

# Nausea and Vomiting of Pregnancy (NVP) and Hyperemesis Gravidarum (HG)

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Information in this leaflet is general in nature and should not take the place of advice from your healthcare provider. With every pregnancy there is a 3 to 5% risk of having a baby with a birth defect or developmental problem.

## What is nausea and vomiting of pregnancy (NVP) and hyperemesis gravidarum (HG)?<sup>1-7</sup>

NVP affects 7 in 10 pregnant women and can have a significant impact on the physical, mental and emotional health, as well as lifestyle and finances of pregnant women and their families. Although NVP is commonly known as ‘morning sickness’, it can happen at any time of the day or night. Symptoms usually occur from week 4 through to week 16 to 20. While most women feel better after the first trimester, some may continue to have symptoms through the entire pregnancy. Symptoms are variable and include intermittent nausea, aversion to odours and particular foods, dry retching, vomiting and in severe cases, persistent vomiting, weight loss and dehydration. Other conditions can also cause nausea and vomiting in pregnancy and should be excluded by your doctor.

The term hyperemesis gravidarum (HG) is used when a pregnant woman has severe symptoms, is unable to eat or drink normally, is limited in daily activities and may require hospital admission and rehydration. This occurs much less often, in about one in 100 pregnancies.

Many women who have had NVP during their first pregnancy will also have it in later pregnancies. Women in this situation should consider having an assessment with a healthcare professional when planning pregnancy or at least at an early stage in the first trimester. This is because early management of diet and lifestyle, medical treatment and quick referral may make NVP less severe.

## What causes NVP?

The cause of NVP is unclear and may have many contributing factors, although it is most likely to be related to the changing hormones in a woman’s body during pregnancy. There is no way of predicting if NVP will happen in a pregnancy (unless it has occurred previously), although it is more common in multiple pregnancies (a pregnancy with more than one baby eg twins).

## Assessment of NVP<sup>1,2</sup>

If you are pregnant and have nausea and vomiting, particularly if it affects your ability to drink and eat, you should contact your healthcare provider. The severity of NVP can be assessed with a questionnaire called a PUQE-24 score which consists of questions about how unwell you have been in the last 24 hours. Your healthcare provider will also assess your fluid and food intake, take a medical history, examine you, monitor you for weight loss and check on your mental health with a specific questionnaire. This can guide treatment pathways and will help to best manage your sickness.

### The PUQE-24 score is shown below:

In the last 24 hours, for how long have you felt nauseated or sick to your stomach?				
Not at all (1)	1 hour or less (2)	2-3 hours (3)	4-6 hours (4)	More than 6 hours (5)
In the last 24 hours have you vomited or thrown up?				
I did not vomit (1)	1-2 times (2)	3-4 times (3)	5-6 times (4)	7 or more times (5)
In the last 24 hours, how many times have you had retching or dry heaves without bringing anything up?				
No time (1)	1-2 times (2)	3-4 times (3)	5-6 times (4)	7 or more times (5)

If your PUQE-24 score is between 4 – 6, you have mild NVP. Between 7 – 12, you have moderate NVP and  $\geq 13$ , you have severe NVP (also known as HG).

If you have severe NVP/HG, your healthcare provider will organise further tests to check for other underlying causes and to see how dehydrated you are. This can assist in working out the most effective treatment for you. Your healthcare provider may be your midwife, GP or obstetrician. If you are very unwell you can also go to the emergency department of your local area hospital.

In partnership with the NSW Ministry of Health, MotherSafe is currently offering an extended service to callers regarding NVP/HG. This includes assessment, management advice, referrals (where appropriate) and follow-up. For more information call MotherSafe on 02 93826539 (or 1800 647 848 non-metropolitan area) or visit the MotherSafe website at

<https://www.seslhd.health.nsw.gov.au/royal-hospital-for-women/services-clinics/directory/mothersafe>

## Is NVP harmful to the pregnancy?<sup>7</sup>

Moderate levels of nausea and vomiting will not harm a developing baby. Ensure you drink plenty of fluids to avoid dehydration. Try and eat a variety of foods as tolerated so that you continue to get your daily requirements of vitamins, minerals and nutrients. Sometimes women lose weight when they have significant NVP. A small amount of weight loss is unlikely to be harmful, however it should be monitored by your healthcare provider.

