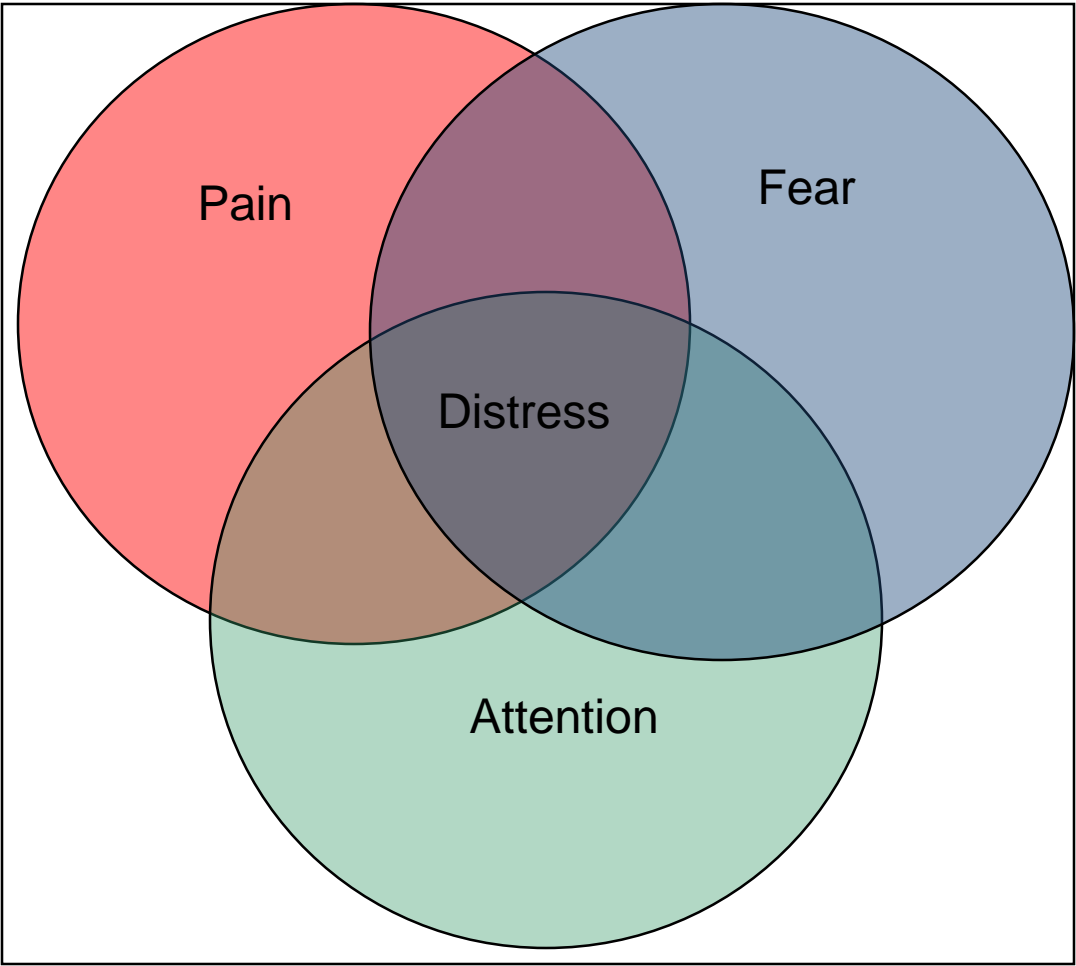
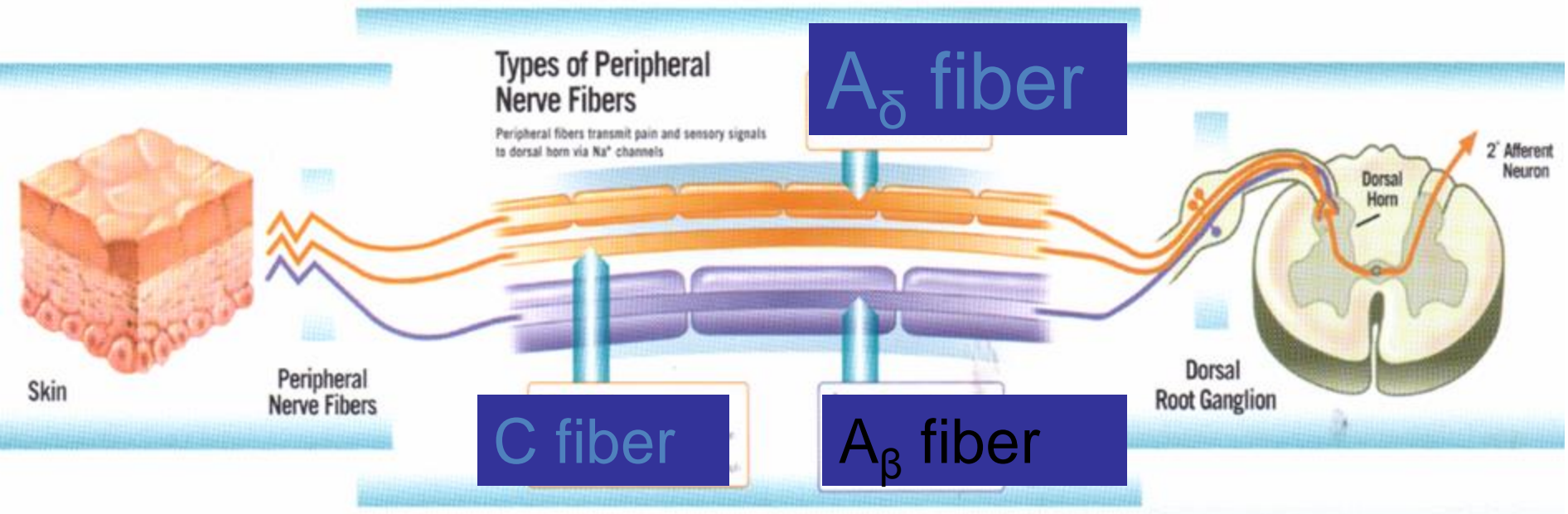


