

# [What is neonatal abstinence syndrome health essay](https://assignbuster.com/what-is-neonatal-abstinence-syndrome-health-essay/)

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Neonatal Abstinence Syndrome is a term used to define a group of problems a newborn will exhibit due to exposure for drugs like opiates, narcotics or anti-depressant during pregnancy.

As almost every drug that passes through the mother’s bloodstream is passed on to the placenta. Therefore any illicit drug abuse will lead the foetus to utero exposure of these substances which will make it physically dependent, same effect that will do the mother herself.

Therefore, after the baby is born, this dependence still continues, but since he is no longer maintained through the placenta which passes on anything his mother has in her bloodstream, after some time, depending on the drug’s active ingredient half-life, this supply of substance will be no longer available. This lack will lead the neonate’s central nervous system to become overstimulated causing withdrawal symptoms.

## Why is NAS a concern?

The abuse of illicit drugs from a mother, not only puts the newborn at risk for NAS but even many other syndromes. These risks are mainly increased due to high chance that being a drug user, the pregnant mother may be reluctant to seek prenatal care, and therefore any conditions or complications the mother may be going through during the prenatal stage are not being screened by any medical specialist.

A fact to consider is that most drug users, usually don’t abuse of only one substance, which usually would lead to several complications during treatment of the newborn for withdrawals. Moreover, if the mother is an intravenous drug user, there is high probability of passing on to the child any infections acquired following use of infected needles, namely; HIV/AIDS.

Apart from the NAS symptoms the neonate may have other problems related to this drug use which include; poor intrauterine growth, premature birth and birth defects.

More problems were observed from the abuse of recreational drugs before and during pregnancy and findings through studies found that some drugs frequently cause specific problems in babies, for example; the use of heroin and opiates, like methadone, is likely to cause substantial withdrawal in the baby, with certain symptoms lasting between four to six months. Methadone users’ babies have a higher probability of seizure episodes than others.

The use of marijuana reduces birth weight and size of the newborn, likewise with use of amphetamines, which in turn even increases the chance of premature birth and may be the cause of intracranial bleeding in the neonate. Cocaine abuse is mostly associated with poor foetal growth and may be even related to a higher risk of sudden infant death syndrome (SIDS).

These similar problems at birth are not only seen with illicit drug use, but even use of alcohol and cigarette smoking does damage the foetus. Complications with regards to alcohol abuse called foetal alcohol spectrum disorders (FASDs), include slow growth both during and after pregnancy, specific deformities of head and face, heart defects and mental retardation. Smaller babies, premature births and stillbirths are at a higher chance of encounter to smoking women.

## Symptoms

Nearly all substances lead to some sort of effect on the newborn, but NAS symptoms may differ with the type of drugs, doses taken, how long the mother abused from these drugs and whether the baby was born premature or full-term.

Incidence of NAS varies with strength of drugs; Heroin and Methadone are more likely to cause NAS, although drugs like Cocaine, Amphetamines, Barbiturates (Anti-Convulsive) and Narcotics may also lead to withdrawal symptoms. Alcohol use during pregnancy can also cause withdrawals in a baby.

Neonate can start to appear symptomatic as early as 24 hours to 48 hours after birth, when strong drugs with short half-life were used, or as late as 5 to 10 days with weaker and longer half-life drugs. Withdrawal symptoms as a consequence of alcohol abuse during pregnancy may begin within a few hours after birth.

Common symptoms may include; excessive/high pitched crying, diarrhoea / vomiting, irritability to light/sound, trembling (jittering), seizures, sweating, fever, hyperactive reflexes, excessive sucking, poor feeding and slow weight gain, rapid breathing, insomnia, increased muscle tone and skin irritation.

A neonatal is diagnosed with NAS when he/she exhibits a combination of these signs, since several signs may also be experienced by newborn having other problems, the baby will have to be closely checked to confirm NAS. A history of the mother’s drug use during pregnancy, as accurate as possible, will be required to proceed with the necessary tests. This is argued about its reliability especially when mother, or worse, both parents are illicit drug abusers, but for the sake of the newborn, a background of what substance the child maybe withdrawing from is of extreme importance to start the right treatment to manage withdrawals as soon as possible.

Diagnosing withdrawals in a newborn may require tests like; urinalysis, toxicology screen of first bowel movements (meconium) and typically an NAS scoring system is used. By means of assigning points to certain signs and symptoms and their severity, this NAS scoring system apart from helping to diagnose, it also aids in grading the severity of the withdrawal and may even help in treatment planning.

Therefore once born and transferred to the postnatal ward, the baby is assessed for signs of withdrawals by the midwives using the NAS scoring chart. If the repeatedly four hourly assessments will get a score of 8 or higher, a doctor will be notified and it may be necessary for the baby to be transferred to the Neonatal and Paediatrics Intensive Care Unit (NPICU) to start any necessary treatment for the withdrawal symptoms observed.

## Treatment

Treatment for NAS will be determined by a paediatric physician and will be specifically based on the neonate’s gestational age and overall health, the extent of disease, the baby’s tolerance for specific medications and therapies and expectations for the course of the disease.

Neonates suffering from withdrawal are irritable and frequently hard to calm and to get comfortable. Snugly wrapping the baby in a blanket, gently rocking the baby and reducing lights and sounds usually helps a bit to manage this irritability exhibited.

