" of glucose and insulin. These factors include foods with different absorption rates as well as the effects of stress, illness, and exercise. Also, as children grow, their insulin needs change. Since determining how much insulin the body needs to "balance" the amount of glucose is really a best guess, sometimes the guess is inaccurate and high or low blood sugar results."

If a physician's instructions are based on certain factors - for instance: amount of food planned for lunch; little to no physical activity; and instead the child does not eat all of the expected meal or adds additional carbohydrates from a friend's lunch; spends recess racing around the field; and/or is coming down with a fever/illness; then the child's blood glucose levels are not necessarily going to fit the expected. At that point in time, a licensed person capable of making an assessment of that child's physical condition is necessary, as is someone who may need to contact the child's physician for changes to the child's medication plan. *Because of the Health Insurance Portability and Accountability Act (HIPPA), in the school setting, only a nurse can speak and consult with a physician and only a physician can give orders to a nurse. Delegation of medical judgment and medication administration responsibility to an unlicensed lay person is a safety concern: assessment and adjustment of a medication is inappropriate for a lay person. Unlicensed school employees who volunteer to be trained to administer insulin in the school setting are essentially performing the practice of nursing and, therefore, are indeed in violation of the Nurse Practice Act.*

Myth:

Insulin requires two people to cross-check dosing prior to administration.

Alleged "Fact":

Insulin does NOT require two persons to cross-check prior to administration. This 'old school' practice is rooted in the fact that some 20+ years ago there was lack of standardized insulin strengths (U-20, U-40, U-50, and U-100). This practice of cross-checking is sometimes used in the hospital setting. Today, **all insulin is standardized at U-100 and it is sold as an over-the-counter medication.**

In the hospital setting, people are sick. Children with diabetes at school are healthy and simply need insulin to learn, live, and just be kids.

In the hospital setting there many kinds of insulin stored in an inventory cabinet. The vast majority of children with diabetes, however, receive one kind of insulin while at school.

ACTUAL FACT: Insulin is still considered a high-alert medication, by the *Institute for Safe Medication Practices*. High-alert medications are drugs that bear a heightened risk of causing significant patient harm when they are used in error. In the hospital setting, it is **still** required that two nurses check the dosage of insulin.

Only certain kinds of insulin are sold over-the-counter: humulin and Novalin. None of the insulin analogs are over-the-counter (such as Novolog, Humalog, Lantus, Apidra, etc.) The following chart lists the types of injectable insulin with details about **onset** (the length of time before insulin reaches the bloodstream and begins to lower blood sugar), **peak** (the time period when the insulin is the most effective in lowering blood sugar) and **duration** (how long insulin continues to lower blood sugar). These three factors may vary, depending on the body's response. The final column provides some insight into the "coverage" provided by the different insulin types in relation to mealtime.

Type of Insulin & Brand Names	Onset	Peak	Duration	Role in Blood Sugar Management
Rapid-Acting				
Humalog or lispro	15-30 min.	30-90 min	3-5 hours	Rapid-acting insulin covers insulin needs for meals eaten at the same time as the injection. This type of insulin is used with longer-acting insulin.
Novolog or aspart	10-20 min.	40-50 min.	3-5 hours	
Apidra or glulisine	20-30 min.	30-90 min.	1-2½ hours	
Short-Acting				
Regular (R) humulin or novolin	30 min.-1 hour	2-5 hours	5-8 hours	Short-acting insulin covers insulin needs for meals eaten within 30-60 minutes
Velosulin (for use in the insulin pump)	30 min.-1 hour	2-3 hours	2-3 hours	
Intermediate-Acting				
NPH (N)	1-2	4-12 hours	18-24	Intermediate-acting insulin covers insulin

