- Does tactile stimulation help reduce injection pain in infants?

- A randomized-controlled trial conducted by Hogan, Probst, Wong, et al (2014) evaluated whether parent-led tactile stimulation would reduce injection pain in 4- to 6-month-old infants. One hundred twenty infants scheduled to receive a routine diphtheria, tetanus, acellular pertussis, inactivated poliovirus, and *Haemophilus influenzae* type B (DTaP-IPV-Hib) vaccine and pneumococcal conjugate vaccine (PCV) were randomized to receive parent-led tactile stimulation for 15 seconds before, during, and after immunization administration at a site immediately distal to the injection point, or act as a control. All infants received the standard of care for pain reduction in the clinic (skin-to-skin, 2 ml 24% sucrose prior to injection, upright positioning, and rapid injection without aspiration). The trial demonstrated no reduction in modified behavioral pain score (MBPS) for infants receiving tactile stimulation in the presence of other pain-reducing strategies, compared to infants receiving no tactile stimulation.

- Does aspiration increase injection pain?

- Rapid intramuscular (IM) injection without aspiration reduces injection pain by shortening the time of the procedure and avoiding displacement of the needle (Taddio, Ilersich, Ipp, et al, 2009).

- One hundred thirteen 4- to 6-month-old infants