Pain, nausea and vomiting

Acute pain

HMP Acute pain - adult/child

1. May present with

- Acute pain

2. Immediate management

- If chest pain, go to Chest pain assessment, p. 103
- **If severe pain:**
  - get rapid history + check for allergies
  - contact MO/NP urgently
  - **adult** - insert IVC + give IV morphine or fentanyl
  - if IVC delay - consider alternative routes eg IM/subcut, inhalation, intranasal
  - **child** - consider intranasal fentanyl. **Note:** must be skilled in the use of this. Use is off-label
- If severe pain + looks sick/'worst I've ever felt' - screen for Sepsis, p. 64
- If sudden onset severe headache/'worst headache of life' - go to Headache, p. 127
- If abdominal pain still give analgesia. **Note:** will not mask physical signs/hinder diagnosis

3. Clinical assessment[1]

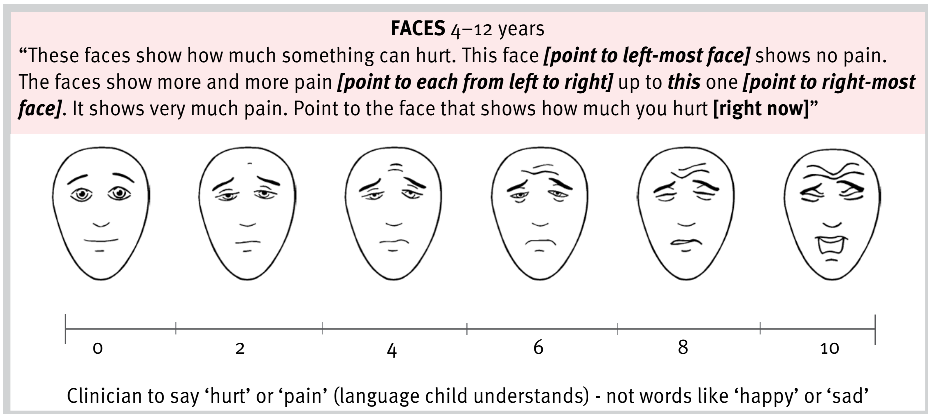
- The most useful diagnostic approach to acute pain is to take a detailed and systematic history
- Ask about:
  - **Site** - where is it
  - **Onset** - when did it start:
    - sudden or gradual
    - result of trauma/activity/cold/stress
  - **Characteristics** eg sharp, throbbing, aching, burning, stabbing
  - **Radiation** - does it spread anywhere else
  - **Associated symptoms** eg nausea, vomiting, sweating, fever
  - **Timing** - duration, constant or intermittent:
    - has anything changed the pain
    - ever had this pain before, how often does it occur
  - **Exacerbating or relieving factors**:
    - eg rest, medicines, eating, position changes, ice/splinting
  - **Severity** - at rest, on movement:
    - mild, moderate, severe
    - scale from 0–10 (0 = no pain, 10 = worst pain imaginable)
    - if child consider FLACC or FACES[2]
- Ask about:
  - any pain relief already given/taken prior to presentation eg by carer, self, ambulance staff:
    - when, what, dose, how effective
  - pain relief used in past - what worked/did not work, side effects
- Get past history, including:
  - current medicines, over-the-counter medicines
  - opioid use (if any)
- Do vital signs
- If child - do weight, bare weight if < 2 years

Pain assessment scales[2-4]

FLACC pain scale - 2 months–7 years (or non-verbal person) Observe with legs + body uncovered for 2–5 minutes			
	0	**1**	**2**
Face	No particular expression or smile	Occasional grimace or frown, withdrawn, disinterested	Frequent to constant quivering chin, clenched jaw
Legs	Normal position or relaxed	Uneasy, restless, tense	Kicking or legs drawn up
Activity	Lying quietly, normal position, moves easily	Squirming, shifting, back and forth, tense	Arched, rigid or jerking
Cry	No cry (awake or asleep)	Moans or whimpers, occasional complaint	Crying steadily, screams, sobs, frequent complaints
Consolability	Content, relaxed	Reassured by touching, hugging or being talked to, distractable	Difficult to console or comfort
Calculate score: 0 = relaxed + comfortable, 1–3 = mild discomfort, 4–6 = moderate pain, 7–10 = severe discomfort/pain			