	hours		hours	needs for about half the day or overnight. This type of insulin is often combined with rapid- or short-acting insulin.
Lente (L)	1-2½ hours	3-10 hours	18-24 hours	
Long-Acting				
Ultralente (U)	30 min.-3 hours	10-20 hours	20-36 hours	Long-acting insulin covers insulin needs for about 1 full day. This type of insulin is often combined, when needed, with rapid- or short-acting insulin.
Lantus	1-1½ hour	No peak time; insulin is delivered at a steady level	20-24 hours	
Levemir or detemir(FDA approved June 2005)	1-2 hours	6-8 hours	Up to 24 hours	
Pre-Mixed*				
Humulin 70/30	30 min.	2-4 hours	14-24 hours	These products are generally taken twice a day before mealtime.
Novolin 70/30	30 min.	2-12 hours	Up to 24 hours	
Novolog 70/30	10-20 min.	1-4 hours	Up to 24 hours	
Humulin 50/50	30 min.	2-5 hours	18-24 hours	
Humalog mix 75/25	15 min.	30 min.-2½ hours	16-20 hours	
*Premixed insulins are a combination of specific proportions of intermediate-acting and short-acting insulin in one bottle or insulin pen (the numbers following the brand name indicate the percentage of each type of insulin).				

It is not uncommon for students to need two different types of insulin - especially at lunchtime, sometimes with different methods of administration, based on an algorithmic calculation.

Also, it is not uncommon for students and or staff at school to have different kinds of injectable medication, so there may be many types of injectable medication for individuals at the school site. Schools sites are home to many children several of whom have complex medical needs. In addition to children with diabetes, school nurses also meet the healthcare needs of children who have health related conditions or who may need to have injections of other medications. To believe that there is only one type of medication in the school setting for children with only one type of health need is inaccurate and presumptive.

Myth:

Insulin administration involves various kinds of syringes.

Alleged "Fact":

Insulin is administered via 3/10 cc unit syringes, insulin pump or insulin pen. These devices use short, tiny needles to administer insulin just under the skin.

NO intramuscular (long-needle) syringes are used to administer insulin.

Every child with diabetes is required by law to provide the school with the necessary supplies. Only those supplies are to be used.

ACTUAL FACT: California has a wide variety of children attending our schools with an array of medical conditions. Individual school sites are known to have multiple students with type 1 Diabetes, all could have different physicians, different delivery methods of insulin, different types of insulin and completely individualized medical management plans.

As mentioned above, it is also not uncommon for students and or staff at school to have different kinds of injectable medication, so there may be many types of injectable medication for individuals at the school site, with several different sizes of syringes.

We have children in urban, suburban, rural and very rural areas. We have children who are covered by health insurance and some who are not. We have those who are covered by private providers and those with Medi-Cal. There are still MANY children who are **not** on insulin pumps or using insulin pens - they are using syringes.

Many of these children are not being seen by pediatric endocrinologists - they are lucky to be seen by a doctor. They may not always have all of the necessary supplies. Helpful lay staff members have been known to unknowingly provide the wrong size syringe - not understanding the difference between units and cc's can be deadly.

And a needle is still a needle whether short or long, on a pen or on a syringe. School settings are VERY different than the home setting. In the home setting there are minimal distractions, many of which can be controlled. A person delivering medication in the home setting can focus exclusively on the task that they must do. The provider and the child with diabetes usually have some kind of relationship where they know one another, including the child's signs and symptoms of low blood and high blood sugar.

In contrast, schools and the school offices are very busy places, which is where medication is stored to be provided to the student, unless s/he has been given permission by the doctor to carry his/her own medication. Office staff may serve up to 1,000 or more requests daily. Office staff is distracted by many competing interests and needs including students, teachers, administrators, parents, phone calls, walkie-talkie requests, and electronic communication requests as part of their assigned duties. In schools, many children throughout the day come to the school office for their oral and injectable medication.

Many students who need medication, coupled with many tasks assigned to the office staff, complicated by many conditions can cause distractions. Nurses understand the need and are trained to follow the 6 'rights' of medication administration for every student receiving medication (the right student, the right medication, the right dose, at the right time, given the right route, and the right document/record.) This

underscores the differences between the home, where one person is receiving one or more types of medication, and school setting, where many students may be receiving many kinds of medication with many distractions happening simultaneously. It clearly is a safety issue.

Myth:

A limited few support the training of unlicensed voluntary school personnel to administer insulin to children with diabetes.

Alleged “Fact”:

The following national organizations support the principle of training unlicensed voluntary school personnel to administer insulin to children with diabetes:

American Academy of Pediatrics, American Medical Association, American Assn. of Clinical Endocrinologists, American Assn. of Diabetes Educators, Lawson Wilkins Pediatric Endocrine Society, American Assn. of Dieticians, Pediatric Endocrine Nurses Society, American Diabetes Association, and the Juvenile Diabetes Research Foundation.

