

## National Reye's Syndrome Foundation Pregnancy, Breast Feeding & Aspirin

## Aspirin and pregnancy

The Food and Drug Administration (FDA) has issued the following warning about aspirin use during pregnancy: "It is especially important not to use aspirin during the last three months of pregnancy, unless specifically directed to do so by a physician because it may cause problems in the unborn child or complications during delivery."

Aspirin is listed on the California Environmental Protection Agency (CAL/EPA) Proposition 65 list of developmental toxicants (CAL/EPA Proposition 65 List). A developmental toxicant is a substance that a group of expert scientists has determined can harm unborn children. The FDA warning is included in the CAL/EPA listing.

## Aspirin and breast feeding

Aspirin is transferred to breast milk and it is estimated that a nursing baby receives about 4-8% of the mother's dose (WHO 1988). Continued exposure to small doses of aspirin may be harmful to babies because aspirin tends to build up in their bodies (Findlay et al. 1981). In some countries, nursing women are advised against aspirin use because of the possible development of Reye's Syndrome in their babies (WHO 1988). Reye's Syndrome is a rare condition that affects the brain and liver and is most often observed in children given aspirin during a viral illness (National Reye's Syndrome Foundation). Because sufficient information is not available to accurately determine the extent of aspirin accumulation in babies and the resulting health outcomes, the World Health Organization (WHO) Working Group on Human Lactation considers aspirin intake by nursing mothers as unsafe (WHO 1988).

The American Academy of Pediatrics Committee on Drugs (AAP 2001) listed aspirin as a drug that has been "associated with significant effects on some nursing infants and should be given to nursing mothers with caution." The report suggested that safer drugs such as acetaminophen should be used for pain relief during pregnancy.

Drugs may pose dangers to the embryo or fetus throughout pregnancy, but they are especially of concern during the first trimester, when the vital organs and systems are developing, and the last trimester, when excessive bleeding can occur during labor.

According to the New England Journal of Medicine, an estimated 10 to 45 percent of pregnant women in the first trimester, unaware of their condition, reach for the most common OTC drug, aspirin. Aspirin and other drugs containing salicylate are not recommended throughout pregnancy, especially during the last three months, except under a doctor's supervision. Acetylsalicylate, a common ingredient in many OTC painkillers, may prolong pregnancy and cause excessive bleeding before and after delivery.

## References

American Academy of Pediatrics. 2001. The Transfer of Drugs and Other Chemicals Into Human Milk Committee on Drugs. Pediatrics 108(3): 776-789. http://aappolicy.aappublications.org/cgi/content/full/pediatrics%3b108/3/776

Findlay JWA, DeAngelis RL, Kearney MF, Welch RM, Findlay JM: Analgesic drugs breast milk and plasma. Clin Pharmacol Ther 29:625-33, 1981.

Iannucci L. The Perplexities of Pregnancy. FDA. http://www.fda.gov/bbs/topics/CONSUMER/CON00033.html.

The WHO Working Group, Bennet PN (ed): Drugs and Human Lactation. Elsevier, Amsterdam, New York, Oxford, 1988. pp. 325-6.