FACES 4–12 years

“These faces show how much something can hurt. This face ***[point to left-most face]*** shows no pain. The faces show more and more pain ***[point to each from left to right]*** up to ***this*** one ***[point to right-most face]***. It shows very much pain. Point to the face that shows how much you hurt **[right now]**”



Clinician to say ‘hurt’ or ‘pain’ (language child understands) - not words like ‘happy’ or ‘sad’

4. Management

- Consult MO/NP if:
  - severe pain even if settled after initial analgesia
  - fever, persistent tachycardia or tachypnoea, or hypotension
  - analgesia is not effective
  - unable to find cause of pain
  - recurrence of pre-existing condition
  - suspected opioid seeking

Analgesia

- Consider medicine(s) already given
- Use step wise approach (below)
- Some causes may require alternative treatment/considerations eg:[5]
  - Head injuries, p. 143 - only give opioids as per MO/NP
  - Headache, p. 127
  - Renal colic, p. 206 - give ketorolac
  - bites and stings - hot water immersion may be effective
  - pregnant woman in Labour 1st stage, p. 400
  - eyes - oxybuprocaine may be indicated. See FB in eye, p. 281
  - Managing injection pain, p. 563
  - if Abdominal pain, p. 196 - still give analgesia (will not mask physical signs/hinder diagnosis)
  - suspected fractures or severe soft tissue injuries immobilisation can ⇣ pain significantly

Step wise approach to acute pain management[2,5,6]

Severity	Analgesia - if not allergic	Practice points
1–3 Mild	**Step 1** Non-pharmacological options **AND/OR** paracetamol	• The paracetamol content of all medicines must be considered. Advise max. dosing to take at home
4–6 Moderate	**Step 2** As for step 1 **AND/OR** Ibuprofen **AND/OR** Oxycodone (adults only)	• Combination of paracetamol + ibuprofen is more effective than the use of either alone • Consider oxycodone only if pain is not adequately relieved by paracetamol ± ibuprofen
7–10 Severe	**Step 3** As for step 2 **AND/OR** Further dose of oxycodone **OR** Morphine or fentanyl	• Check/monitor sedation score • Consider intranasal fentanyl for child • **Note:** IM/subcut absorption may be impaired if poor perfusion eg hypovolaemia, shock • Preferably titrate via IV route
Also consider - **Methoxyflurane** (eg Penthrox®) or **Nitrous oxide** (eg Entonox®) for quick procedures < 10 minutes eg laceration repair, trauma eg while transferring in ambulance etc		

Non-pharmacological options[1,4]

- Ice, massage, heat pack
- Elevation + splinting of injuries
- Repositioning, distraction, imagery
- Reassurance - explain cause of pain + expected outcome to relieve anxiety
- If infant/young child - breastfeeding, low lighting, sucrose, bubbles, cuddling carer/parent

Monitor effect of analgesia

- Repeat pain scale:[1,4]
  - **mild/moderate pain** - 30–60 minutely as clinically indicated
  - **severe pain** - 10 minutely for 1st 30 minutes, then as required
- Do vital signs as appropriate + give antiemetic if Nausea and vomiting, p. 40
- **Note:** if given subcut, monitor for at least 2 hours due to delayed absorption/adverse effects

Sedation score[7]

- Patient must be woken to assess sedation

Score	Description	Action
0	**Awake**	• Nil
1	**Mild** - easy to rouse, able to keep eyes open for 10 seconds	• Increase monitoring of vital signs, sedation + pain score • Recheck score before giving potentially sedating medication
2	**Moderate** - rousable but unable to keep eyes open for 10 seconds **Early respiratory depression**	• Give O_2 to maintain SpO_2 ≥ 94% • Stay with patient • Do not give further opioids/sedating medications • Do 15 minutely vital signs, sedation + pain score until sedation score < 2 • Contact MO/NP promptly
3	**Severe** - difficult to rouse or un-rousable	• Stay with patient + call for help • Support airway/breathing + give O_2 to maintain SpO_2 ≥ 94% • Give naloxone, p. 39 if opioid was given • **Contact MO/NP urgently** • 5 minutely vital signs, sedation + pain score until sedation score < 2