ACTUAL FACT: None of the above organizations spend any time in public schools, nor do they have a thorough understanding of public education. California alone has over 1100 school districts, each with its own set of issues. While unlicensed staff in one district may be highly educated, including classified support staff; in other districts classified staff may only have the minimum qualifications, and may also be extremely overburdened. Stress can lead to errors.

In addition, every state has a Nursing Practice Act, which actually governs the practice of nursing and all of the tasks considered to fall under nursing, including medication administration. Delegation to unlicensed assistive personnel (UAPs), as referenced above, is not an option in California. California statute does not allow delegation of medication administration to unlicensed persons, except in the case of “gratuitous nursing” (CB&P § Section 2727), which is considered to be **family and friends of the patient**.

The National Council of State Boards of Nursing (NCSBN) defines delegation as: *“Transferring to a competent individual the authority to perform a selected nursing task in a selected situation.”* The nurse retains accountability for the delegation.

Other definitions:

Accountability: Being responsible and answerable for actions or inactions of self or others in the context of delegation.

Delegator: The person making the delegation.

Delegatee: The person receiving the delegation. (a.k.a. Delegate)

Supervision: The provision of guidance or direction, evaluation and follow-up by the licensed nurse for accomplishment of a nursing task delegated to unlicensed assistive personnel.

Unlicensed Assistive Personnel (UAP): Any unlicensed personnel, regardless of title, to whom nursing tasks are delegated.

According to the NCSBN, Boards of Nursing have the legal responsibility to regulate nursing and provide guidance regarding delegation. Registered Nurses (RNs) may delegate certain nursing tasks to Licensed Practical Nurses/Vocational Nurses (LPN/VNs) and unlicensed assistive personnel (UAP). In some jurisdictions, LPN/VNs may also delegate certain tasks within their scope of practice to unlicensed assistive personnel **but California is not one of the states**. In California, RNs and LVNs may not delegate

to or train unlicensed staff, except for tasks expressly carved out in statute, and which have clear parameters that must be followed to determine the appropriateness of the delegation. The licensed nurse has a responsibility to assure that the delegated task is performed in accord with established standards of practice, policies and procedures. The nurse who delegates retains accountability for the task delegated.

Delegation is a very deliberative decision, with clear parameters to guide the decision. The RN assigns or delegates tasks based on the needs and condition of the patient, potential for harm, stability of the patient's condition, complexity of the task, predictability of the outcomes, abilities of the staff to whom the task is delegated, and the context of other patient needs.

In California, we not only do not have delegation, but even if we did the large number of school districts who currently do not want to spend money on a credentialed school nurse would not have a nurse to do the delegating, nor to do the supervision and training and to bear the responsibility.

Myth:

Insulin is a deadly drug that causes great harm.

Alleged **“Fact”**:

On the contrary, insulin is a life-sustaining medication that is routinely and safely administered by millions of unlicensed Americans every day. The key is becoming trained about its use and educated about diabetes.

The vast majority of children with diabetes use a fast-acting insulin analog. Numerous clinical studies show that this form of insulin is associated with better glucose management and, therefore, less hypoglycemia (low blood glucose levels). Should a “low” occur, it is most often remedied by eating foods containing carbohydrates, which turn into sugars upon entering the blood stream and then elevate the “low” glucose level.

ACTUAL FACT: Insulin is both a life-sustaining medication **AND** it can be a deadly drug that causes great harm, if administered incorrectly. It is an unfortunate situation known to many school nurses that teenagers have been known to attempt suicide with insulin. In addition, medication errors will occur! Using a licensed healthcare provider to determine the dosage, draw it up and to administer the medication, will reduce those errors. Mistakes in calculation often involve decimal point errors. Under all such circumstances, a trained nurse, not a lay person, is far more likely to successfully assess and deal with the situation, correctly.

Myth:

The *Legal Advisory* is 'illegal' and no longer in effect.

