South Australian Perinatal Practice Guideline

Nausea and Vomiting in Pregnancy and Hyperemesis Gravidarum

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Note:

This guideline provides advice of a general nature. This statewide guideline has been prepared to promote and facilitate standardisation and consistency of practice, using a multidisciplinary approach. The guideline is based on a review of published evidence and expert opinion.

Information in this statewide guideline is current at the time of publication.

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Health practitioners in the South Australian public health sector are expected to review specific details of each patient and professionally assess the applicability of the relevant guideline to that clinical situation.

If for good clinical reasons, a decision is made to depart from the guideline, the responsible clinician must document in the patient's medical record, the decision made, by whom, and detailed reasons for the departure from the guideline.

This statewide guideline does not address all the elements of clinical practice and assumes that the individual clinicians are responsible for discussing care with consumers in an environment that is culturally appropriate and which enables respectful confidential discussion. This includes:

- The use of interpreter services where necessary,
- Advising consumers of their choice and ensuring informed consent is obtained,
- Providing care within scope of practice, meeting all legislative requirements and maintaining standards of professional conduct, and
- Documenting all care in accordance with mandatory and local requirements

Explanation of the Aboriginal artwork

The Aboriginal artwork used symbolises the connection to country and the circle shape shows the strong relationships amongst families and the Aboriginal culture. The horse shoe shape design shown in front of the generic statement symbolises a woman and those enclosing a smaller horse shoe shape depicts a pregnant women. The smaller horse shoe shape in this instance represents the unborn child. The artwork shown before the specific statements within the document symbolises a footprint and demonstrates the need to move forward together in unison.

Australian Aboriginal Culture is the oldest living culture in the world yet Aboriginal people continue to experience the poorest health outcomes when compared to non-Aboriginal Australians. In South Australia, Aboriginal women are 2-5 times more likely to die in childbirth and their babies are 2-3 times more likely to be of low birth weight. The accumulative effects of stress, low socio economic status, exposure to violence, historical trauma, culturally unsafe and discriminatory health services and health systems are all major contributors to the disparities in Aboriginal maternal and birthing outcomes. Despite these unacceptable statistics the birth of an Aboriginal baby is a celebration of life and an important cultural event bringing family together in celebration, obligation and responsibility. The diversity between Aboriginal cultures, language and practices differ greatly and so it is imperative that perinatal services prepare to respectively manage Aboriginal protocol and provide a culturally positive health care experience for Aboriginal people to ensure the best maternal, neonatal and child health outcomes.

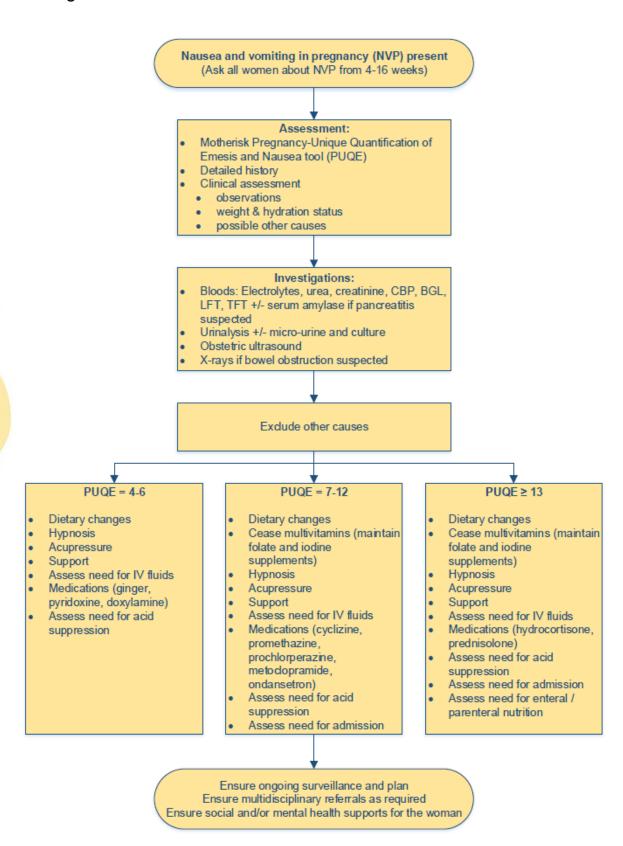
Purpose and Scope of Perinatal Practice Guideline (PPG)

This guideline outlines the management and treatment for nausea and vomiting in pregnancy and hyperemesis gravidarum.