S2	Ibuprofen			Extended authority ATSIHP/IHW/IPAP
ATSIHP, IHW, IPAP, MID and RIPRN may proceed				
RN may administer; for supply see RN supplying, p. 11				
Form	**Strength**	**Route**	**Dose**	**Duration**
Tablet	200 mg 400 mg	Oral	**Adult and child ≥ 12 years** 200–400 mg	stat Then 6–8 hourly as needed Max. 48 hours supply (or 1 bottle of liquid)
Oral liquid	100 mg/ 5 mL		**Child > 3 months–11 years** 5–10 mg/kg (max. 400 mg) *Round down to the nearest measurable dose*	
Offer CMI: Do not take if dehydrated eg due to vomiting or diarrhoea. Take with a glass of water. If upsets stomach take with food. May cause nausea, indigestion, GI bleeding, diarrhoea, headache, dizziness, fluid retention or hypertension				
Note: If renal impairment, taking diuretics, ACEIs, or ARBs consult MO/NP. Use with caution if asthma, cardiovascular disease or ↑ cardiovascular risk, taking lithium or anticoagulants				
Pregnancy: May ↑ rate of miscarriage. Seek specialist advice for use in the 2nd half of pregnancy; do not use during the last few days before expected birth				
Contraindication: Dehydration, active peptic ulcer disease or GI bleeding, severe renal, heart or liver failure, coagulation disorders				
Management of associated emergency: Consult MO/NP. See Anaphylaxis, p. 82 [8]				

<table>
<tr><th>S2</th><th colspan="3">Paracetamol</th><th>Extended authority
ATSIHP/IHW/IPAP</th></tr>
<tr><td colspan="5">ATSIHP, IHW, IPAP, MID and RIPRN may proceed</td></tr>
<tr><td colspan="5">RN may administer; for supply see RN supplying, p. 11</td></tr>
<tr><th>Form</th><th>Strength</th><th>Route</th><th>Dose*</th><th>Duration</th></tr>
<tr><td>Tablet</td><td>500 mg</td><td rowspan="2">Oral</td><td>Adult and child ≥ 12 years
500 mg–1 g
(max. 8 tablets/4 g in 24 hours)</td><td rowspan="2">stat
Then 4–6 hourly as required

Max. 48 hours supply
(or 1 bottle of liquid)</td></tr>
<tr><td>Oral liquid</td><td>120 mg/5 mL
100 mg/mL</td><td>Child › 1 month–11 years
15 mg/kg (max. 1 g)
Round down to nearest measurable dose
(max. 60 mg/kg in 24 hours.
Do not exceed 4 g in 24 hours)</td></tr>
<tr><td rowspan="2">Suppository</td><td rowspan="2">125 mg
250 mg
500 mg</td><td rowspan="2">PR</td><td>Adult and child ≥ 12 years
500 mg–1 g</td><td rowspan="2">stat

Further doses on MO/NP orders</td></tr>
<tr><td>Child › 1 month–11 years
15 mg/kg (max. 1 g)
Round down to nearest strength</td></tr>
<tr><td colspan="5">Offer CMI: Too much paracetamol can cause liver damage. No more than 4 g should be given to an adult patient in 24 hour period. Doses should not be given more frequently than 4–6 hours. Check paracetamol content of other medicines being taken eg over-the-counter medicines, cough + cold products</td></tr>
<tr><td colspan="5">Note: If hepatic impairment consult MO/NP. *Reduce dose if risk factors for toxicity ie Adult: (dehydration, alcohol use, under-nutrition, anticonvulsants, elderly/frail) - if ≥ 50 kg, ↓ max. dose to 3 g/24 hours; if < 50 kg, give 15 mg/kg (max. 4 doses/24 hours). Child: (fever, dehydration, under-nutrition, or if < 5 kg) - ↓ max. dose to 45 mg/kg/24 hours (do not exceed 3 g/24 hours). Also see Guideline for safe paracetamol use https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/medicines/safety</td></tr>
<tr><td colspan="5">Management of associated emergency: Consult MO/NP. Recognise + treat suspected Paracetamol toxicity, p. 218 without delay. Contact Poisons Information Centre ✆ 131 126 [9-11]</td></tr>
</table>