Alleged "Fact":

Our judicial system is uniquely and expressly authorized to interpret and define law. **The California Court of Appeal issued a "stay", which means the lower court ruling no longer applies and the *Legal Advisory* remains in full force and effect** pending resolution of the lawsuit. Schools continue to be reminded of their legal obligations to comply with the laws that apply to children with diabetes, and the CDE continues to monitor compliance by all local education agencies. Most of the *Legal Advisory* is devoted to explaining these obligations and, aside from the nursing groups' challenge over who may administer insulin, there is no dispute about its effectiveness.

ACTUAL FACT: The "stay" means that the trial court's ruling cannot be enforced until the appeal has been decided. Specifically, the stay order states that "enforcement of the judgment and peremptory writ of mandate, filed...on December 26, 2008, is stayed by operation of law during the pendency of the appeal." The stay does not:

- change California law;
- permit unlicensed school employees to administer insulin;
- strip the right of students with diabetes to receive the care they need during the school day from licensed personnel;
- require unlicensed school personnel to administer insulin;
- require nurses to train and/or supervise unlicensed personnel to administer insulin;
- give school officials or others the right to take adverse action against school employees who are not licensed to administer medication if they refuse to violate California law by doing so;
- give school officials or others the right to take adverse action against nurses who refuse to train and/or supervise the administration of insulin by unlicensed school personnel;
- excuse schools from their legal responsibilities under federal disability laws to provide students with a free, appropriate public education.

Although California law still prohibits unlicensed school personnel from administering insulin, the stay does allow the CA Department of Education to continue publishing its legal advisory. However, the *Legal Advisory* is not mandatory and does not require any school employee to administer insulin. It also does not require that schools demand, appoint or ask unlicensed personnel to administer insulin. Rather, the *Legal Advisory* is nothing more than a program guideline (**Education Code section 33308.5.**) Under California law, the guidelines contained in the *Legal Advisory* "shall not be prescriptive." (**Education Code section 33308.5.**) "The California Department of Education, with the approval of the State Board of Education, may issue and periodically update an advisory providing non-binding guidance on the administration of medication to pupils and otherwise assisting pupils in the administration of medication. The advisory shall be a program guideline under Education Code section 33308.5." **Ca Code**

Reg., tit. 5, § 611. On the other hand, California law is mandatory and, as the trial court correctly recognized, it prohibits unlicensed personnel from administering insulin.

Under California law, the only people who may lawfully administer insulin to students in California's K-12 public schools are: (1) the student, with authorization of the student's licensed healthcare provider and parent/guardian; (2) a licensed school nurse or school physician employed by the LEA; (3) an appropriate licensed school employee (i.e., a registered nurse or a licensed vocational nurse) supervised by a school physician, school nurse or other appropriate individual; (4) a contracted registered nurse or licensed vocational nurse from a private agency or registry, or by contract with a public health nurse employed by the local county health department; (5) a parent/guardian who so elects; (6) the parent's/guardian's designee, if the parent/guardian so elects, so long as the designee is a volunteer who is not an employee of the local education agency; and (7) an unlicensed voluntary school employee with appropriate training, only in emergencies (defined in California law as epidemics or public disasters). Emergencies do not include personnel shortages, fiscal constraints or lack of available licensed personnel.

Myth:

Since there is no funding available to hire another nurse, the child must either learn to self-administer or the parent must come to school to give the child needed injections.

Alleged "Fact":

No. Financial burden is not a valid legal defense.

Under federal laws, the School/District is still duty-bound to provide a disabled student with *equal access to a free, appropriate public education* (FAPE) by providing *reasonable accommodations*, including *related aids and healthcare services*, for all school-sponsored activities including field trips, extracurriculars, and aftercare programs held on campus. Blanket policy is prohibited; each child's needs shall be considered on an individualized basis. Parents may NOT be required to provide care in order to facilitate the child's access to a free, appropriate public education. All of these accommodations are to be delivered in the *least restrictive manner*.

ACTUAL FACT: We agree that financial burden is not a defense. And financial burden is ALSO not a valid reason to ignore many current statutes and not provide a licensed nurse!

There are many aspects of diabetes management that can and should be handled by unlicensed school staff. However, if a student is unable to self administer insulin, then a licensed healthcare professional - a nurse - should be involved in that child's care.