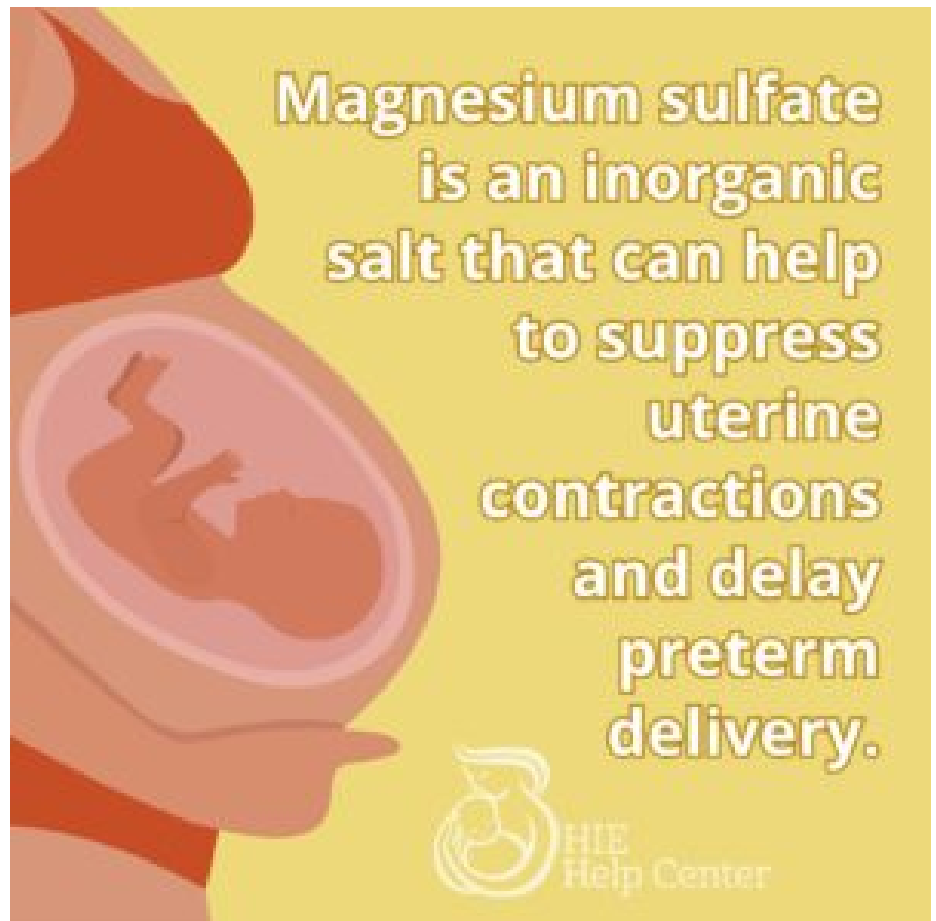


Magnesium sulfate, an inorganic salt, can help to reduce the risk of preterm birth-associated brain damage in two important ways.



First, antenatal magnesium sulfate can be used to suppress premature labor and delay preterm birth. This gives medical professionals time to administer [antenatal steroids](#) that can help to reduce the risk of [birth injuries](#) (2).

Second, magnesium sulfate can provide direct neuroprotective effects to the baby's brain. A systematic review suggested that this drug can play an important role in the prevention of cerebral palsy (3). Research also indicates that it can lower the risk of periventricular leukomalacia (PVL) (4) and intraventricular hemorrhage (5).

An HIE diagnosis can be difficult, but our team is here to help. Call



us when you're ready.

How does magnesium sulfate protect a baby's brain?

Exactly how magnesium sulfate provides neuroprotection of the fetus is not well understood, but professionals hypothesize that in-utero administration of magnesium sulfate may (6):

- Stabilize blood pressure and normalize cerebral blood flow
- Stabilize neuronal membranes and block excitatory neurotransmitters
- Protect against oxidative injury
- Protect against inflammatory injury

When and how should magnesium sulfate be administered?

Magnesium sulfate should be offered to a pregnant person who is (6):

Carrying a viable fetus and

Very likely to deliver a premature baby within the next 24 hours

This may include patients with:

- Preterm premature rupture of membranes (PPROM)
- Preterm labor without membrane rupture and

- A planned preterm birth for medical reasons

Researchers Simhan and Himes recommend limiting the use of magnesium sulfate to pregnancies that are between 24 and 32 weeks' gestation, although they note that more research may reveal benefits in fetuses closer to term (6).

Is magnesium sulfate safe for pregnant women and babies?

While magnesium sulfate administration is known to be safe in most pregnant women (provided that the medication is carefully dosed and the patient's well-being is closely monitored), it should not be given under certain circumstances.





Women who have one or more of the following conditions may experience dangerous side effects if they receive magnesium sulfate (2, 4):

- Myasthenia gravis
- Muscular dystrophy
- Myocardial compromise
- Cardiac conduction defects
- Impaired renal (kidney) function

A recent [systematic review and meta-analysis](#) suggests that the use of magnesium sulfate is generally safe for infants. Overall, they found no clear negative effects of antenatal exposure to magnesium sulfate.

When should I contact an attorney?

Babies that are born prematurely have fragile brains and are at greater risk of sustaining birth injuries. If your child sustained a preventable birth injury – this is medical negligence. If you suspect your child's birth injury was due to medical negligence, contact us to learn more about pursuing a case. [Our birth injury attorneys](#) provide free consultations, during which we will inform you of your [legal options](#) and answer any questions you have. You pay *nothing* throughout the entire legal process unless we win your case!

Related reading:

- [Magnesium Sulfate to Suppress Preterm Labor](#)



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