<table>
<tr><th>S8</th><th colspan="3">Oxycodone</th><th>Extended authority
ATSIHP/IHW/RIPRN</th></tr>
<tr><td colspan="5">ATSIHP, IHW and RN must consult MO/NP</td></tr>
<tr><td colspan="5">RIPRN may proceed</td></tr>
<tr><th>Form</th><th>Strength</th><th>Route</th><th>Dose</th><th>Duration</th></tr>
<tr><td>Tablet
(immediate release)</td><td>5 mg</td><td>Oral</td><td>Adult only
5 mg</td><td>stat
Repeat after 4 hours if needed
Further doses on MO/NP order</td></tr>
<tr><td colspan="5">Offer CMI: May cause nausea, vomiting, itch, drowsiness, dizziness, headache, constipation, low BP when moving to standing, indigestion or dry mouth</td></tr>
<tr><td colspan="5">Note: If elderly/frail, renal or hepatic impairment, acute alcoholism or delirium tremens seek MO/NP advice. Monitor sedation score + RR</td></tr>
<tr><td colspan="5">Pregnancy: One dose is safe. Consult MO/NP if ongoing need</td></tr>
<tr><td colspan="5">Contraindication: Acute or severe bronchial asthma or other obstructive airways disease, head injuries, raised ICP, respiratory depression</td></tr>
<tr><td colspan="5">Management of associated emergency: Consult MO/NP. See Anaphylaxis, p. 82. Give naloxone if overdose [6,12]</td></tr>
</table>

S8	Morphine	**Extended authority** ATSIHP/IHW/MID/RIPRN
ATSIHP, IHW and RN must consult MO/NP		
RIPRN may proceed EXCEPT for pregnant women		
MID may proceed for intrapartum use only. IM/subcut routes only		

Form	Strength	Route	Dose	Duration
Injection	10 mg/mL	**IM/Subcut** **Note:** start at lower end of dose range, titrate to response + sedation score	**Adult only** Age (years) / mg: < 40 : 7.5–10 40–60 : 5–10 60–70 : 2.5–7.5 70–85 : 2.5–5 > 85 : 2–3	stat Further doses on MO/NP order
		IV Dilute with 9 mL water for injections to make a concentration of 1 mg/mL	**Adult only** 0.5–2 mg increments (max. 10 mg) Give lower dose if > 70 years[13]	stat Inject **slowly** over 4–5 minutes Repeat every 5 minutes if needed based on response + sedation score (max. 10 mg). Further doses on MO/NP order

Offer CMI: May cause nausea, vomiting, itch, drowsiness, dizziness, headache, constipation, low BP when moving to standing, dry mouth, sweating or dysphoria

Note: Monitor sedation score + RR. Use with caution in > 70 years + significant renal or liver disease (reduce dose). Fentanyl is more appropriate in renal disease

Contraindication: Acute or severe bronchial asthma or other obstructive airways disease, head injuries, raised ICP

Management of associated emergency: Consult MO/NP. See Anaphylaxis, p. 82. Give naloxone if overdose [6,13,14]

S8	Fentanyl	**Extended authority** ATSIHP/IHW/RIPRN

ATSIHP, IHW and RN must consult MO/NP

RIPRN may proceed for adult. **If child** - must consult MO/NP unless circumstances do not allow, in which case consult MO/NP as soon as circumstances allow

<table>
<tr><th>Form</th><th>Strength</th><th>Route</th><th colspan="2">Dose</th><th>Duration</th></tr>
<tr><td rowspan="9">Injection</td><td rowspan="9">100 microg/
2 mL</td><td rowspan="7">Subcut</td><td colspan="2">Adult only</td><td rowspan="7">stat