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Management Flowchart





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Summary of Practice Recommendations

All women should be asked about nausea and vomiting in pregnancy (NVP) between 4 and 16 weeks gestation.

The diagnosis of Hyperemesis Gravidarum is made after exclusion of other causes.

Women who report NVP should be assessed using an assessment tool, measurement of the woman's weight and her hydration status to determine the severity of the condition and to guide management.

The <u>Motherisk PUQE-24 scoring system</u> is recommended to determine the degree of the woman's NVP and possible treatment recommendations.

Abbreviations

ABG	Arterial Blood Gas
BD	Twice daily
BGL	Blood glucose level
СВР	Complete blood picture
СТ	Computed tomography
g	Gram
HG	Hyperemesis Gravidarum
IM	Intramuscular
IV	Intravenous
L	Litre
LFT	Liver function test
mg	Milligram
mL	Millilitres
mmol	Millimoles
MRI	Magnetic resonance imaging
NVP	Nausea and Vomiting of Pregnancy
PO	Oral
PICC	Peripherally inserted central catheter
PUQE	Motherisk Pregnancy-Unique Quantification of Emesis and Nausea tool
QID	Four times daily
SOMANZ	The Society of Obstetric Medicine of Australia and New Zealand
TDS	Three times daily
UTI	Urinary Tract Infection
TFT	Thyroid Function Test
%	Percentage

Definitions

Hyperemesis gravidarum	A severe form of nausea and vomiting in pregnancy that leads to weight loss with or without dehydration and/or electrolyte imbalances. ¹
Nausea and vomiting of pregnancy	Nausea, vomiting and/or dry retching in pregnancy where there is no other possible diagnosis, commencing in the first trimester. ¹



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Introduction

Nausea and vomiting in pregnancy (NVP) will typically occur in the first trimester between four and seven weeks gestation, peaking at nine weeks and resolving by twenty weeks.^{2,3} Pregnancy related nausea and vomiting is thought to affect approximately 80% of women.³

Hyperemesis gravidarum (HG) is a severe form of nausea and vomiting that affects approximately 1% of pregnant women and includes signs of dehydration, electrolyte imbalances, and weight loss.³ Weight loss of greater than 5% of body weight is considered significant. The onset is usually in the first trimester, peaking by 12 weeks and for most women it will resolve by twenty weeks gestation.^{3,4}

HG rarely causes significant long-term sequalae in women but can be a significant cause of emotional, physical and economic distress for women and their familes.³ Some women require hospital management and HG impacts on their ability to work.³ Occasionally HG causes pregnancy complications for women and can lead to low birth weight babies.³

Diagnosis and investigations

All women should be asked about NVP at each antenatal visit that occurs between 4-16 weeks. If women report NVP the severity should be assessed using an assessment tool, measurement of the woman's weight and her hydration status.

The diagnosis of HG is only made after exclusion of other pathology. Clinicians should:

- Obtain a detailed history including any maternal disease or conditions related to nausea and vomiting, past history of NVP/HG, history to exclude other causes (abdominal pain, urinary symptoms, infection, drug history, chronic *Helicobacter pylori* infection)²
- Perform a clinical assessment for signs of dehydration, include observations, weight, signs of muscle wasting and dehydration
- Exclude molar or multiple pregnancy
- Calculate the NVP assessment tool score

Investigations are required to determine the degree of physiological disturbance and to exclude significant pathology if indicated by history and examination. Investigations required include²:

- Micro-urine and culture and dipstick urinalysis (quantify ketonuria as 1+ ketones or more)
- Blood for urea, electrolytes and serum creatinine (hypokalaemia/hyperkalaemia, hyponatraemia, dehydration & renal disease)
- Full blood count (infection, anaemia, haematocrit)
- Blood glucose monitoring (exclude diabetic ketoacidosis if diabetic)
- Liver function tests (specific hepatitis serology if indicated, gallstones and to monitor malnutrition)
- Thyroid stimulating hormone, free T4 level to exclude thyrotoxicosis
- Serum amylase if pancreatitis considered
- Obstetric ultrasound to confirm ongoing pregnancy and exclude multiple pregnancy or trophoblastic disease
- Abdominal erect and supine x-rays if suspected bowel obstruction
- In women who have had previous admissions or are not responding to treatment consider: TFT – hypo/hyperthyroid, calcium & phosphate, amylase to exclude pancreatitis, ABG to exclude metabolic disturbances to monitor severity



