COVID-19 rapid guideline: managing symptoms (including at the end of life) in the community

NICE guideline
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Your responsibility

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.
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Overview

The purpose of this guideline is to provide recommendations for managing COVID-19 symptoms for patients in the community, including at the end of life. It also includes recommendations about managing medicines for these patients, and protecting staff from infection.

On 22 April 2020, we added ibuprofen as an option for managing fever and other symptoms that antipyretics would help treat. We also clarified the source of prescribing data in some tables.

This guideline is for:

- health and care practitioners
- health and care staff involved in planning and delivering services
- commissioners.

The recommendations bring together

- existing national and international guidance and policies
- advice from specialists working in the NHS from across the UK. These include people with expertise and experience of treating patients for the specific health conditions covered by the guidance during the current COVID-19 pandemic.

NICE has developed these recommendations in direct response to the rapidly evolving situation and so could not follow the standard process for guidance development. The guideline has been developed using the interim process and methods for developing rapid guidelines on COVID-19. The recommendations are based on evidence and expert opinion and have been verified as far as possible. We will review and update the recommendations as the knowledge base and expert experience develops.
1 Communicating with patients and minimising risk

1.1 For patients with COVID-19 symptoms explain:

- that the key symptoms are cough, fever, breathlessness, anxiety, delirium and agitation but they may also have fatigue, muscle aches and headache
- that they and people caring for them should follow the UK guidance on self-isolation and the UK guidance on protecting vulnerable people
- that if the symptoms are mild they are likely to feel much better in a week
- who to contact if their symptoms get worse, for example NHS 111 online.

1.2 Communicate with patients and support their mental wellbeing, signposting to charities and support groups where available, to help alleviate any anxiety and fear they may have about COVID-19.

1.3 Minimise face-to-face contact by:

- offering telephone or video consultations (see BMJ guidance on Covid-19: a remote assessment in primary care for a useful guide including a visual summary for remote consultations)
- cutting non-essential face-to-face follow up
- using electronic prescriptions rather than paper
- using different methods to deliver medicines to patients, for example pharmacy deliveries, postal services, NHS volunteers or introducing drive-through pick-up points for medicines.
2 Treatment and care planning

2.1 When possible, discuss the risks, benefits and possible likely outcomes of the treatment options with patients with COVID-19, and their families and carers, so that they can express their preferences about their treatment and escalation plans. Use decision support tools (when available). Bear in mind that these discussions may need to take place remotely (see recommendation 1.3).

2.2 Put treatment escalation plans in place because patients with COVID-19 may deteriorate rapidly and need urgent hospital admission (see recommendation 3.1).

2.3 For patients with pre-existing advanced comorbidities, find out if they have advance care plans or advance decisions to refuse treatment, including do not attempt resuscitation decisions. Document this clearly and take account of these in planning care.

2.4 For patients who are being considered for admission to critical care in line with the NICE COVID-19 rapid guideline on critical care in adults bear in mind that this may need to happen urgently.
3 General advice for managing COVID-19 symptoms

We will review and update these recommendations on a regular basis.

3.1 When managing COVID-19 symptoms, take into account:

- that not all patients will have COVID-19
- the patient's underlying health conditions, severity of the acute illness and if they are taking multiple medicines
- that older patients with comorbidities, such as chronic obstructive pulmonary disease (COPD), asthma, hypertension, cardiovascular disease and diabetes, may have a higher risk of deteriorating and need monitoring or more intensive management, including hospital admission
- that patients with severe symptoms of COVID-19 may deteriorate rapidly and need urgent hospital admission (see the NICE COVID-19 rapid guideline on managing suspected or confirmed pneumonia in adults in the community).

3.2 When managing key symptoms of COVID-19 in the last hours and days of life, follow the relevant parts of NICE guideline on care of dying adults in the last days of life. This includes pharmacological interventions and anticipatory prescribing. Note that symptoms can change, and patients can deteriorate rapidly in a few hours or less.
4 Managing cough

We will review and update these recommendations on a regular basis.

4.1 Be aware that older patients or those with comorbidities, frailty, impaired immunity or a reduced ability to cough and clear secretions are more likely to develop severe pneumonia. This could lead to respiratory failure and death.

