

Procedure for Insulin Administration by Injection

Pupil:	DOB:	School:	Grade:
Equipment And Supplies	1. Vials of insulin (extra 3-day supply for disaster preparedness) 2. Syringes with needles 3. Cotton balls	4. Alcohol swabs 5. Sharps container (each school should have its own Sharps container)	
Essential		Key Points & Precautions	
1. Wash hands.		Implement Universal Precautions at all times.	
2. Assemble insulin(s), syringe, cotton ball, and alcohol.			
3. If insulin is cold, warm in the palm of hand to room temperature.		Injecting cold insulin can cause pain and may affect absorption.	
4. If this is a new bottle of insulin, remove the flat, colored cap. Do not remove the rubber stopper or the metal band under the cap.			
5. If NPH or Lente is used, it will require mixing. Gently roll the bottle between the palms or turn the bottle over from end to end a few times. Do not shake. If any clumps are visible do not use.		Shaking can cause the protein to denature and decrease the potency. Clumps are an indication that the protein has been denatured.	
6. Clean the rubber tops with alcohol and let dry for a few seconds.			
7. Remove the cap from the syringe and place in a "clean field". (If only Humalog/Novolog or regular insulin is used then proceed to #8 and Skip #9). Fill the syringe with air equal to the number of units of long-acting insulin needed. Keep the bottle upright and inject air into the long-acting insulin bottle. Pull empty syringe out of the bottle. If only long-acting insulin is given, skip #8 and proceed to #9.		Air is always injected into the longer acting insulin first. Air is always injected to prevent creating a vacuum.	
8. Inject air into Regular or Humalog/Novolog insulin bottle and with syringe remaining in bottle, invert and pull plunger back beyond the number of units desired. Keeping the syringe in an upright-position, clear any air by pulling plunger back and tapping syringe to raise air bubbles to the top. Push plunger to desired amount of units, ensuring that no air bubbles remain and withdraw the syringe.		Regular/Humalog/Novolog insulin is always drawn up first. This avoids potential contamination of long acting insulin into short acting (which could delay the action time of regular insulin). Air bubbles in the syringe can alter the desired dose.	
9. Inject needle into long-acting insulin bottle and withdraw exact number of units to be given. Total number of units must equal the Regular/Humalog/Novolog unit dose plus the long-acting insulin dose. Example: 5u Regular, 10u NPH equals 15 total units.		If there is any air in the syringe after withdrawing the needle, attempt to clear. If any insulin is inadvertently pushed out, the entire dose should be discarded and redrawn. Avoid pushing the plunger up in the long-acting bottle to rid air. This could inadvertently push regular plunger up into the long-acting bottle and alter the entire dose.	
10. Prop syringe on the cap in a "clean field" Select the site to be used and prep with alcohol and let dry. If area is dirty, then wash with soap and water and dry.		Any subcutaneous tissue can be used for injection sites. The best absorption is in the lower abdomen, followed by the upper, outer arms, tops of the thighs and lastly the upper areas of the buttocks. Exercise and heat (like the warmth from a jacuzzi) also hastens absorption of an injected area.	
11. Pinch up skin and tissue with one hand. With the other hand, hold the syringe, with the eye of the needle pointing upward, like a pencil. Dart the needle into the "soft pocket" (area that lies directly in front or in back of the pinched up skin) at a 90 degree angle. Inject insulin in one to five seconds. Release pinched up skin and remove needle while applying gentle pressure at the injection site for 10 - 15 seconds. This will help to prevent leakage from the site.		Take care to avoid injecting into the muscle, as it will hastens absorption. Do not massage the area as it irritates the tissue and hastens absorption.	
12. Dispose of syringe with needle intact into a sharps container.			
13. Document on a Procedure log.			