# How to use BUZZY® ... in healthcare settings





# PAIN



Gate techniques  
Pinching  
Ice Cube

Used with permission Purdue Pharma

# What does Buzzy<sup>®</sup> do???

Buzzy is a vibrating case with an optional ice pack.

By stimulating A beta vibration and C fibers with cold, Buzzy relieves the pain from any minor sharp aches or stick, including needles, splinters and stings.



# How Does Buzzy<sup>®</sup> work?



- Uses natural pain relief by confusing your body's own nerves and distracting away from the poke
  - This dulls or eliminates the pain
- Works in the same way as:
  - Rubbing a bumped elbow stops the hurt
  - Running water soothes a burn
  - Putting a hand in ice water lowers pain everywhere else



# What comes with Buzzy<sup>®</sup>?

- Striped Buzzy<sup>®</sup> comes with:
  - Velcro strap (Can substitute a tourniquet)
  - Instructions, Two AAA Batteries
    - Buzzy will last about 20 hours with enough “oomph” to decrease pain, but the batteries will keep going up to 30 hours. Change the batteries when they wimp out!
  - Blue Gel Wings and Two White Ice Wings
    - All wings are reusable
    - White-sided wings are only for one patient

## Blue Gel Ice Wings

- Reusable
- Stays frozen 10 minutes
- Must be cleaned between patients with Sani-Wipe



## White Ice Pack

- Disposable
- Stays frozen 15 minutes
- Add 10 -15ml water to soft side before folding and placing in freezer
- Soft side is less cold
- Smooth side is colder





## Covers for Buzzy

With the plain black “The Buzz”, different covers are available for your patients to choose from..





# How do I use the black strap?

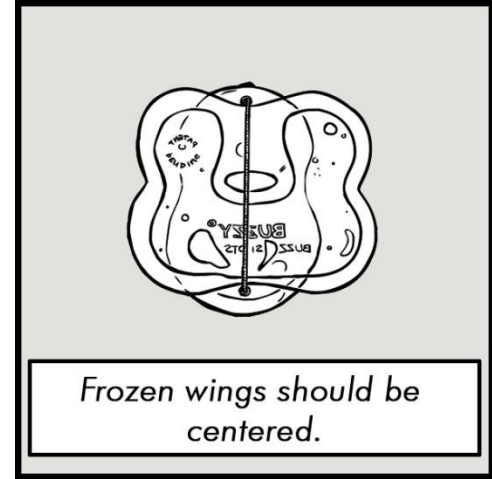


Or just let  
patient or  
parent hold



# How do I use the ice packs?

- Ice provides 60% of the numbing
- Fold in half and freeze them solid
  - Wings freeze in about 30 min
- Wings go under the elastic strap.
- If not frozen, don't use (squishy wings absorb vibration)
- If too cold, try the soft white side of the disposable wings or the white side of the reversible ones.



