



LactMed (Drugs and Lactation Database)

An Information Sheet of the Harley E. French Library of the Health Sciences University of North Dakota

LactMed is accessible, free of charge, via TOXNET at: <http://toxnet.nlm.nih.gov>

- Peer-reviewed and fully referenced database of drugs to which breastfeeding mothers may be exposed. Among the data included are maternal and infant levels of drugs, possible effects on breastfed infants and on lactation, and alternate drugs to consider.
- Part of the [National Library of Medicine's](#) (NLM) [Toxicology Data Network](#) (TOXNET®). It includes information on the levels of such substances in breast milk and infant blood, and the possible adverse effects in the nursing infant. Statements of the American Academy of Pediatrics concerning a drug's compatibility with breastfeeding are provided, as are suggested therapeutic alternatives to those drugs where appropriate.
- All data are derived from the scientific literature and fully referenced. Data are organized into substance-specific records, which provide a summary of the pertinent reported information and include links to other NLM databases. Supplemental links to breastfeeding resources from credible organizations are also provided.

Searching

Users can search by drug or chemical name, [Chemical Abstracts Service](#) Registry Number (RN), pharmacologic category, and/or subject terms. Search results can easily be viewed, printed or downloaded. Search results are displayed in relevancy ranked order, but may be sorted by publication date, author or title.

A Sample Record (abbreviated for space)

Phenobarbital

CASRN: 50-06-6

Drug Levels and Effects:

Summary of Use during Lactation:

There is a great deal of inter- and inpatient variability in excretion of phenobarbital into breastmilk. Phenobarbital in breastmilk apparently can decrease withdrawal symptoms in infants who were exposed in utero, but it can also cause drowsiness in some infants, especially when used with other sedating drugs. If phenobarbital is required by the mother, it is not necessarily a reason to discontinue breastfeeding. ..

Drug Levels:

In published reports of anticonvulsant use during breastfeeding, most women were taking a combination of anticonvulsants. Some other anticonvulsants (e.g., phenytoin, carbamazepine) stimulate the metabolism of other drugs including anticonvulsants, whereas others (e.g., valproic acid) inhibit the metabolism of other drugs...

Maternal Levels. In women taking phenobarbital for 3 days, average milk levels at 23 hours after the last dose were as follows: 90 mg daily in 4 women, 0.85 mg/L (range 0.8 to 1 mg/L); 150 mg daily in 2 women, 1.25 mg/L (range 1 to 1.5 mg/L); 225 mg daily in 2 women, 5.2 mg/L (range 2.7 to 5 mg/L). ..

Infant Levels. A breastfed infant's epileptic mother took barbitone 275 mg, which contains 165 mg of phenobarbital, daily during pregnancy and postpartum. The infant who was breastfed throughout the first 30 days (extent not stated) had serum phenobarbital levels that rose from 10 mg/L at birth to 17 mg/L on day 4...

Effects in Breastfed Infants:

Two 1-week-old infants whose mothers had been receiving phenobarbital 100 mg at bedtime for 3 to 5 nights exhibited deep slumber with difficulty in awakening that was possibly caused by phenobarbital in breastmilk.[7] A mother was taking phenobarbital 390 mg daily and phenytoin 400 mg daily during pregnancy and postpartum. Her infant was drowsy at birth, refused to suck and was given partial formula feeding. At 5 days of age, her infant was admitted to the hospital pale and collapsed with bruising, bleeding, and a decreased hemoglobin, thought to be due to methemoglobinemia...

Possible Effects on Lactation:

Relevant published information was not found as of the revision date...

AAP Category:

Associated with significant effects on some nursing infants and should be given to nursing mothers with caution.[13]

Alternate Drugs to Consider:

Dependent on the condition being treated.

References:

1. Westerink D, Glerum JH. Scheiling en microbepaling van fenobarbital en fenytoïne i modernmelk. [Separation and microdetermination of phenobarbital and phenytoin in human milk.]. Pharm Weekbl. 1965;100:577-83. PMID: [14343657](#)
2. Horning MG, Stillwell WG, Nowlin J et al. Identification and quantification of drugs and drug metabolites in human breast milk using GC-MS-COM methods. Mod Probl Pediatr. 1975;15:73-9.
3. Kaneko S, Sato T, Suzuki K. The levels of anticonvulsants in breast milk. Br J Clin Pharmacol. 1979;7:624-7. Letter. PMID: [465285](#)
4. Kuhnz W, Koch S, Helge H et al. Primidone and phenobarbital during lactation period in epileptic women: total and free drug serum levels in the nursed infants and their effects on neonatal behavior. Dev Pharmacol Ther. 1988;11:147-54. PMID: [3383727](#)

Substance Identification:

Substance Name: **Phenobarbital**

CAS Registry Number: 50-06-6

Drug Class:

Anticonvulsants

Barbiturates

Hypnotics and Sedatives

GABA Modulators

Administrative Information:

LactMed Record Number:

401

Last Revision Date:

20060705

Disclaimer:

Information presented in this database is not meant as a substitute for professional judgment. You should consult your healthcare provider for breastfeeding advice related to your particular situation. The U.S. government does not warrant or assume any liability or responsibility for the accuracy or completeness of the information on this Site.

LactMed Basics brochure available at URL: <http://nmlm.gov/mcr/resources/consumer/LactMed.pdf>

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