A higher-calorie formula may be recommended for the extra calories necessary due to their increased activity. Intravenous (IV) fluids are sometimes necessary to avoid the newborn becoming dehydrated due to severe vomiting or diarrhoea.

Depending on the severity of the withdrawal symptoms, babies may need medications to help relieve the discomfort and other complications of withdrawal, seizures in particularly. The drug of choice is usually a drug similar to the one the mother used during pregnancy, which therefore is the substance the baby is withdrawing from, then dosage is slowly reduced when withdrawal symptoms are managed. Benzodiazepines are usually used for alcohol withdrawals and methadone for heroin and other opiate withdrawal.

## Prevention

An attempt to break the cycle of reproductive morbidity or mortality starts from identifying substance abuse. Most of the birth defects mentioned to be cause of illicit drug use, could be possibly less if the mother stops using drugs as soon as she finds out she is pregnant or if possible before. Preferably both men and women should stop abusing of any drugs before conception itself to further reduce the chance of birth defects which can occur not only through the gestation stage, but even at gametogenesis.

Whilst with most birth defects the termination of drug abuse from mother does only lower their probability, in the case of NAS this could be completely prevented, therefore is encourage to stop any abuse and seeking prenatal care. Drug screening at this stage prevents fully the transmission of any substances through the placenta to the foetus avoiding any future dependence. Health education is currently focusing on these problems as to prevent this growing social problem phenomenon to become oversized.

## Prognosis

Children of drug dependents, do not only go through a rough period in the first days of their life due to the utero exposure of illicit substances, but also various longer lasting, or worse, lifelong medical disabilities will be incurred due to the exposure to different types of drugs. Adding up is the fact of the social challenges as son/daughter of a drug addict, for example, being socially left out from school friends or other groups. Moreover, looking at the economic aspect, which may be due to the persisting drug dependence of either or both parents, could easily be critical and lead to a low standard of living.

Definitely the prognosis widely varies with all these variables, but surely if this drug addiction of any of the parents won’t cease, it will be of no help for the baby, hopefully in good health, to have an amusing future ahead. Long-term problems in children, who were exposed to illicit substances during gestation, may symptoms related to adverse neurodevelopmental outcomes leading to low IQ scores from births to methadone and cocaine users.

The perception, speech and intellectual functions were found to suffer some disturbances to youngsters who were exposed to opiate drugs. Major part of the children born to a illicit substance abusing mother have been reported to suffer from behavioural problem, such as; low levels of learning and adapting to new situations and high sensitivity to their environment causing irritability, agitation, aggression, poor social skills. Marijuana use during pregnancy was associated with increased impulsivity, delinquency and hyperactivity exhibited in the exposed kids. None of the treatments used to treat NAS was proved to affect any final outcome of this prenatal exposure.

## Epidemiology

Internationally, from the UK Advisory Council on the Misuse of Drugs it is suggested that 6, 000 babies, i. e. 1% of UK births, are born to drug abusing mothers each year. Due to their availability and recreational use cocaine, methadone and other illicit substance are now being preferred to the past higher ratio of heroin abusers. A broader image shows us that as much as European women use opioids during pregnancy as analgesic treatment, the number of pregnant women abusing of other drugs is somewhat similar.

In Malta, although on low scale it’s still increasing in incidence from year to year. This is most likely due to the more common day to day recreational drug use around teenager and slightly older generations. Along with the availability, dependencies on certain substances have increased, leading to abuse from mothers even during pregnancies and the newborn suffering from NAS as an end result. From a conversation with a nurse from NPICU revealed me that the number of NAS in Malta is around 0. 4% of all births in our country, but a number which is disturbingly on an incline.

## Conclusion

Neonatal Abstinence Syndrome and any other birth defects are usually topics that no one would like to converse about, as usually talking about these fragile human beings, born with some sort of problem, either being congenital or lifestyle-induced during gestation, does make both parties feel uneasy.

Nonetheless avoiding to talk about these won’t lower their incidence, it is actually the opposite, proper health education is one way where one can teach what someone’s habits can lead to. It is a known fact that there is little we can do with congenital conditions, but we can reason out that a least we should not help the number of premature births or still births increase.

NAS is one of many conditions, which I personally think that recent changes in our lifestyles can easily lead us to newborns having similar problems. Main reason being, the increment of habitual/recreational drug use and availability amongst 14-30 age bracket, is probably one of the highest ever seen. Not considering the exaggerate number of alcohol abusers, which also can lead to similar conditions. In addition to the other problems linked to promiscuous sexual relationships leading to higher risks of infection which can easily be transmitted and later inherited by a newborn.

Anti-drug abuse campaigns do already show some of the consequence these substances will do to your body. But maybe sometimes things look amplified and interest is lost whilst listening or even looking at a leaflet. More evident data should be used to incept the thought in the minds that these conditions are not out of this world, and clearly outline any possible remedies to prevent themselves and their babies from going through unnecessary pain.

I would like to conclude saying that nowadays life presents us with enough and may be too many challenges. If we can minimize these with some thought and assertiveness, we can make at least our nuclear sized life a better place. Temptations during hard times do arise, but it is not fair on anyone to suffer from our bad decisions, especially those that should be a symbol of our love to life.