# What procedures can I use Buzzy® for?



- Insertion of IV's
- Venipuncture for lab draws
- Finger sticks for obtaining blood samples
- IM injections to the upper arm
- SQ or Intradermal injection
- On shoulders, sternum, or distant body part for distraction from any procedure

**Buzzy needs to go  
"between the brain and the pain"  
to be effective.**



Courtesy of Shriners's Childrens Hospital  
Louanne Lunny, MLS(ASCP)cm

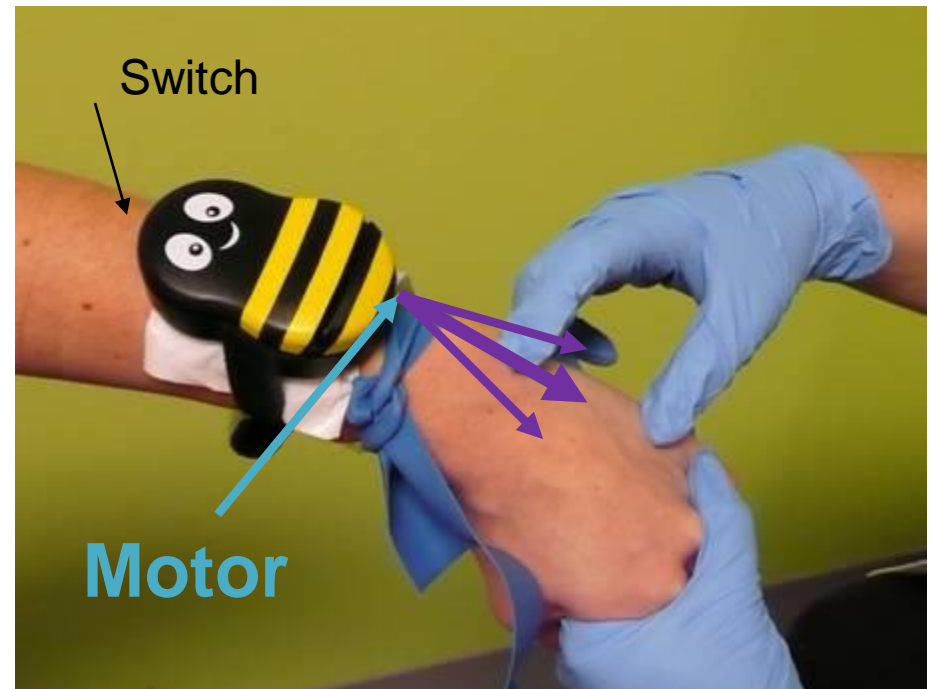
# Restrictions for use (Age and Disease Processes)

- Age 2 and above – can use Buzzy<sup>®</sup> with ice pack and Bee-Stractors
- Buzzy<sup>®</sup> without ice pack
  - 6 weeks to 2 years
  - Sickle cell patients (theoretical)
  - Patients with sensitivity to cold



# IV placement and Venipuncture procedure

- Apply tourniquet if applicable
  - Through Buzzy slot or
  - Prior to placing Buzzy
- Place BUZZY® 2-5 cm proximal to site
- Place wider end of BUZZY® closest to pain. (Head of BUZZY® closer to patient's head during procedures)