Further doses on MO/NP order</td></tr>
<tr><td>Age (years)</td><td>microg</td></tr>
<tr><td>< 40</td><td>100</td></tr>
<tr><td>40–60</td><td>75–100</td></tr>
<tr><td>60–70</td><td>40–100</td></tr>
<tr><td>70–85</td><td>40–75</td></tr>
<tr><td>> 85</td><td>30–50</td></tr>
<tr><td>IV

Use undiluted or add sodium chloride 0.9% to facilitate slow injection</td><td colspan="2">Adult only

10–20 microg increments
(max. 100 microg)</td><td>stat
Inject slowly over 3–5 minutes

Repeat every 5–10 minutes if needed based on response + sedation score
(max. 100 microg)

Further doses on MO/NP order</td></tr>
<tr><td>Intranasal*
Use mucosal atomiser device (MAD)

Note: IHW + ATSIHP may NOT administer intranasal</td><td colspan="2">Child 1–12 years
1.5 microg/kg
(max. 100 microg)
Note: add 0.1 mL to initial dose to accommodate MAD dead space</td><td>stat
Divide dose between nostrils to minimise swallowing + effects eg sneezing

May repeat after 5–10 minutes on MO/NP order</td></tr>
</table>

Offer CMI: May cause rash, bradycardia, drowsiness, dizziness, headache, low blood pressure when moving to standing or dry mouth

Note: Monitor sedation score + RR.***Intranasal is off-label use** - ensure documentation + evaluation is undertaken as per CATAG guiding principles for the quality use of off-label medicines www.catag.org.au. Use with caution if › 70 years

Contraindication: Acute or severe bronchial asthma or other obstructive airways disease, concurrent use with MAO inhibitors, head injuries, raised ICP

Management of associated emergency: Consult MO/NP. See Anaphylaxis, p. 82. Give naloxone if overdose [6,15,16]

S4	Nitrous oxide + oxygen (Entonox®)			Extended authority ATSIHP/IHW/RIPRN/SRH
ATSIHP, IHW and RN must consult MO/NP				
RIPRN may proceed. SRH may proceed for adults only				
Form	**Strength**	**Route**	**Dose**	**Duration**
Premix gas	Nitrous oxide 50% + oxygen 50%	Inhalation	**Adult + child > 4 years** self administered as needed	short-term use only
Offer CMI: Patient must self administer ie hold the mouthpiece or mask (not clinician or parent). Pain relief after 5–8 breaths + wears off quickly. May cause dizziness, nausea and brief disinhibition				
Note: Use with caution if opioid given				
Contraindication: Heart failure, severe cardiac impairment, may worsen/cause myocardial depression. Air containing cavities eg middle ear occlusion, abdominal distension, pneumothorax - risk of ↑ pressure ± volume in cavities				
Management of associated emergency: Consult MO/NP. Give oxygen if overdose [17,18]				

S4	Methoxyflurane			Extended authority ATSIHP/IHW/RIPRN
ATSIHP, IHW and RN must consult MO/NP				
RIPRN may proceed				
Form	**Strength**	**Route**	**Dose**	**Duration**
Inhalation solution	99.9%	Inhalation	**Adult + child ≥ 6 years** 3 mL	stat Can repeat after 20 minutes (max. 6 mL/day)
Offer CMI: Pain relief after 6–10 breaths + continues for several minutes after stopping. May cause mild dizziness, drowsiness or headache				
Note: Self-administered with supervision. Only use if conscious + cooperative. Use in well ventilated area to minimise non-patient exposure. Do not use on consecutive days or exceed 15 mL/week				
Contraindication: Susceptibility to malignant hyperthermia				
Management of associated emergency: Consult MO/NP. See Anaphylaxis, p. 82 [17,19]				