4.2 If possible, encourage patients with cough to avoid lying on their back because this makes coughing ineffective.

4.3 Use simple measures first, including getting patients with cough to take honey (for patients aged over 1 year). See table 1 for treatments for managing cough.

4.4 For patients with COVID-19 consider short-term use of codeine linctus, codeine phosphate tablets or morphine sulfate oral solution to suppress coughing if it is distressing.

Table 1 Treatments for managing cough in adults aged 18 years and over

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Initial management:</strong> use simple non-drug measures, for example taking honey</td>
<td>A teaspoon of honey</td>
</tr>
<tr>
<td><strong>First choice, only if cough is distressing:</strong> codeine linctus (15 mg/5 ml) or codeine phosphate tablets (15 mg, 30 mg)</td>
<td>15 mg to 30 mg every 4 hours as required, up to 4 doses in 24 hours If necessary, increase dose to a maximum of 30 mg to 60 mg 4 times a day (maximum 240 mg in 24 hours)</td>
</tr>
<tr>
<td><strong>Second choice, only if cough is distressing:</strong> morphine sulfate oral solution (10 mg/5 ml)</td>
<td>2.5 mg to 5 mg when required every 4 hours Increase up to 5 mg to 10 mg every 4 hours as required If the patient is already taking regular morphine increase the regular dose by a third</td>
</tr>
</tbody>
</table>
Special considerations

Seek specialist advice for patients under 18 years old

Consider addiction potential of codeine linctus, codeine phosphate and morphine sulfate. Issue as an 'acute' prescription with a limited supply. Advise the patient of the risks of constipation and consider prescribing a regular stimulant laxative

Avoid cough suppressants in chronic bronchitis and bronchiectasis because they can cause sputum retention

Notes: See BNF and MHRA advice for appropriate use and dosing in specific populations.

All doses are for oral administration.
5 Managing fever

We will review and update these recommendations on a regular basis.

5.1 Be aware that, on average, fever is most common 5 days after exposure to the infection.

5.2 Advise patients to drink fluids regularly to avoid dehydration (no more than 2 litres per day).

5.3 Do not use antipyretics with the sole aim of reducing body temperature.

5.4 Advise patients to take paracetamol or ibuprofen if they have fever and other symptoms that antipyretics would help treat (see table 2 for treatments for managing fever). Tell them to continue only while the symptoms of fever and the other symptoms are present. If using a non-steroidal anti-inflammatory drug they should take the lowest effective dose for the shortest period needed to control symptoms. For more information on the short-term use of ibuprofen and other non-steroidal anti-inflammatory drugs, see the NICE evidence summary on acute use of non-steroidal anti-inflammatory drugs (NSAIDs) for people with or at risk of COVID-19, an NHS England policy on acute use of NSAIDs in people with or at risk of COVID-19, and the Commission on Human Medicines' advice on ibuprofen and COVID-19. [amended 22 April 2020]

Table 2 Antipyretics for managing fever in adults and children

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults (18 years and over): paracetamol</td>
<td>0.5 g to 1 g every 4 to 6 hours, maximum 4 g per day</td>
</tr>
<tr>
<td>Adults (18 years and over): ibuprofen</td>
<td>400 mg three times a day when required</td>
</tr>
<tr>
<td>See BNF for dosing and for alternative non-steroidal anti-inflammatory medicines</td>
<td></td>
</tr>
<tr>
<td>Children and young people over 1 month and under 18 years: paracetamol or ibuprofen</td>
<td>See the dosing information on the pack or the BNF for children</td>
</tr>
</tbody>
</table>
Notes: See BNF and MHRA advice for appropriate use and dosing in specific populations.

All doses are for oral administration. Rectal paracetamol, if available, can be used as an alternative. See the BNF and BNF for children for rectal dosing information.

Continue only while the symptoms of fever and the other symptoms are present.

[amended 22 April 2020]
6 Managing breathlessness

We will review and update these recommendations on a regular basis.

6.1 Be aware that severe breathlessness often causes anxiety, which can then increase breathlessness further.

6.2 As part of supportive care the following may help to manage breathlessness:

- keeping the room cool
- encouraging relaxation and breathing techniques and changing body positioning (see table 3 for techniques to help manage breathlessness)
- encouraging patients who are self-isolating alone, to improve air circulation by opening a window or door (do not use a fan because this can spread infection)
- when oxygen is available, consider a trial of oxygen therapy and assess whether breathlessness improves.

