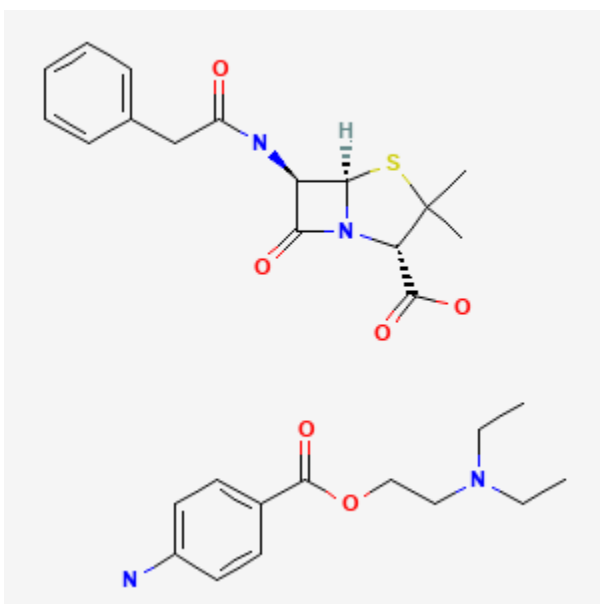




## Procaine Penicillin G

Revised: February 15, 2021.

CASRN: 54-35-3



## Drug Levels and Effects

### Summary of Use during Lactation

Limited information indicates penicillin G produces low levels in milk that are not expected to cause adverse effects in breastfed infants. Occasionally disruption of the infant's gastrointestinal flora, resulting in diarrhea or thrush have been reported with penicillins, but these effects have not been adequately evaluated. Procaine penicillin G is acceptable in nursing mothers.

### Drug Levels

*Maternal Levels.* No studies have reported milk penicillin G levels after administration of procaine penicillin G to the mother.[1] However, after 2 doses of 2 million units of aqueous penicillin G intramuscularly in 15 women,

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peak milk levels were 120 units/L and trough levels were 10 units/L. Two women received 2.4 million units of benzathine penicillin G intramuscularly 20 hours after delivery. Milk concentrations decreased from 30 units/L on the third day to 10 units/L on the fifth day. After the fifth day, milk levels were undetectable.[2] Milk levels after 2 to 2.4 million units of procaine penicillin G would be expected to be between those of similar doses of aqueous and benzathine penicillin G.

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

## Effects in Breastfed Infants

A breastfed 1-month-old infant with congenital syphilis developed a Herxheimer reaction 6 hours after its mother received 2.4 million units of benzathine penicillin G intramuscularly. However, the baby had also received 10 units of penicillin G at about the same time as the mother's injection. The reaction was possibly caused by penicillin in breastmilk.[3]

## Effects on Lactation and Breastmilk

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

## References

1. Rozansky R, Brzezinsky A. The excretion of penicillin in human milk. *J Lab Clin Med.* 1949;34:497–500. PubMed PMID: 18116312.
2. Borderon E, Soutoul JH, Borderon JC, et al. *Med Mal Infect.* 1975;5:373–6. [Excretion of antibiotics in human milk].
3. Rollier R, Rollier M, Bellouchi M. *Bull Soc Fr Dermatol Syphiligr.* 1967;74:178–80. [Herxheimer's reaction in maternal milk in early congenital syphilis]. PubMed PMID: 6070262.

## Substance Identification

### Substance Name

Procaine Penicillin G

### CAS Registry Number

54-35-3

### Drug Class

Breast Feeding

Lactation

Anti-Infective Agents

Antibacterial Agents

Penicillins