



= YES = NO

(PLACE PATIENT LABEL HERE)

SURNAME: _____ NHI: _____

FIRST NAMES: _____

Date of Birth: ____ / ____ / ____ SEX: _____

NAUSEA & VOMITING IN PREGNANCY

Date: _____ Time: _____ Assessment nurse: _____ Sign: _____

INCLUSION CRITERIA

- Pregnant ≤ 12 weeks with nausea and vomiting
or
 > 12 weeks with documented history of Hyperemesis

EXCLUSION CRITERIA

- PV bleeding
 Abdominal pain

- Select Treatment Pathway on Whiteboard**
Enter actual time started
Data collected for Ministry of Health

STOP!

Not suitable for this Best Care Bundle
Select 'BCB removed' Treatment Pathway
Continue usual nursing cares

NURSING ASSESSMENT *Aim < 30 minutes*

- History, examination and vital signs *Document on Nursing Assessment Record*
- IV access & bloods: General panel β-HCG
- Calculate % weight loss:
- | | | | | |
|---------------------------------|---|-----------------------|---------|------------------------------|
| <i>pre-pregnancy weight</i> | - | <i>current weight</i> | X 100 = |

% weight loss |
|
<i>pre-pregnancy weight</i> | | | | |
- Urine ketones: _____ *Paste POC analysis in Nursing Assessment Record. Only send to lab if + parameters*
- Provide 'Nausea and vomiting in pregnancy' patient information sheet

RED FLAGS *All red flags boxes must be populated*

= YES = NO

- | | | | |
|--|--|---|------------------------------------|
| <input type="checkbox"/> HR < 50 or >120 | <input type="checkbox"/> Systolic BP < 80 or >130 | <input type="checkbox"/> Δ Level of consciousness | <input type="checkbox"/> Headache |
| <input type="checkbox"/> Fever | <input type="checkbox"/> Diastolic BP > 90 | <input type="checkbox"/> Visual disturbance | <input type="checkbox"/> Confusion |
| <input type="checkbox"/> Diarrhoea | <input type="checkbox"/> Known high risk pregnancy | <input type="checkbox"/> Ataxia | |

NO RED FLAGS

Continue Best Care Bundle
follow pathway
instructions
page 2 & 3

RED FLAGS PRESENT (ANY) → Senior Dr review ASAP (SMO / Senior Registrar)

Dr Name: _____ Sign: _____

Continue Best Care Bundle. Intervention if any: _____

Exit Care Bundle: Reason: _____

↳ Select 'BCB removed' in TP column, Electronic Whiteboard. This signals the medical staff

SEVERITY ASSESSMENT TOOL *Assign pathway. Follow instructions page 2&3*

	<input type="checkbox"/> Mild	<input type="checkbox"/> Moderate	<input type="checkbox"/> Severe
<i>Time frame</i>	<input type="checkbox"/> Recent onset	<input type="checkbox"/> Ongoing symptoms	<input type="checkbox"/> Severe intractable vomiting
<i>Oral fluid tolerance</i>	<input type="checkbox"/> Tolerating oral fluids	<input type="checkbox"/> Tolerating no or minimal fluids	<input type="checkbox"/> Not tolerating fluids
<i>Ketones</i>	<input type="checkbox"/> 0 - 1+	<input type="checkbox"/> 2 - 3+	<input type="checkbox"/> ≥ 4+
<i>Signs of dehydration</i>	<input type="checkbox"/> None or minimal	<input type="checkbox"/> Mild	<input type="checkbox"/> Severe
<i>Weight loss</i>	<input type="checkbox"/> < 5%	<input type="checkbox"/> 5 -10%	<input type="checkbox"/> > 10%



= YES = NO

(PLACE PATIENT LABEL HERE)

SURNAME: _____ NHI: _____

FIRST NAMES: _____

Date of Birth: ____ / ____ / ____ SEX: _____

MILD PATHWAY

- Can be managed in the waiting room - bloods and IV line not routinely necessary
- Assessment nurse: review the patient at each interval and manage according to instructions
- Document all medications given on Electronic Medication Chart
- Doctor to prescribe all medication and fluids that are not standing orders

START	Time:	<u>Oral intake:</u> <input type="checkbox"/> Encourage oral intake	<i>Small regular sips. Provide 'Hyperemesis snack food package' (store room)</i>
	Sign:	<u>Consider antiemetic:</u> <input type="checkbox"/> Given: _____ <input type="checkbox"/> Not given	<i>See the formulary on page 4 for options and standing orders</i>