**Best numbing is directly distal from the center of the Buzzy where the motor is.**

# Venipuncture

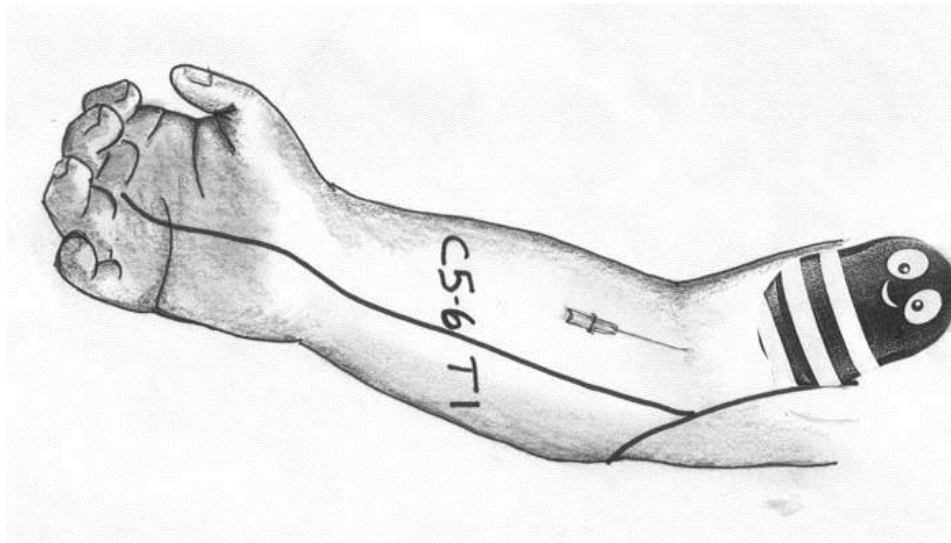
Turn Buzzy on at least 30 seconds before procedure

Clean site per protocol

Leave Buzzy activated until procedure complete

Remove Buzzy

Clean Buzzy, cold pack and strap with Sani-Wipe



Courtesy of Shriners' Childrens Hospital  
Louanne Lunny, MLS(ASCP)cm



# Venipuncture Tips

- Use Child Life or Distr*ACTION* Cards
- Give patients a choice of ice packs; if no soft sided available, a tissue under the ice pack can help.
- Put Buzzy **directly** above the site of insertion and in same dermatome