## Settling NVP<sup>1-7</sup>

The following are some suggestions which may assist in settling NVP. Managing NVP as early as possible may reduce the severity of symptoms.

- Sometimes taking prenatal vitamins may worsen NVP; this is often related to the iron content. If this is the case, you should discuss with your healthcare provider what vitamins will work best for you. In general, if you currently have NVP, avoid iron-containing preparations. Consider switching to a supplement that contains only iodine (about 150mcg) and folic acid (500mcg) until you feel better. You can ask your pharmacist for the appropriate product.<sup>1</sup>

- Rest when you can: fatigue can make nausea worse. Change your activities to reduce tiredness and get more rest.
- Try to avoid any triggers, like certain smells that make you feel sick. Ask for help with food preparation from friends and relatives.
- Drink plenty of fluids: drink small amounts often, but not at the same time as you are eating. Drinks include cordial, diluted fruit juices, cordial, coconut water or you can ask your pharmacist for suitable oral rehydration products.
- Avoid an empty stomach - have frequent small snacks like toast with jam, crackers or fruit. Boiled sweets may be helpful.
- Don't overeat. Eat small meals more frequently rather than a lot of food all at once. Try to eat at times when you feel least sick.
- Eat before you get out of bed in the morning (keep crackers, biscuits and water beside the bed). Get out of bed slowly and take your time in the morning rather than rushing.
- Cold or frozen drinks and food are often better tolerated.
- Avoid fatty, spicy, fried and battered food eg hot chips and chocolate. Boiled rice and mashed potatoes are good alternatives.
- Snacking on high protein food may be helpful eg scrambled eggs, cooked, lean meat and yoghurt.
- Do not brush your teeth right after eating as this can cause nausea.
- Some herbal teas may be helpful - try peppermint tea or ginger tea.

## Treatment of mild NVP symptoms<sup>1-7</sup>

- Acupressure wristbands for travel sickness (available from pharmacies) may help.
- Acupuncture and hypnosis have been used as alternative approaches. Consult an acupuncturist who is experienced in treating pregnant women.
- Ginger (200mg-600mg every 8 hours - maximum dose 1800mg per 24 hours)<sup>1,4</sup> may be beneficial in NVP. A standardised product is preferred and is available over the counter at pharmacies.
- Pyridoxine (vitamin B6) can be trialled. Most often in pregnancy the **pyridoxine (vitamin B6)** dose is 75 -100mg daily. It is important to make

sure that your pyridoxine (vitamin B6) tablet is 25mg if you are taking it 3 times a day. Another common dosing is 100mg once a day (maximum daily dose is 200mg per day). **Ensure you do not take more than the recommended dose and see your doctor if symptoms persist.**

## Medicines to treat NVP<sup>1,4,5,6,7</sup>

If the strategies listed above do not help, consider adding **doxylamine tablets to the pyridoxine (vitamin B6) tablets discussed above.**

**Doxylamine** is an antihistamine and is considered safe in pregnancy. Doxylamine is the 1<sup>st</sup> line medication to treat NVP recommended in both Australia and worldwide, due to its effectiveness and its strong safety profile. Doxylamine tablets are available at your local pharmacy.

They are marketed in Australia as a sleeping aid but can also be used for NVP. Speak to the pharmacist and ensure you get tablets which you will be able to break in half. **Doxylamine may cause drowsiness. If this is a problem, try taking it only at night or with a smaller dose to begin with and gradually increase the dose as needed. Even a ¼ tablet at night to start with may be helpful.**

**In summary, it is suggested that women take doxylamine and pyridoxine (vitamin B6) tablets together as follows (if drowsiness is not a concern):**

	Morning	Afternoon	Night
Doxylamine 25mg tablet	Take ½ a tablet	Take ½ a tablet	Take 1 tablet
Pyridoxine (vitamin B6) 25mg tablet	Take 1 tablet	Take 1 tablet	Take 1 tablet
<b>or</b>			
Pyridoxine (vitamin B6) 100mg tablet	Take 1 tablet a day		

Other over the counter antihistamine options include diphenhydramine, cyclizine or promethazine. Only one antihistamine medication should be used at a time.<sup>1</sup>

If these options do not give relief, there are a range of prescription medications which are safe to use in pregnancy and have been shown to be useful in

treating persistent NVP. Consult your doctor or MotherSafe for further advice.

