

## Glucagon Administration

### Things to consider:

- Most students with diabetes will have an order for the use of glucagon if needed, however, Wisconsin Statute chapter 118.29 allows glucagon to be given to any student who is known to have diabetes and is believed to be experiencing a severe low blood sugar.
- Low blood sugar in children with diabetes can have varied symptoms. These can include but are not limited to:
  - nervousness,
  - shakiness,
  - weakness,
  - extreme hunger,
  - slight nausea,
  - dizziness,
  - headache,
  - blurred vision,
  - fast heartbeat and/or,
  - feeling tired.
- Based on the child's individual health plan (also known as a diabetes action plan or diabetes emergency plan), low blood sugar is treated with some type of quick acting oral sugar, such as candy, icing, and/or juice.
- **Severe** low blood sugar symptoms include disorientation, unconsciousness, and seizures. If not treated promptly, it can lead to death.
- Glucagon is an injectable medication and is used in emergency situations when the student is unresponsive or unable to swallow because of a very low blood sugar.
- Given that when a child is having symptoms of severe low blood sugar, it can be a stressful situation, it is highly recommended that you familiarize yourself with the student's emergency plan beforehand.
- Your school nurse or other licensed health care professional must review the glucagon procedure with you to ensure that you have the skills to perform this emergency medication administration.
- Store the diabetes emergency plan and glucagon kit in a location that is easily accessible during a severe low blood sugar event.
  - Be sure that staff members who have regular contact with the student know where the medication is stored.
- The glucagon kit contains a vial with powder and a syringe with liquid diluent.
- Be sure to check the expiration date on the medication package.
- Remember to keep health care information confidential.

**Needed supplies:**

Glucagon kit

Gloves

Alcohol swabs

**Procedure for medication administration:**

1. Identify that symptoms of a severe low blood sugar reaction are present and that based on the child's diabetes emergency plan, medication needs to be given.
2. Call for assistance. Ask that another school staff person call 911 or emergency medical services.
3. Explain the procedure to the child at his/her level of understanding.
4. Assemble supplies and place on a clean surface.
5. Review the student's diabetes emergency action plan.
6. Check the glucagon kit and order to be sure it is
  - a. For the right child
  - b. The right medication
  - c. The right dose
  - d. Being given at the right time and
  - e. Being given by the right route.
  - f. Also check to ensure the medication has not expired.
7. Wash your hands if possible.
8. Put on gloves.
9. Remove the glucagon vial and syringe containing the liquid or diluent from the case.
10. Remove the gray cap from the vial.
11. Remove the cap from the syringe.
12. Place the needle tip in the center top of the vial and slowly push the diluent from the syringe into the vial.
13. Gently swirl the vial with the syringe still in the vial until the solution is clear (this takes about 10-15 seconds).
14. Turn the vial upside down, being sure that the needle does not fall out of the vial.
15. Pull the solution into the syringe, by pulling back on the plunger, as you withdraw the ordered amount of glucagon solution.
16. If present, remove air bubbles by tapping on the outside of the syringe and expelling the air or by pushing the dose back into the vial and pulling back on the plunger again.
17. Recheck the 5 rights again, checking the glucagon kit and order to be sure it is
  - a. For the right child
  - b. The right medication
  - c. The right dose
  - d. Being given at the right time and

- e. Being given by the right route.
18. Identify the location (buttock, thigh, or arm) for the injection.
  19. Cleanse the injection site with an alcohol wipe.
  20. Insert the needle into the skin at a 90 degree angle
  21. Slowly inject the solution.
  22. Remove syringe.
  23. Put the used syringe in the carrying case.
  24. Close the carrying case to avoid a possible needle stick injury.
  25. Apply pressure using the alcohol wipe and gently massage injection site.
  26. If the student is not lying on their side, move the student to a side-lying position because vomiting often follows the injection of glucagon.
    - a. If needed, ask another person for assistance.
  27. If alone with student, and you have not already called 911 or emergency medical service, do so now.
  28. Monitor the student's arousal, pulse, and respirations.
  29. If breathing stops, begin rescue breaths.
  30. If breathing and heartbeat stop, begin CPR.
  31. Maintain a side-lying position to prevent aspiration due to vomiting.
  32. Once rescue squad arrives, inform them of medication administered, including type of medication, dose, and time.
    - a. Send along glucagon kit along with used dose.
  33. Dispose of all used materials in proper receptacles.
  34. Remove gloves and wash hands.
  35. Follow up with the parent or guardian and healthcare provider, as needed
  36. Document the event and administration of glucagon, including time, date, dosage, and site of administration.