1-2 hours after treatment started	Time:	<input type="checkbox"/> Improved <i>Tolerating oral fluids</i>	→	<input type="checkbox"/> Clinician consider discharge <i>Discharge criteria and check list below</i>
	Sign:	<input type="checkbox"/> Not improved <i>Inadequate fluid intake</i>	→	<input type="checkbox"/> Move to Moderate and Severe Pathway <i>Start at the first box</i> <input type="checkbox"/> Place IV line & start fluids

POAC INFORMATION / REFERRAL PROCESS

- A referral letter / POAC number is no longer needed, **but POAC needs to be mentioned in the EDS for treatment to be free of charge**
- The EDS proforma (linked from the EDS) is pre-populated with all the information the patient needs
- The patient can present at **any time for the rest of this pregnancy**, as long as it is for Hyperemesis.
- POAC care is provided by most GP's and after hours clinics. Patients can choose to follow up with their registered GP or a walk-in clinic. There is a list of clinics that provide walk in service on CeDDS
- Most GP's require appointments to be made, but the clinics usually do not.

ADDITIONAL INFORMATION

Full guideline Hyperemesis BCB	Best Care Bundle page, Emergency Medicine Intranet site
MOH Guideline**	http://health.govt.nz/our-work/preventative-health-wellness/nutrition/folate-folic-acid
Find a midwife	www.findyourmidwife.co.nz or www.healthpoint.co.nz



= YES = NO

(PLACE PATIENT LABEL HERE)

SURNAME: _____ NHI: _____

FIRST NAMES: _____

Date of Birth: ____ / ____ / ____ SEX: _____

MODERATE & SEVERE PATHWAY

- Assign in side room if possible. *May have blocks of ice / small sips of water*
- Document all medications given on Electronic Medication Chart. Doctor to prescribe, unless standing order
- Document all fluids on Fluid Balance chart. The first 1000mL is a standing order.

START	Time:	Antiemetic: 1st Given: _____	Formulary page 4
	IV fluids:	<input type="checkbox"/> 1000mL 0.9% Sodium Chloride / 30 minutes	First 1000 mL is standing order
Start here if moved from Mild Pathway			
1 hour <i>after treatment started</i>	Time:	<input type="checkbox"/> Improved →	Oral fluids: As tolerated <i>Hyperemesis snack food package'</i> (Fish bowl, Acutes) IV fluids: <input type="checkbox"/> Continued <input type="checkbox"/> Not continued <i>Clinician decision</i>
	Sign:	<input type="checkbox"/> Not improved and / or inadequate fluid intake →	Antiemetic: 2nd Given: _____ <input type="checkbox"/> Not given <i>See page 4</i> IV fluids: <input type="checkbox"/> 1000 mL 0.9% Sodium Chloride / 1 hour <i>Clinician to prescribe . Add K+ if hypokalaemic.</i>
2 hours <i>after treatment started</i>	Time:	<input type="checkbox"/> Improved →	Oral fluids: As tolerated Clinician: Consider discharge <i>See criteria and checklist page 3</i>
	Sign:	<input type="checkbox"/> Not improved and / or inadequate fluid intake →	Antiemetic: 3rd Given: _____ <input type="checkbox"/> Not given IV fluids: <input type="checkbox"/> 1000 mL 0.9% Sodium Chloride or Plasmalyte / 4 hours <i>Clinician to prescribe. Add K+ if hypokalaemic</i> Clinician: Consider alternative etiologies ? SMO review <input type="checkbox"/> Refer if admission probable <input type="checkbox"/> Move to ED Observation if discharge likely
3-4 hours <i>after treatment started</i>	Time:	<input type="checkbox"/> Improved →	Oral fluids: As tolerated Ketones: <input type="checkbox"/> Repeat if possible: _____ <i>Not a requirement for discharge</i> Clinician: <input type="checkbox"/> Discharge or <input type="checkbox"/> Move to ED Observation area
	Sign:	<input type="checkbox"/> Not improved and / or inadequate fluid intake →	<input type="checkbox"/> Refer all for admission NSH: Gynae reg 021 245 4591 WTH: Obstetric consultant via operator Bundle Care concluded → <i>Clinician to Document ongoing care plan in clinical notes</i>