S3	Naloxone			Extended authority ATSIHP/IHW
ATSIHP, IHW, RIPRN and RN may proceed				
Form	**Strength**	**Route**	**Dose**	**Duration**
Injection	400 microg/mL	IV	**Adult** 100–200 microg	stat Can repeat every 2 minutes (max. 10 mg)
		IM	**Adult** 400 microg **Child** 10 microg/kg (max. 400 microg)	stat Can repeat in 5 minutes/as per MO/NP
Nasal spray	1.8 mg/ actuation	Intranasal	**Adult + child** 1.8 mg (1 spray into 1 nostril)	stat Can give 2nd dose (using new device) into other nostril after 2–3 minutes
Note: Repeat doses until patient is more awake and breathing adequately. Patient should improve in 1 minute. Failure to respond may indicate another cause of unconsciousness. The duration of naloxone is short (15–30 minutes) compared to opioids. Continue observation + monitor RR. May cause an acute withdrawal syndrome in those with opioid dependence ie anxiety, agitation, tachycardia, confusion, seizures, pulmonary oedema or arrhythmias				
Pregnancy: Do not use in opioid dependent women, risk of withdrawal in fetus				
Management of associated emergency: Consult MO/NP. See Anaphylaxis, p. 82 [6,20]				

5. Follow up

- Patients needing morphine/fentanyl will likely need evacuation for further management
- If not evacuated, follow up as per MO/NP + likely cause of pain
- If supplied with paracetamol or ibuprofen + further pain relief is needed after 48 hours, consult MO/NP

6. Referral/consultation

- Consult MO/NP if further analgesia is needed + max. dose has been given

Nausea and vomiting

HMP Nausea and vomiting - adult/child

Recommend

- Always consider life-threatening causes eg bowel obstruction, mesenteric ischaemia, acute pancreatitis + myocardial infarction[1]
- Offer antiemetic for aeromedical retrieval prophylaxis

Background

- In the absence of abdominal pain, significant headache or recent initiation of certain medicines, nausea + vomiting is usually caused by self-limiting viral gastroenteritis[1]

1. May present with

- Nausea ± vomiting

2. Immediate management

- If related to chest pain, go to Chest pain assessment, p. 103

ALERT suspect Button battery, p. 80 in all children if vomiting blood. A button battery lodged in the oesophagus can burn a hole through to the aorta causing catastrophic haemorrhage

3. Clinical assessment

Check for red flags[1,2]

- Prolonged vomiting
- Looks very unwell/very drowsy
- Significant weight loss
- Abdominal distension or tenderness
- Rectal bleeding
- Green, bile or blood/coffee grounds vomit
- Fever, neck stiffness, confusion
- Severe headache, altered LOC
- Isolated vomiting, lack of nausea
- History of head trauma/injury
- Bulging fontanelle - infant/young child
- Child - T > 39 or 38 if < 3 months of age
- Projectile vomiting if 3–6 weeks of age. See Pyloric stenosis, p. 544
- ↑ BGL

- Always try to identify the cause of the nausea/vomiting
- Get history, including:[1]

  - frequency of vomiting
  - timing in relation to eating
  - food eaten in last 24 hours - could it be food poisoning
  - similar symptoms in family members/close contacts
  - pregnancy
  - exposure to toxins/poisons/bites/stings
  - recent illicit drug use, alcohol/hangover related
  - recent travel
- Ask about other symptoms eg:[1]
  - chest pain, heartburn
  - headache, vertigo or dizziness
  - last bowel motion, any diarrhoea
  - related to motion/travel
  - dysuria or frequency of urine
  - fever
- Get past history, including:[1]
  - current medicines, over-the-counter medicines, previous antiemetics
  - recent initiation of a new medicine(s)
  - diabetes
  - abdominal surgery
- Do vital signs
- BGL if cause unknown or history of diabetes:[1]
  - ↑ BGL with nausea ± vomiting - may indicate DKA, p. 89
  - ↓ BGL consider Hypoglycaemia, p. 91 as cause
- Do physical examination, including:
  - Hydration assessment - adult, p. 200 or child, p. 535
  - plus as determined from history taking eg:
    - abdominal examination, p. 197
    - urinalysis. **Note:** urinalysis cannot reliably exclude UTI in infants + young children
    - pregnancy test if female of reproductive age
  - if child do weight, bare weight if < 2 years