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Other causes of nausea and vomiting include^{1,2}:

- ulcers
- cholecystitis/cholelithiasis
- gastroenteritis/inflammatory bowel disease/ gastroparesis
- hepatitis
- pancreatitis
- thyroid disease
- genitourinary conditions (UTI &pyelonephritis)
- ovarian torsion
- metabolic disorders
- · neurological disorders
- · vestibular neuronitis
- positional vertigo
- drug induced
- Helicobacter Pylori

Nausea and vomiting assessment tool

The Society of Obstetric Medicine of Australia and New Zealand (SOMANZ) developed an extensive guideline in 2019 for the management of NVP and HG. A nausea and vomiting assessment tool was recommended by SOMANZ. Several tools are available including the *Rhodes score* and the *Motherisk Pregnancy-Unique Quantification of Emesis and Nausea* tool (PUQE). The PUQE is simpler to use and is a validated tool recommended to assess NVP. The PUQE-24 is scored over 24 hours and can provide an accurate indicator of the woman's well-being.

Motherisk PUQE-24 scoring system¹

1. In the last	1. In the last 24 hours, for how long have you felt nauseated or sick to your stomach?				
Not at all	1 hour or less	2-3 hours	4-6 hours	> 6 hours	
(1)	(2)	(3)	(4)	(5)	
2. In the last	2. In the last 24 hours, have you vomited or thrown up?				
No vomiting	1-2 times	3-4 times	5-6 times	7 or more times	
(1)	(2)	(3)	(4)	(5)	
3. In the last 24 hours, how many times have you had retching or dry heaves without throwing up?					
None	1-2 times	3-4 times	5-6 times	7 or more times	
(1)	(2)	(3)	(4)	(5)	

SOMANZ recommend the following classifications for the severity of NVP1:

Mild	Women with NVP who score 4-6
Moderate	Women with NVP who score 7-12
Severe	Women with NVP who score ≥13



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Management

All women presenting with NVP need a medical assessment and treatment will depend on the clinical situation, examination, pathology results and the woman's wishes. A <u>treatment flowchart</u> has been developed to assist in potential pathways for women's treatment. Generally, treatment is aimed at using a combination of different therapies tailored to each woman's circumstances, symptoms and wishes.

Admission should be considered for women who continue to experience nausea and vomiting and are unable to tolerate antiemetics and/or experience ketonuria/weight loss (of greater than 5% of body weight) and/or who have a confirmed or suspected comorbidity. Referral to a consultant obstetrician +/- obstetric physician is indicated in these cases.

If using the PUQE-24 tool:

- Women who score <13 can be managed in the community (providing they have no other complicating medical conditions). Women managed in the community should have regular review of treatment and response to treatment.¹ A written management plan is recommended for the woman with instructions on titrating therapy in response to her symptoms.¹
- Women with severe NVP or HG (PUQE-24 score of > 13), who do not respond to standard treatments or where the hyperemesis is severe and prolonged will require referral to a consultant obstetrician +/- obstetric physician.

Dietary changes

Encourage the woman to eat before, or as soon as she feels hungry in order to avoid an empty stomach that may aggravate her nausea.³ Encourage small, frequent, high carbohydrate, low fat meals. Some women report an improvement when eliminating spicy or fatty foods and eating salty, bland, dry or high protein snacks/meals.³ Fluids are better tolerated if cold, clear, carbonated or sour (e.g. ginger ale, lemonade) taken in small amounts between meals. Clinicians can recommend that women try eating some dry crackers before getting out of bed in the morning, getting out of bed slowly and to avoid rushing.³ Herbal teas can help with NVP, particularly peppermint or ginger teas.³

Ginger

Ginger can be used by women who wish to avoid antiemetic treatment in NVP.²

Pregnancy vitamins

Some women find improvement in their NVP when they stop their pregnancy vitamins. Women should ensure that iodine and folic acid supplements continue.