Table 3 Techniques to help manage breathlessness

<table>
<thead>
<tr>
<th>Controlled breathing techniques include positioning, pursed-lip breathing, breathing exercises and coordinated breathing training.</th>
</tr>
</thead>
<tbody>
<tr>
<td>In pursed-lip breathing, patients inhale through their nose for several seconds with their mouth closed, then exhale slowly through pursed lips for 4 to 6 seconds. This can help to relieve the perception of breathlessness during exercise or when it is triggered.</td>
</tr>
<tr>
<td>Relaxing and dropping the shoulders reduces the 'hunched' posture that comes with anxiety.</td>
</tr>
<tr>
<td>Sitting upright increases peak ventilation and reduces airway obstruction.</td>
</tr>
<tr>
<td>Leaning forward with arms bracing a chair or knees and the upper body supported has been shown to improve ventilatory capacity.</td>
</tr>
<tr>
<td>Breathing retraining aims to help the patient regain a sense of control and improve respiratory muscle strength. Physiotherapists and clinical nurse specialists can help patients learn how to do this (bearing in mind that this support may need to be done remotely).</td>
</tr>
</tbody>
</table>

6.3 For patients with signs or symptoms of pneumonia see the NICE COVID-19 rapid guideline on managing suspected or confirmed pneumonia in adults in the
6.4 Identify and treat reversible causes of breathlessness, for example pulmonary oedema.

6.5 Consider an opioid and benzodiazepine combination (see tables 4 and 5) for patients with COVID-19 who:

- are at the end of life and
- have moderate to severe breathlessness and
- are distressed.

Consider concomitant use of an antiemetic and a regular stimulant laxative.

At the time of publication (April 2020), opioids and benzodiazepines did not have a UK marketing authorisation for moderate to severe breathlessness. See support for decision-making for off-label prescribing during the COVID-19 pandemic, produced by the General Medical Council (GMC) and Care Quality Commission (CQC), and the GMC's COVID-19 ethical hub. [amended 17 April 2020]

### Table 4 End-of-life treatments for managing breathlessness for patients aged 18 years and over

<table>
<thead>
<tr>
<th>Clinical scenario</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Higher doses may be needed for symptom relief in patients with COVID-19. Lower doses may be needed because of the patient's size or frailty. The doses are based on the BNF and the Palliative care formulary.</td>
</tr>
<tr>
<td><strong>Opioid naive</strong> (not currently taking opioids) and able to swallow</td>
<td>Oral treatment</td>
</tr>
<tr>
<td></td>
<td>Morphine sulfate immediate-release 2.5 mg to 5 mg every 2 to 4 hours as required or morphine sulfate modified-release 5 mg twice a day, increased as necessary (maximum 30 mg daily)</td>
</tr>
<tr>
<td>Already taking regular opioids for other reasons (for example, pain relief)</td>
<td>Oral treatment</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Morphine sulfate immediate-release 5 mg to 10 mg every 2 to 4 hours as required or one twelfth of the 24-hour dose for pain, whichever is greater</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unable to swallow</th>
<th>Parenteral treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Morphine sulfate 1 mg to 2 mg subcutaneously every 2 to 4 hours as required, increasing the dose as necessary</td>
</tr>
<tr>
<td></td>
<td>If needed frequently (more than twice daily), a subcutaneous infusion via a syringe driver may be considered (if available), starting with morphine sulfate 10 mg over 24 hours</td>
</tr>
</tbody>
</table>
**Special considerations**

Seek specialist advice for patients under 18 years old. See BNF for more details on formulations and dosages of morphine sulfate. If breathlessness is not continuous, intermittent opioid dosing may be appropriate.

If estimated glomerular filtration rate (eGFR) is less than 30 ml per minute, use equivalent doses of oxycodone instead of morphine sulfate (see Prescribing in palliative care in the BNF for more details).

Consider concomitant use of an antiemetic and a regular stimulant laxative.

Continue with non-pharmacological strategies for managing breathlessness when starting an opioid.