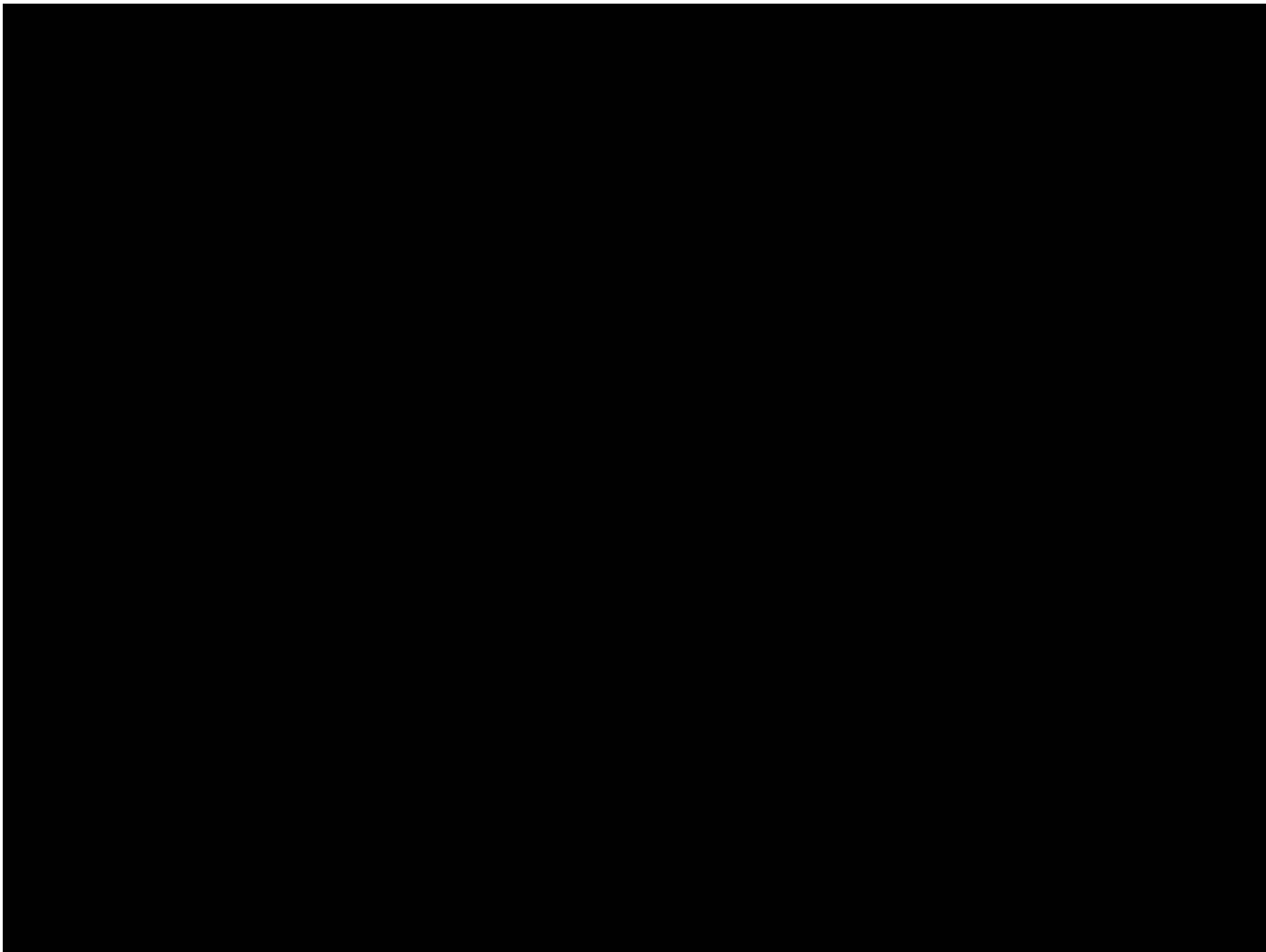


<- Not optimal.  
Buzzy's motor  
is a little off-  
center from  
site

Much better ->  
Buzzy's motor  
is closer and  
directly above  
poke







# Won't the cold cause vasoconstriction?

- Possibly. The ice pack directly over the site of the puncture wouldn't be good, but since the blood is flowing toward Buzzy's cold rather than away it shouldn't have much effect.
- If a child finds the ice pack to be too cold, have them hold the pack in either hand.

# Research and articles: Buzzy for IVs

- Inal S, Kelleci M. External thermomechanical stimulation and distraction are effective on pain relief of children during blood draw. *Journal of Maternal and Child Nursing*, 2012 *in press*.
- Baxter AL, Cohen LL, Von Baeyer C. An Integration of Vibration and Cold Relieves Venipuncture Pain in a Pediatric Emergency Department. [Pediatr Emerg Care, 2011 Dec;27\(12\): 1151-6.](#)
- Miller D, Pasek T. Buzzy in the Emergency Department: A Novel Pain Relief Device for Children. University of Pittsburgh Trauma Symposium, Pittsburgh, PA October 2011
- Baxter AL, et al. Pilot data on a novel device. *Clin J Pain*, 2009 *October ;25(8):705-10.*
- Lie D, Minimizing needle pain: a new device may help. 2010 <http://www.medscape.com/viewarticle/732185>