## Other symptoms which may need treatment<sup>1,3</sup>

- Constipation is common and may be worsened by some of the medication used to treat NVP. Macrogol (once or twice a day) and/or lactulose (15-30ml once or twice a day) and/or docusate (120mg once or twice a day) may be used in pregnancy.
- Reflux is a common problem in pregnancy and may be worsened by NVP. For moderate reflux, over the counter treatments include antacids and esomeprazole and are considered safe to use. Pantoprazole and rabeprazole are also available over the counter but have less safety information in pregnancy (although they are not anticipated to increase risk in pregnancy). Most other treatments require a prescription, so you will need to see your doctor for other medicines or for long-term treatment. For example, omeprazole or famotidine are commonly recommended to treat heartburn in pregnancy but require a prescription.<sup>1</sup>

## In conclusion

NVP is a common but treatable condition in pregnancy. It is important that women receive appropriate treatment and support so that they can enjoy their pregnancy and optimise their own health and that of their baby.

## References

1. NSW Health. Nausea and Vomiting in Pregnancy and Hyperemesis Gravidarum Guideline July 2022. Available at <https://www1.health.nsw.gov.au/pds/ActivePDS/Documents/GL2022-009.pdf> Accessed May 2024
2. NSW Health. Hyperemesis Gravidarum Fact Sheet. Nausea and vomiting in pregnancy and hyperemesis gravidarum. August 2023. Available at <https://www.health.nsw.gov.au/kidsfamilies/MCFhealth/Factsheets/hyperemesis-gravidarum.pdf> Accessed May 2024
3. Lowe SA, Boyer L et al. The SOMANZ position statement on the management of nausea and vomiting in pregnancy and hyperemesis gravidarum. SOMANZ. Society of Obstetric Medicine of Australia and New Zealand. Updated October 2023. Available at <https://www.somanz.org/content/uploads/2023/12/SOMANZ-Management-of-NVP-Position-Statement-Updated-Oct-2023-FINAL-1.pdf> Accessed May 2024
4. Therapeutic Guidelines (eTG August 2022 edition). Nausea and vomiting during pregnancy. Updated August 2022. West Melbourne. Accessed April 2024
5. Einarson A, Maltepe C et al. Treatment of nausea and vomiting in pregnancy - an updated algorithm. Canadian Family Physician. 2007 Dec; 53(12):2109-2111
6. Tan A, Foran T and Henry A. Royal Australian College of General Practitioners. Managing nausea and vomiting in pregnancy in a

primary care setting. Australian Family Physician. 2016 August; 45(8).  
7. Committee on Practice Bulletins-Obstetrics. ACOG Practice Bulletin No.189: Nausea and vomiting of pregnancy. Obstetrics and Gynecology. 2018; 131(1): e15-e30

## Other resources

MotherToBaby. Nausea and vomiting of pregnancy (NVP). OTIS. Organization of Teratology Information Specialists. February 2022. Available at <http://www.mothersbaby.org/fact-sheets/nausea-vomiting-pregnancy-nvp/>  
BUMPS. Treating Nausea and vomiting in pregnancy. UKTIS BUMPS. Best Uses of Medicines Pregnancy. September 2019. Available at <https://www.medicinesinpregnancy.org/leaflets-a-z/nausea--vomiting>

Endorsed June 2024. Reviewed by clinicians and consumers in development stage. Should you wish to discuss any aspect of this information please send an email to [RHWfeedback@sesiahs.health.nsw.gov.au](mailto:RHWfeedback@sesiahs.health.nsw.gov.au)