Hypnosis

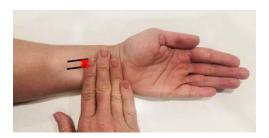
A review of the use of hypnosis to treat HG found insufficient evidence to recommend routine use but the evidence suggests that it is not harmful and can result in positive outcomes for some women.⁵



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Acupressure and acupuncture

Acupressure and acupuncture are considered safe in pregnancy and may improve NVP.² Acupressure at the P6 acupressure point (see picture below) can be recommended using a wrist band.^{1,2,6}



P6 acupressure point

Support

Women may require referral to social work and/or psychological support if the NVP or HG is impacting on their ability to work and/or care for their other children and/or manage their day to day lives. If physical activity is impacted, consider a physiotherapy referral. Clinicians should assess the woman's mental health during the pregnancy and postnatally and refer for additional support if indicated.²

Intravenous rehydration

Intravenous fluid and electrolyte replacement is an effective treatment for dehydration and electrolyte imbalance associated with NVP and HG.¹ *Thiamine* (100mg) given intravenously with the initial rehydration fluid and then daily for 2-3 days, followed by intravenous multivitamins is recommended for women who require intravenous rehydration and who have vomited for more than three weeks to prevent Wernicke encephalopathy.⁶ Dextrose infusions are not appropriate unless the woman has normal serum sodium levels and she has been given thiamine (to prevent Wernicke encephalopathy).² The tables below are recommended by SOMANZ for parenteral replacement of IV fluids and electrolytes¹:

Fluid	Quantity/rate	Practice Points
0.9% sodium chloride	1 to 2L initial rate at 1L/1 hour	Give further IV fluids at a rate of 1L/1-2 hours (or slower) to correct dehydration and electrolytes
4% dextrose and 0.18% sodium chloride or 5% dextrose	1 to 2L initial rate at 1L/2 hours	Consider this option if the woman has had minimal oral intake, starvation or uncontrolled nausea ONLY after correction of thiamine deficiency and exclusion of hyponatremia



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Electrolytes can be added to the IV fluids as determined by blood results.

Electrolyte	Quantity/rate	Practice Point
Potassium Chloride Potassium Chloride is a high-risk medication – follow all local protocols for management	30 to 40 mmol/L Maximum infusion rate 10mmol/L over 1 hour	Administer with caution as per hospital protocol. Preferred product is pre-mixed 30mmol potassium chloride in 1L bag of 0.9% sodium chloride. Use large peripheral vein or central venous access only
Magnesium sulphate	10 to 20 mmol/day over 20 to 40 mins	Dilute with 100mL of 0.9% sodium chloride. Use large peripheral vein or central venous access only

Pharmacological treatments

There is little high-quality and consistent evidence supporting any one intervention over another, which should be taken into account when making management decisions.^{3,7}

Consider treatment with an antacid, ranitidine or omeprazole where dyspepsia features, or where symptoms persist or return after 20 weeks gestation.

A step-wise approach for NVP using medications with more experience is preferred. Treatment for HG may not follow the step-wise approach and will be individualised to the woman's needs aiming for targets of symptom relief.

Medication Dose		Practice Points
First line agents (m	ild symptoms - PUQE-24	score of 4-6)
Ginger ^{1,6}	250 mg orally, up to 4 times a day	Maximum dose 2g per dayMay cause acid reflux
Pyridoxine (vitamin B6) ^{1,8} 25 mg tablets	10 mg to 25 mg orally, up to 3 – 4 times a day, maximum 200 mg/day	 More effective when used in combination with doxylamine Prolonged high doses are associated with peripheral neuropathy (associated with doses >500 mg/day)
Doxylamine 25 mg tablets	6.25 mg to 25 mg orally up to 3 times a day, maximum of 50 mg/day	 May cause sedation Use in combination with pyridoxine A combination product of doxylamine and pyridoxine (10 mg / 10 mg) is approved in Canada, UK and USA for nausea and vomiting of pregnancy



