

The latest research shows unborn children have the capacity to feel pain at 20 weeks of pregnancy, and perhaps even as early as 12 weeks. However, pain is a subjective experience, so how do we know? We know because of the unborn child's anatomy, and the unborn child's observed reaction to pain.



References

1 – KJS Anand & PR Hickey, "Pain and Its Effects in the Human Neonate and Fetus," New England Journal of Medicine 317, no. 21 (1987): 1321-1329.
2 – M Van de Velde & F De Buck, "Fetal and Maternal Analgesia/Anesthesia for Fetal Procedures." Fetal Diagnosis and Therapy 31, no. 44 (2012): 201-219.
3 – PNA Van Scheltema et al., "Fetal Pain," Fetal and Maternal Medicine Review 19, no. 4 (2008): 311-324.
4 – SW Derbyshire, JC Bockmann, "Reconsidering Fetal Pain," Journal of Medical Ethics 46 (2020): 3-6.
5 – I Bystron et al., "The First Neurons of the Human Cerebral Cortex," Nature Neuroscience 9 (2006): 880.
6 – WJ Borkowski & RL Bernstine, "Electroencephalography of the Fetus," Neurology 5, no. 5 (1955): 362.

7 – SW Derbyshire, "Fetal Pain: Do We Know Enough to Do the Right Thing?", *Reproductive Health Matters* 16, no. 31 (2008): 117-126.

8 - C Bocchi et al., "Ultrasound and Fetal Stress: Study of the Fetal Blink-Startle Reflex Evoked by Acoustic Stimuli," *Neonatal Pain*, ed.: Giuseppe Buonocore & Carlo V. Bellieni (Milan: Springer, 2007): 31–32.
9 - R Brusseau & LA Bulich, "Anesthesia for Fetal Intervention," *Essential Clinical Anesthesia*, ed: Charles Vacanti, Pankaj Sikka, Richard Urman, Mark Dershwitz, B. Scott Segal (New York: Cambridge University Press, 2011): 772-776.

10 – X Giannakoulopoulos et al., "Fetal Plasma Cortisol and Beta-Endorphin Response to Intrauterine Needling," *Lancet* 344 (1994): 77-81

11 – Royal College of Obstetricians and Gynecologists, "Fetal Awareness: Review of Research and Recommendations for Practice" (March 2010).

12 – SW Derbyshire, JC Bockmann, "Reconsidering Fetal Pain," *Journal of Medical Ethics* 46 (2020): 3-6.
13 – Molly McElroy, "While in Womb, Babies Begin Learning Language From Their Mothers," University of Washington, January 2, 2013: https://www.washington.edu/ news/2013/01/02/while-in-womb-babies-begin-learninglanguage-from-their-mothers.

14 – Lee Dye, "Babies Recognize Mom's Voice from the Womb," ABC News, May 22, 2003: https://abcnews.go.com/Technology/story?id=97635.



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is **abortion** painful for the **baby**?





the **anatomy** of pain

When an abortionist rips off the arm of a baby, can she feel it?

For that to occur, pain receptors must transmit the message from the arm, through the body, up the spinal cord, and to the thalamus, which relays the message to the cerebral cortex (the gray matter of the brain).

- Pain receptors first appear around the baby's mouth at 7 weeks of pregnancy, spread to the face, palms, and soles by 11 weeks, the baby's trunk and limbs by 15 weeks, and all skin and mucus membranes by 20 weeks.¹
- Nerve fibers connecting pain receptors to the spinal cord begin developing at 8 weeks, and fibers to transmit signals to the brain inside the spinal cord begin developing at 13 weeks.²
- The connection between the spinal cord and the thalamus begins developing at 14 weeks and is finished at 20 weeks.³
- Nerve connections from the thalamus to the subplate (a part of the developing cortex) begin developing at 12 weeks.⁴
- The first neurons in the cortex are established starting at 6 weeks.⁵ A baby's brainwaves have been measured as early as 45 days after fertilization—8 weeks of pregnancy.⁶



behavioral **reactions** to pain

Given the anatomy that makes the sensation of pain possible exists by 20 weeks—and possibly exists as soon as 12 weeks—we should see unborn babies react to painful stimuli in ways a child or adult would.

- Between 7 and 8 weeks the baby begins exhibiting reflex reactions to stimuli specifically moving their head when touched around the mouth.⁷
- By 14 weeks, the baby can be observed moving deliberately on their own.⁸
- Stress hormones in response to painful stimuli can be measured in the baby's blood at 18 weeks.⁹
- Babies vigorously react to being stuck with a needle, versus their umbilical cord being stuck with a needle.¹⁰

fetal anesthesia

As a result of this knowledge gained about the baby's development, it is now standard medical practice for anesthesia to be given to babies undergoing surgery in the womb.

common objections

The American College of Obstetricians and Gynecologists (ACOG) politically advocates for abortion and has a strong motive for their denial of the existence of fetal pain. If the science of fetal pain is true, then ACOG is partly responsible for the painful, agonizing deaths of millions of children. ACOG cites two research reviews that claim babies can't feel pain before 24 weeks.

One of these reviews' lead authors is a lawyer, not a scientist. Dr. Stuart Derbyshire helped co-author the other review.¹¹ However, in 2020, Dr. Derbyshire coauthored a newer review that cites evidence showing unborn children have the capability to feel pain at 12 weeks.¹²

Are unborn children asleep until birth, as ACOG contends? While consciousness is also a subjective experience, we know unborn children are not only aware of their environment but learning from it. They begin learning language in the womb¹³ and recognize their mother's voice.¹⁴

If an unborn child can observe and learn about reality, then so can the leaders of ACOG. However, sadly, they are ideologically opposed to following the science of fetal development. It should also be noted that even though ACOG admits babies have the capacity to feel pain after 24 weeks of pregnancy, they refuse to support legislation banning excruciatingly painful abortions on children after 24 weeks.