= YES = NO

(PLACE PATIENT LABEL HERE)

SURNAME: _____ NHI: _____

FIRST NAMES: _____

Date of Birth: ____ / ____ / ____ SEX: _____

FORMULARY / MEDICATION OPTIONS

CHECK ALLERGY STATUS AND SEE MEDSAFE OR OTHER TEXT FOR FULL LIST OF CONTRAINDICATIONS**

ALL MEDICATIONS MUST BE CHARTED ON THE ELECTRONIC MEDICATION CHART

ANTI-EMETIC OPTIONS *In order of preference. For use in hospital and on discharge*

Medication	Dose	Route	Freq	Notes
Metoclopramide	10 mg	IV/Oral	Q 8 hourly	Standing order Not for < 20 y/o. Max duration 5 days. (Risk dystonic reaction)
Cyclizine	25-50 mg	IV/Oral	Q 8 hourly	Standing order
Ondansetron	4 mg	IV/ Oral	Q 6-8 hourly	NOT a standing order for Hyperemesis. Class B medication. Contraindication: Long QT syndrome. Very constipating
Prochlorperazine	25 mg	PR		Then 20mg oral 6 hours later single dose
<i>Suppositories not available in ED, option for discharge</i>	20 mg	Oral		Then 10mg two hours later
	5-10 mg	Oral	BD or TDS	Prevention dose. Option for refractory cases

ROUTINE PREGNANCY SUPPLEMENTS *For discharge **MOH recommendation***

Folic Acid	800 mcg	Oral	Once daily	Healthy women until end of 12 th week of pregnancy
Folic Acid- high dose*	5 mg	Oral	Once daily	All moderate/severe Hyperemesis. For those at higher risk of neural tube defects and See MOH guide online. (Link BCB page, EM intranet)
Iodine	150 mcg	Oral	Once daily	Until breastfeeding is discontinued

ADDITIONAL ORAL SUPPLEMENTS *For in hospital & discharge, some evidence might also help with symptoms*

Pyridoxine (Vitamin B6)	25 mg	Oral	8 hourly	Iodine and Folic acid can be prescribed individually (funded) Elevit® with Iodine (NOT funded) also contains B1, B6 and Folic Acid +several other vitamins and minerals. It can be difficult to swallow
Thiamine (Vitamin B1)	100 mg	Oral	Once daily	

INTRAVENOUS FLUIDS

0.9% Sodium Chloride	1000 mL	IV	/ 30 mins	Standing order. Note only the first 1000 mL is standing order. Further fluid needs to be prescribed
0.9% Sodium Chloride	1000 mL	IV		Or Plasmalyte. As per clinician

DISCHARGE CRITERIA **MUST MEET ALL**

- Senior doctor agrees with discharge plan
- Tolerating oral fluids
- Significant clinical improvement

ADMISSION CRITERIA

- Severe dehydration or electrolyte abnormality
- > 10% weight loss
- Persistent abnormal vital signs
- Unable to tolerate oral fluids after adequate Rx

DISCHARGE CHECKLIST

- Patient is taking Folic acid and Iodine or script provided. Consider adding Thiamine and Pyridoxine.
- Hyperemesis Patient information sheet provided
In Best Care Bundle or EM CeDDS
- 'Hyperemesis Nutrition Information Pack' provided
NSH: Fish bowl, Acutes. Stocked with snack packs. 3556 Dietetic department if out of stock.
WTH: Charge Nurse
- Ultrasound, if it is still to be arranged (GP or LMC)
To exclude molar or twin pregnancy
- Please note current weight in the EDS
EDS Proforma (link from EDS) is pre-populated with helpful information

FOLLOW UP - please document this in the EDS

- POAC: must be mentioned in EDS to be free**
 - Formal referral letter / POAC number is not needed.
 - POAC provider list on BCB page, EM CeDDS
 - Valid for the rest of this pregnancy
 - Best Care Bundle EDS Proforma (link from EDS) is pre-populated with patient information & list of clinics
- Follow up with GP / LMC:**
All patients should have a LMC by 10/40 (MOH directive). No LMC → refer to 'Midwife Community Liaison' (yellow form) or see EM CeDDS
- Dietitian referral if indicated: Referral form: EM CeDSS**
 - > 5% weight loss
 - All moderate and severe cases
 - ≥ 1 admission this pregnancy