# Buzzy Versus Vapocoolant

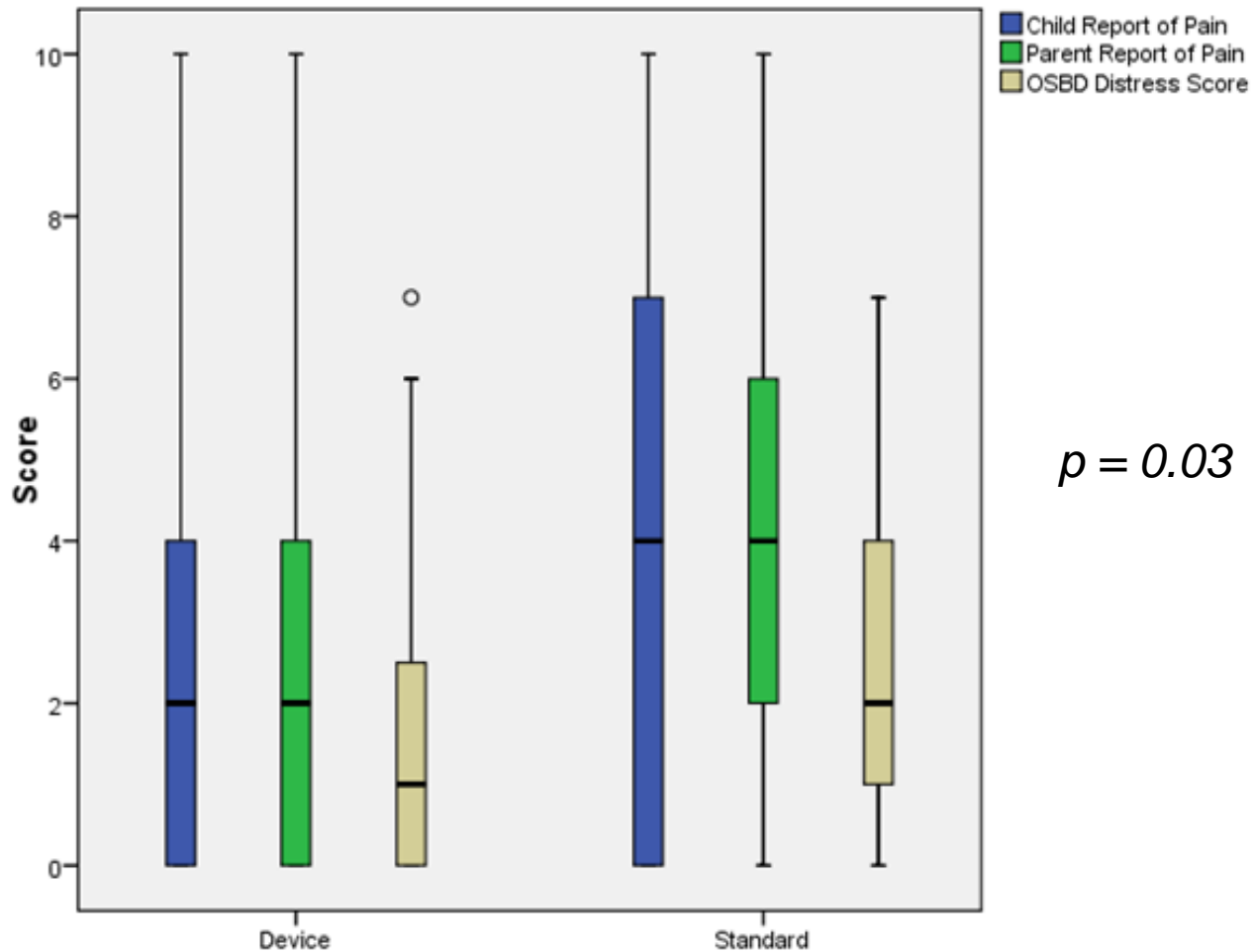
- N = 81 4-18 years in emergency department
- IV Success 3x higher on the first stick:
  - 85% with Buzzy v. 65% with vapocoolant
  - (95%CI 3.05, 1.03,9.02, p=0.04)
- Average time until IV placement
  - 5.43 minutes Buzzy, 7.43 min with VC (not sig)
- Nonsignificant trend toward more blood draw in Buzzy group may have contributed to improved success

Baxter AL, Cohen LL, Von Baeyer C  
[Pediatr Emerg Care, 2011 Dec;27\(12\): 1151-6.](#)

:

# Pain: Buzzy Vs. Vapocoolant

Figure 3. Medians and Interquartile ranges for pain and distress scores



$p = 0.03$

# Venipuncture Buzzy v. nothing

- 120 patients mean age 9.3 years
- Child Pain with FPSR 2.78/10 v. 6.56/10  $p=.001$
- Parent Obs. Pain VAS 2.8 v. 6.5  $p=.001$
- Nurse Observed pain VAS 2.7 v. 6.4  $p=.001$
- Anxiety 1.61 v. 3.36  $p=.001$

# Intramuscular Injections in Upper Arm

- Locate site
- 1) Press BUZZY® directly on site and activate vibration. Leave in place at least 30 seconds; for stinging shots or deeper IM, leave on up to 2 minutes for deepest numbing.
- 2) For injection, slide BUZZY® 2-5 cm proximal to site (pressing on bony area if available) for deltoid injections



Parent pressing Buzzy using position of comfort. Shot goes where red dot is located. Nurse can reposition so Buzzy's motor is directly above shot.

# Tips: Intramuscular Injections in Upper Arm



One-hand Buzzy injection technique  
if parent or child not pressing Buzzy

Great placement->  
Buzzy's motor is  
close and directly  
above poke.  
Patient is holding  
directly on site.