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Second line agents	(moderate symptoms -	PUQE-24 score 7-12)
Cyclizine 50 mg tablets	12.5 mg to 50 mg orally, up to 3 times a day ⁷ , maximum 150 mg/day	> May cause sedation
Promethazine 10 mg, 25 mg tablets 50mg/2 mL injection	10 mg to 25 mg orally, up to 3 to 4 times a day 25mgs IM 3 to 4 times a day, maximum 100mg/day 1	 High doses given close to delive have caused prolonged neurological disturbances in the infant Sedation IV administration is not recommended. Promethazine is highly caustic and rapid injectior can cause hypotension¹⁰
Prochlorperazine 5 mg tablets 12.5 mg/mL injection	5 mg to 10 mg orally, up to 3 to 4 times a day ⁹ , maximum 30 mg/day 12.5 mg IM 3 times a day ⁹	 High doses given close to delive have caused prolonged neurological disturbances in the infant Sedation
	5mg to 10 mg IV 3 to 4 times a day Note: For intravenous administration, inject over 2 minutes ⁹	
Metoclopramide ⁹ 10 mg tablets 10 mg/2 mL injection	10 mg orally 3 times a day 10 mg IM or IV 3 times a day Maximum 30 mg/day	> TGA recommend maximum duration of treatment is 5 days ⁹
Domperidone ² 10 mg tablets	10 mg orally, up to 3 times a day, maximum 30 mg/day	> The Australian product information states - usually, the maximum treatment duration should not exceed one week for the treatment of acute nausea and vomiting. For other indications, the initial duration of treatment is limited to 4 weeks > There are limited data available pregnant women, domperidone should only be used in pregnanci if clearly needed ¹¹
Ondansetron 4 mg, 8 mg tablets 4 mg, 8 mg wafers 4 mg/2 mL injection 8 mg/2 mL injection	4 to 8 mg orally, 2 to 3 times a day ⁹ 4 to 8 mg IV, 8 to 12 hourly (usual maximum 16 mg/day) ⁹	 Reserved as a second line ager Conflicting suggestions that first trimester use is associated with increased rates of cardiac defect and oral clefts^{2,9} Consider laxatives and patient education about constipation Can also cause headaches and dizziness



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Third line agents (severe symptoms - PUQE-24 score ≥13)			
Hydrocortisone 100 mg/ 2 mL injection	100 mg IV twice a day ^{1,2}	>	Once clinical improvement occurs switch to oral prednisolone ²
Prednisolone 1 mg, 5 mg, 25 mg tablets 5 mg/mL oral liquid	40 mg to 50 mg orally once a day Gradually taper dose until the lowest dose to reduce the symptoms is reached ²	> >	Limit to women with intractable nausea and vomiting There are conflicting reports of an association of oral clefting with first trimester use ¹ Ensure regular medical follow-up to ensure corticosteroids are not taken for prolonged periods Monitor blood sugar levels

Acid Suppression

Many women with NVP also experience acid gastroesophageal reflux. The following treatment therapy is recommended (Note: none of the following medications have an associated increased risk of congenital malformations): 1,2

Medication	Dose	Issues	
Antacids containing magnesium, calcium or aluminium	As required and for mild symptoms	High doses – constipation/diarrhoea	
H2 Antagonists	Ranitidine 150 mg -to 300 mg, orally twice a day Famotidine 20 mg orally, once or twice a day		
Proton pump inhibitors	Omeprazole 20 mg once or twice a day Esomeprazole 40 mg once or twice a day Lansoprazole 15 mg once or twice a day Rabeprazole 20 mg once or twice a day Pantoprazole 40 mg once or twice a day	Well tolerated Omeprazole is the preferred proton pump inhibitor during pregnancy due to greater experience	

Enteral and parental nutrition

Where treatment from the third line treatment options has failed to control the HG, additional nutrition may be required to correct the associated dehydration and electrolyte inblanaces.² These women require a multidisciplinary approach and input from a Gastroenterologist and Nutritionist.² Enteral feeding options that can be considered include nasogastric, nasoduodenal or nasojejunal tubes, percutaneous endoscopic gastrostomy or jejunostomy feeding. Parenteral feeding via a peripherally inserted central catheter (PICC) line can also be considered.²



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Staff Resources

SOMANZ Guideline for the management of nausea and vomiting in pregnancy: https://www.somanz.org/Index.asp

Resources for women

SOMANZ Guideline for the management of nausea and vomiting in pregnancy: https://www.somanz.org/Index.asp

Hyperemesis Gravidarum Australia: https://hyperemesisaustralia.org.au

Women's and Children's Health Network. Morning Sickness. http://www.cyh.com/HealthTopics/HealthTopicDetails.aspx?p=438&np=462&id=2782