Opioid patches should not routinely be used in patients who are opioid naive because of the time it takes for the medicine to get to steady state for clinical effect and the high morphine equivalence (see Prescribing in palliative care in the BNF for more details).

**Add a benzodiazepine if required**

For breathlessness and anxiety: lorazepam 0.5 mg sublingually when required (maximum 4 mg daily).

Reduce the dose to 0.25 mg to 0.5 mg in elderly or debilitated patients (maximum 2 mg in 24 hours).

For associated agitation or distress: midazolam 2.5 mg to 5 mg subcutaneously when required (see BNF for more details on dosages).

Sedation and opioid use should not be withheld because of a fear of causing respiratory depression.

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**Notes:** At the time of publication (April 2020), opioids and benzodiazepines did not have a UK marketing authorisation for this indication or route of administration. See support for decision-making for off-label prescribing during the COVID-19 pandemic, produced by the General Medical Council (GMC) and Care Quality Commission (CQC), and the GMC's COVID-19 ethical hub.

[amended 22 April 2020]
Table 5 Treatments in the last days and hours of life for managing breathlessness for patients aged 18 years and over

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opioid</strong></td>
<td>Morphine sulfate 10 mg over 24 hours via a syringe driver, increasing stepwise to morphine sulfate 30 mg over 24 hours as required</td>
</tr>
<tr>
<td><strong>Benzodiazepine if required in addition to opioid</strong></td>
<td>Midazolam 10 mg over 24 hours via the syringe driver, increasing stepwise to midazolam 60 mg over 24 hours as required</td>
</tr>
<tr>
<td><strong>Add parenteral morphine or midazolam if required</strong></td>
<td>Morphine sulfate 2.5 mg to 5 mg subcutaneously as required&lt;br&gt;Midazolam 2.5 mg subcutaneously as required&lt;br&gt;(See BNF for more details on dosages)</td>
</tr>
</tbody>
</table>

**Special considerations**
- Seek specialist advice for patients under 18 years old
- Consider concomitant use of an antiemetic and a regular stimulant laxative
- Continue with non-pharmacological strategies for managing breathlessness when starting an opioid
- Sedation and opioid use should not be withheld because of a fear of causing respiratory depression

Notes: At the time of publication (April 2020), opioids and benzodiazepines did not have a UK marketing authorisation for this indication or route of administration. See support for decision-making for off-label prescribing during the COVID-19 pandemic, produced by the General Medical Council (GMC) and Care Quality Commission (CQC), and the GMC's COVID-19 ethical hub.

[amended 22 April 2020]
7 Managing anxiety, delirium and agitation

We will review and update these recommendations on a regular basis.

7.1 Address reversible causes of anxiety, delirium and agitation first by:

- exploring the patient's concerns and anxieties
- ensuring effective communication and orientation (for example explaining where the patient is, who they are, and what your role is)
- ensuring adequate lighting
- explaining to those providing care how they can help.

7.2 Treat reversible causes of anxiety or delirium, with or without agitation, for example hypoxia, urinary retention and constipation.

7.3 Consider trying a benzodiazepine to manage anxiety or agitation (see table 6 for treatments for managing anxiety, delirium and agitation).

At the time of publication (April 2020), midazolam and levomepromazine did not have a UK marketing authorisation for this indication or route of administration (see General Medical Council's guidance on prescribing unlicensed medicines for further information).

Table 6 Treatments for managing anxiety, delirium and agitation in patients aged 18 years and over