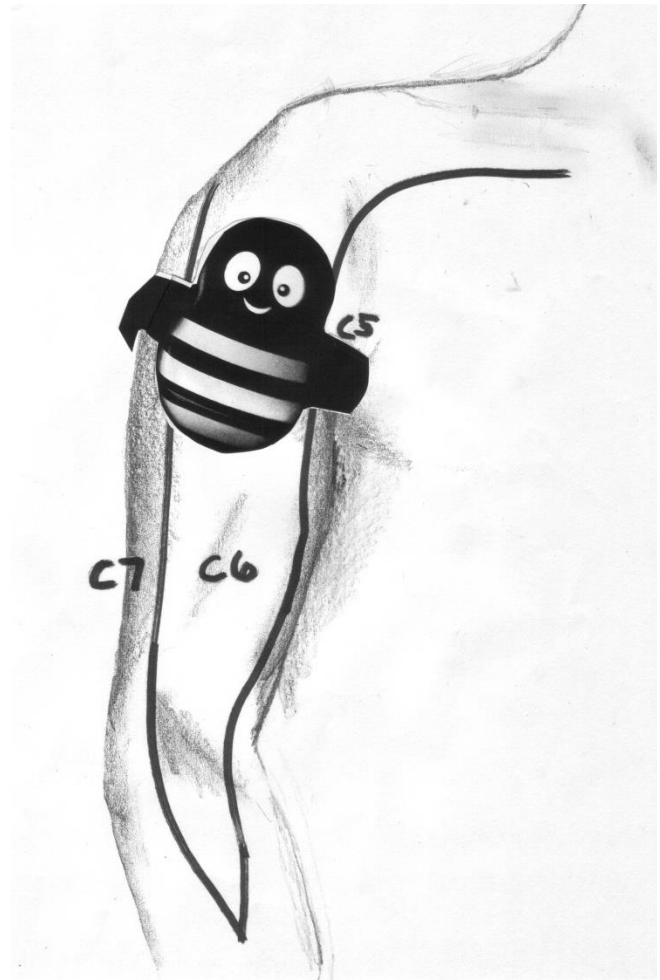


Parent can hold from above



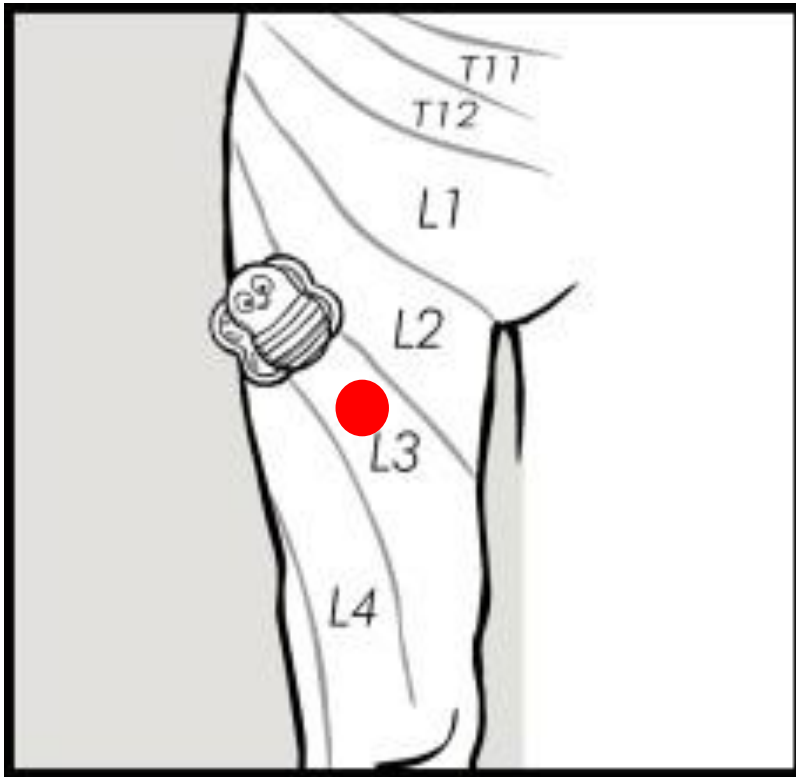
# IM or SQ in other locations

- For SQ behind an arm, just make sure Buzzy is directly proximal to location of injection.