Mother To Baby Factsheets:- https://mothertobaby.org/fact-sheets-parent/

- Nausea and Vomiting of Pregnancy (NVP)
- Doxylamine-pyridoxine
- Ginger
- Ondansetron
- Prednisolone
- Promethazine

UK-TIS Factsheets: www.medicinesinpregnancy.org/Medicine--pregnancy/

- Nausea and Vomiting of Pregnancy
- Ginger
- Doxylamine-pyridoxine
- Ondansetron
- Prednisolone
- Promethazine



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References

- 1. Lowe S, Bowyer L, Beech A, Robinson H, Armstrong G, Marnoch C & Grzeskowiak L. Guideline for the management of nausea and vomiting in pregnancy and hyperemesis gravidarum: Society of Obstetric Medicine of Australia and New Zealand, 2019.
- 2. Royal College of Obstetricians and Gynaecologists. Green-top guideline No 69: The Management of Nausea and Vomiting of Pregnancy and Hyperemesis Gravidarum: Royal College of Obstetricians and Gynaecologists, 2016.
- Boelig RC, Barton SJ, Saccone G, Kelly AJ, Edwards SJ, Berghella V. Interventions for treating hyperemesis gravidarum. Cochrane Database of Systematic Reviews 2016; (5).
- 4. Department of Health. Clinical Practice Guidelines: Pregnancy Care. Canberra: Australian Government 2019.
- 5. McCormack D. Hypnosis for hyperemesis gravidarum. Journal of Obstetrics and Gynaecology 2010. p. 647-53.
- 6. Ramin SM. ACOG Practice Bulletin No. 189 Summary: Nausea And Vomiting Of Pregnancy. Obstetrics & Gynaecology 2018; 131(1): 190-3.
- 7. Dean CR, Shemar M, Ostrowski GA, Painter RC. Management of severe pregnancy sickness and hyperemesis gravidarum. bmj 2018; 363: k5000.
- McParlin C, O'Donnell A, Robson SC, et al. Treatments for Hyperemesis Gravidarum and Nausea and Vomiting in Pregnancy: A Systematic Review. JAMA 2016; 316(13): 1392-401.
- eTG complete [digital]. Nausea and vomiting during pregnancy. Melbourne: Therapeutic Guidelines Limited; 2019 [cited 2019 January]. Available from: https://tgldcdp.tg.org.au/etgAccess
- 10. Burridge N, Symons K. Australian Injectable Drugs Handbook: The Society of Hospital Pharmacists of Australia; 2017.
- 11. Australian Government. Australian Product Information Apo-Domperidone (Domperidone Maleate) tablet. In: Department of Health TGA, editor; 2018. p. 1-16.



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Recording nausea and vomiting in your pregnancy

Your doctor or midwife would like you to complete the following table to help them determine the best treatment for you and your baby.

Please complete this table and bring it to your appointment with your doctor or midwife (or you may be asked to complete the table at an appointment).

Please circle the answers that best represent the nausea and vomiting that you have experienced in the last 24 hours (1 day).

In the last 24 hours, for how long have you felt nauseated or sick to your stomach?				
Not at all	1 hour or less	2-3 hours	4-6 hours	> 6 hours
(1)	(2)	(3)	(4)	(5)
In the last 24 hours, have you vomited or thrown up?				
No vomiting	1-2 times	3-4 times	5-6 times	7 or more times
(1)	(2)	(3)	(4)	(5)
In the last 24 hours, how many times have you had retching or dry heaves without throwing up?				
None	1-2 times	3-4 times	5-6 times	7 or more times
(1)	(2)	(3)	(4)	(5)

Motherisk PUQE-24 scoring system¹

Your doctor or midwife will calculate your score and talk to you about the best way to manage your nausea and vomiting.

 Lowe S, Bowyer L, Beech A, et al. Guideline for the management of nausea and vomiting in pregnancy and hyperemesis gravidarum: Society of Obstetric Medicine of Australia and New Zealand, 2019.

For more information

SA Health and Wellbeing Women's and Children's Health Network 72 King William Road North Adelaide SA 5006

http://www.cyh.com/HealthTopics/HealthTopicDetails.aspx?p=438&np=462&id=2782 www.sahealth.sa.gov.au



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