4. Management

- Urgently contact MO/NP if:
  - any red flags
- Contact MO/NP if:
  - child/infant, also see Child with vomiting, p. 492
  - no obvious cause/unsure
  - suspected poisoning
  - patient has re-presented
- If pregnant - seek advice from midwife/MO/NP - avoid antiemetic if possible:[1,3]
  - severe vomiting that starts in late pregnancy may indicate Preeclampsia, p. 386
  - if hyperemesis gravidarum (extreme morning sickness) MO/NP may order ondansetron
- Otherwise, treat cause if known - be guided by relevant topic
- If probable gastroenteritis ± dehydrated, see Gastroenteritis - adult, p. 200 or Gastroenteritis - child, p. 535

- Offer antiemetic as needed for initial symptom relief of nausea + vomiting:
  - monitor effect - contact MO/NP if not effective

S4	**Metoclopramide**			**Extended authority** ATSIHP/IHW/MID/RIPRN
ATSIHP, IHW and RN must consult MO/NP				
MID and RIPRN may proceed				
Form	**Strength**	**Route**	**Dose**	**Duration**
Tablet	10 mg	Oral IM IV	**Adult ≥ 20 years** 10 mg	stat Inject IV dose slowly over at least 3 minutes Further doses on MO/NP order
Injection	10 mg/2 mL			
Offer CMI: May cause drowsiness, dizziness or headache. Avoid driving or operating heavy machinery if affected. Report uncontrolled or repeated body movements eg face, mouth or tongue				
Note: If renal impairment seek MO/NP advice				
Contraindication: Parkinson's disease, phaeochromocytoma + conditions where ↑ GI motility may be harmful eg GI obstruction or perforation				
Management of associated emergency: Consult MO/NP. See Anaphylaxis, p. 82. If extrapyramidal adverse effects + acute dystonic reaction (within minutes to days) **treat with benzatropine** [4]				

S4	**Ondansetron**			**Extended authority** ATSIHP/IHW/RIPRN
ATSIHP, IHW, MID and RN must consult MO/NP				
RIPRN may proceed (max. 4 mg IV, 8 mg oral)				
Form	**Strength**	**Route**	**Dose**	**Duration**
Orally disintegrating tablet	4 mg	Oral	**Adult** 4–8 mg	stat
			Child > 6 months–16 years **Oral** 8–< 15 kg - 2 mg 15–30 kg - 4 mg > 30 kg - 8 mg **IV** 0.15 mg/kg (max. 8 mg)	Inject IV dose slowly over at least 5 minutes, or 15 minutes if > 75 years Further doses on MO/NP orders
Injection	4 mg/ 2 mL	IV		
Offer CMI: Put tablet on top of tongue to dissolve, then swallow. May cause dizziness or headache				
Note: If child - useful if related to gastroenteritis/unable to tolerate oral fluids. **If adult** - use for non-specific nausea + vomiting is off-label. Ensure documentation + evaluation is undertaken as per CATAG guiding principles for the quality use of off-label medicines www.catag.org.au. Seek MO/NP advice if hepatic impairment, phenylketonuria, prolonged QT interval or risk factors for prolonged QT interval				
Management of associated emergency: Consult MO/NP. See Anaphylaxis, p. 82 [5,6]				

S4	Benzatropine			Extended authority ATSIHP/IHW/MID/RIPRN
ATSIHP, IHW and RN must consult MO/NP				
RIPRN may proceed. MID may proceed with oral dose only				
Form	**Strength**	**Route**	**Dose**	**Duration**
Tablet	2 mg	Oral	**Adult only** 1–2 mg	stat Further doses on MO/NP order
Injection	2 mg/2 mL	IM		
Offer CMI: May cause drowsiness, dizziness or blurred vision. May increase effects of alcohol				
Contraindication: GIT or urinary obstruction, myasthenia gravis				
Management of associated emergency: Consult MO/NP. See Anaphylaxis, p. 82 [7,8]				

5. Follow up

- As per MO/NP + cause of nausea/vomiting

6. Referral/consultation

- As above

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