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher doses may be needed for symptom relief in patients with COVID-19. Lower doses may be needed because of the patient's size or frailty</td>
<td>The doses are based on the BNF and the Palliative care formulary</td>
</tr>
</tbody>
</table>
| Anxiety or agitation and able to swallow: lorazepam tablets | Lorazepam 0.5 mg to 1 mg 4 times a day as required (maximum 4 mg in 24 hours)  
Reduce the dose to 0.25 mg to 0.5 mg in elderly or debilitated patients (maximum 2 mg in 24 hours)  
Oral tablets can be used sublingually (off-label use) |
|---|---|
| Anxiety or agitation and unable to swallow: midazolam injection | Midazolam 2.5 mg to 5 mg subcutaneously every 2 to 4 hours as required  
If needed frequently (more than twice daily), a subcutaneous infusion via a syringe driver may be considered (if available) starting with midazolam 10 mg over 24 hours  
Reduce dose to 5 mg over 24 hours if estimated glomerular filtration rate is less than 30 ml per minute |
| Delirium and able to swallow: haloperidol orally | Haloperidol 0.5 mg to 1 mg at night and every 2 hours when required.  
Increase dose in 0.5-mg to 1-mg increments as required (maximum 10 mg daily, or 5 mg daily in elderly patients)  
The same dose of haloperidol may be administered subcutaneously as required rather than orally, or a subcutaneous infusion of 2.5 mg to 10 mg over 24 hours  
Consider a higher starting dose (1.5 mg to 3 mg) if the patient is severely distressed or causing immediate danger to others  
Consider adding a benzodiazepine such as lorazepam or midazolam if the patient remains agitated (see dosages above) |
| Delirium and unable to swallow: levomepromazine injection | Levomepromazine 12.5 mg to 25 mg subcutaneously as a starting dose and then hourly as required (use 6.25 mg to 12.5 mg in the elderly)  
Maintain with subcutaneous infusion of 50 mg to 200 mg over 24 hours, increased according to response (doses greater than 100 mg over 24 hours should be given under specialist supervision)  
Consider midazolam alone or in combination with levomepromazine if the patient also has anxiety (see dosages above) |
| Special considerations | Seek specialist advice for patients under 18 years old |

Notes: At the time of publication (April 2020), midazolam and levomepromazine did not have a UK marketing authorisation for this indication or route of administration (see General Medical COVID-19 rapid guideline: managing symptoms (including at the end of life) in the community (NG163))
Council's guidance on prescribing unlicensed medicines for further information).

See BNF and MHRA advice for appropriate use and dosing in specific populations.

[amended 22 April 2020]
8 Managing medicines for patients with COVID-19

8.1 Follow UK government legislation on prescribing, ordering, supplying, transporting, storing and disposing of medicines.

8.2 After a patient with COVID-19 has died, follow UK government guidance for infection prevention and control, particularly if taking medicines for safe removal and destruction.

8.3 When returning medicines, tell the community pharmacy staff that they are from a patient with COVID-19 so that infection prevention and control precautions can be taken.

8.4 When supporting patients with symptoms of COVID-19 who are having social care in the community, follow the NICE guideline on managing medicines for adults receiving social care in the community. This includes processes for ordering and supplying medicines and transporting, storing and disposing of medicines.

8.5 When prescribing, handling and administering medicines for patients with symptoms of COVID-19 in a care home, follow the NICE guideline on managing medicines in care homes. This includes processes for storing and disposing of medicines.
9 Prescribing anticipatory medicines for patients with COVID-19

For information about prescribing medicines at the end of life see the BNF's prescribing in palliative care.

9.1 When prescribing and supplying anticipatory medicines at the end of life:

- Take into account potential waste, medicines shortages and lack of administration equipment by prescribing smaller quantities or by prescribing a different medicine, formulation or route of administration when appropriate.

- If there are fewer health and care staff you may need to prescribe subcutaneous, rectal or long-acting formulations, and carers or family members may need to administer them.

9.2 Consider different routes for administering medicines if the patient is unable to take or tolerate oral medicines, such as sublingual or rectal routes, or subcutaneous injections.
10 Healthcare workers

10.1 All healthcare workers involved in receiving, assessing and caring for patients who have known or suspected or COVID-19 should follow UK government guidance for infection prevention and control. This contains information on using personal protective equipment (PPE), including visual and quick guides for putting on and taking off PPE.
Update information

22 April 2020: we amended recommendation 5.4 and table 2 to include ibuprofen as an option for managing fever and other symptoms that antipyretics would help treat. This is in line with our evidence summary on acute use of non-steroidal anti-inflammatory drugs (NSAIDs) for people with or at risk of COVID-19 and an NHS England policy on acute use of NSAIDs in people with or at risk of COVID-19. We also clarified the source of prescribing data in tables 4, 5 and 6.

17 April 2020: we linked to support for off-label prescribing from the GMC and CQC in recommendation 6.5 and the notes under tables 4 and 5. We also removed the antiemetic and laxative examples from these tables. We clarified tables 5 and 6 to highlight that the dose may need to be adjusted in some patients.

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