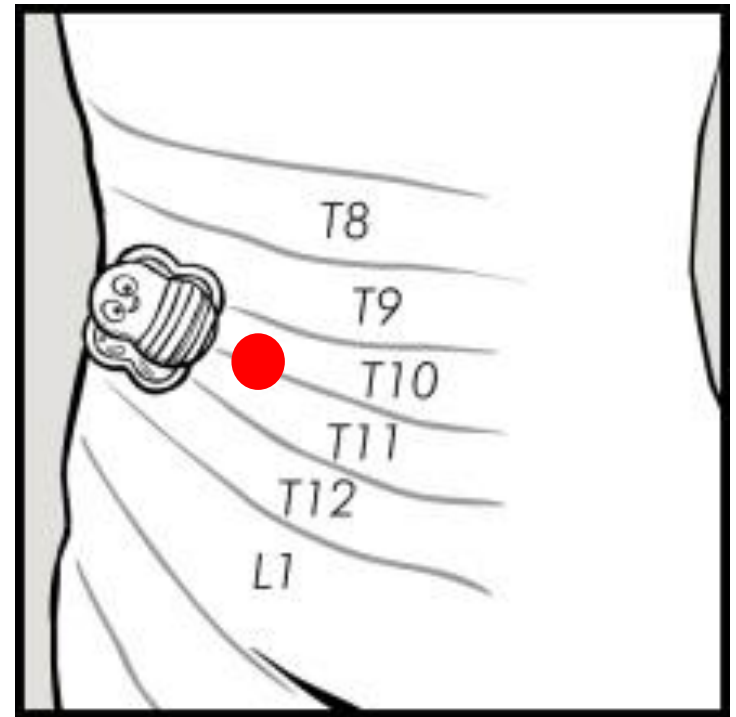


# IM in other locations

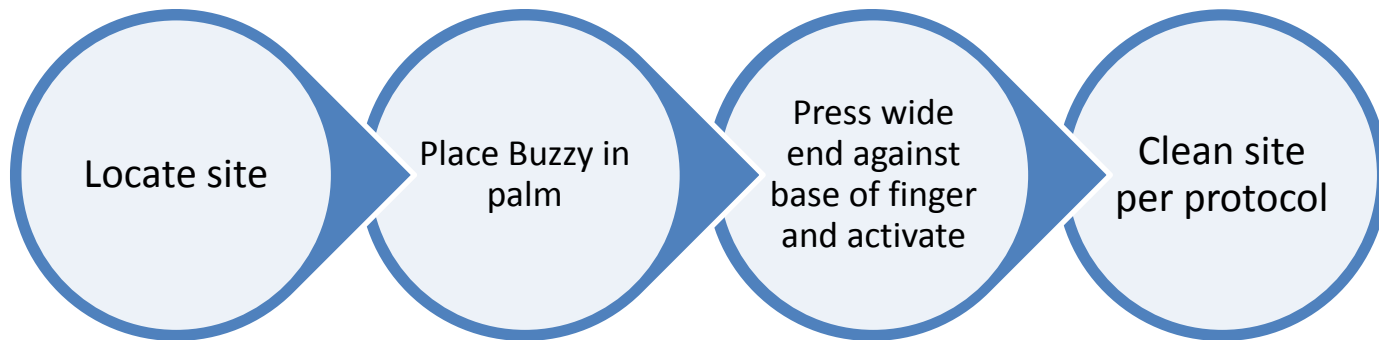
- Shots in the thigh



- Shots in the stomach



# Capillary Collection



Courtesy of Shriners' Childrens Hospital  
Louanne Lunny, MLS(ASCP)cm



# Who can use Buzzy<sup>®</sup>?

- Who can use Buzzy<sup>®</sup>?
  - Buzzy is an FDA registered Class I device (over the counter)
  - Since Buzzy is over the counter, anyone can use Buzzy.
    - A phlebotomist
    - Child Life
    - A radiology tech
    - A nurse
    - A resident



# Bee-Stractor DistrACTION™ Badge Cards



- Distraction in general reduces pain by up to 50%
- Caregiver reads questions on the back while child looks at cards
- Available in poster size
- English and Spanish questions



# Venipuncture with DistrACTION

- 123 6 – 12 year olds with 1-3 previous
- Child Pain DistrACTION 3.9 v. 6.51  $p < .001$
- Child Anxiety CAPS 1.34 v. 3.3  $p < .001$
- Compared to previous
  - DistrACTION: 96.7% less painful, 3.3% same
  - Standard: 0% less, 88.7% same, 11.3% more

## Bee-Stractors DistrACTION Cards

Buzzy blocks sharp sensations, not light touch, so an anxious person may still be distressed feeling dull pokes.

DistrACTION cards pull attention from the event, giving a welcome escape to a brightly colored place.

Cards can be placed in Buzzy's slot, so one person can show pictures and read questions at the same time. 20% of kids will want to watch; if so, let them.





Questions???

