

## Clinical management of COVID-19 in care home residents

This resource was written by the PCPA President, Dr Graham Stretch and formed part of a wider document. [Pharmacy and Medicines Support to Care Homes: Urgent System-Wide Delivery Model](#)

COVID-19 may present in the frail and elderly care home resident in the manner described by Public Health England – fever  $\geq 37.8^{\circ}\text{C}$  and at least one of the following which must be of acute onset: persistent cough (with or without sputum), hoarseness, nasal discharge or congestion, shortness of breath, sore throat, wheezing, sneezing <https://www.gov.uk/government/publications/wuhan-novel-coronavirus-initial-investigation-of-possible-cases> However, these signs may also be absent, and it is important awareness of this is raised. Clinicians have also recognised more atypical presentations in care home residents describing common presentation with non-respiratory tract symptoms; for example new onset/worsening confusion, delirium, falls, generalized weakness, myalgia, malaise, functional decline <https://www.bmj.com/content/bmj/suppl/2020/03/24/bmj.m1182.DC1/gret055914.fi.pdf>

Additionally, presentations with conjunctivitis, anorexia, increased sputum production, dizziness, headache, rhinorrhoea, chest pain, haemoptysis, diarrhoea, nausea/vomiting, abdominal pain, nasal congestion, tachypnoea, unexplained tachycardia, or decrease in blood pressure and anosmia have been described <https://www.rgptoronto.ca/wp-content/uploads/2020/04/COVID-19-Presentations-in-Frail-Older-Adults-U-of-C-and-U-fo-T.pdf>

Nurses and carers who know residents well should be consulted on regular calls as they intuitively recognise these often subtle signs of deterioration. Tools to encourage care staff to report these ‘soft signs’ include RESTORE2. <https://westhampshireccg.nhs.uk/wp-content/uploads/2020/02/CS49286-RESTORE2-full-version.pdf>

The use of remote methods of assessment should be facilitated and care homes, carers and nurses will need urgent assistance to put in place hardware (tablet / smartphone) and Wi-Fi to facilitate this. Equipment and rudimentary competence to measure pulse oximetry and blood pressure should be urgently provided to homes, to assist clinicians working remotely.

When a resident is identified as likely having COVID19 testing of other residents and staff where local arrangements are in place. Residents should be isolated, but it must be recognised this is very often not possible within their own rooms where dementia and ‘walking with purpose’(wandering) occurs. Ideally ‘hot’ facilities should be utilised to provide care to positive residents. It is recognised issues of staffing, PPE and visiting will present particular problems.

Care planning should be undertaken with residents and next of kin as a matter of urgency, to include plans for treatment ceilings and whether a resident should be admitted to hospital if they become critically unwell.

Planning of communication, prescribing, dispensing and delivery should be undertaken, recorded and disseminated for each care home as soon as possible. Pathways for referral involving single points of access via phone and email should be arranged.

Timely supply of symptomatic treatment with antipyretic paracetamol should be in place in all homes. Most often the most efficient way of arranging this is via bulk prescribing or homely remedies, both of these routes allow for medication to be stocked and used for any resident when the need arises, expediting relief of pyrexia or pain, simplifying pathways and reducing wastage, important in the context of shortage situations.

## Medication for symptomatic control

<b>Managing cough</b>	
Initially	Demulcents, honey or simple linctus
2 <sup>nd</sup> Line where oral route available	Codeine linctus (15 mg/5 ml) or codeine phosphate tablets (15 mg, 30 mg) 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)
3 <sup>rd</sup> line for severe / resistant cough	Morphine sulfate oral solution (10 mg/ 5 ml) 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
<b>Managing breathlessness</b>	
Initially	Controlled breathing techniques include positioning, pursed-lip breathing, breathing exercises and coordinated breathing training
Opioid medication	Oral : 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)  Parenteral : Morphine sulfate 1 mg to 2 mg (increased to 5mg according to response) subcutaneously every 2 to 4 hours as required, increasing the dose as necessary 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
Benzodiazepine medication	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 frail 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
<b>Managing anxiety, delirium and agitation</b>	
Anxiety or agitation and able to	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

swallow: lorazepam tablets	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)

From NICE COVID-19 rapid guideline: managing symptoms (including at the end of life) in the community (NG 163)

<https://www.nice.org.uk/guidance/ng163/resources/covid19-rapid-guideline-managing-symptoms-including-at-the-end-of-life-in-the-community-pdf-66141899069893>

<b>Managing respiratory secretions</b>	
Transdermal	Hyoscine hydrobromide 1.5mg patches (1mg in 72 hr) (e.g. Scopoderm®) Transdermal patch 1 to 4 patches every 72 hours
Sublingual / Buccal	Hyoscine hydrobromide 300microgram tablets (e.g. Kwells®) 300micrograms every 6 hours Maximum 1.2mg/24hr. Atropine 1% eye drops Sublingually 2 to 4 drops every 4 hours Glycopyrronium bromide injection 200micrograms/ml Buccally 200microgram every hour as required Maximum 1.2mg/24hr.
Parental	Hyoscine Hydrobromide :Subcutaneous injection 400micrograms every hour as required, Subcutaneous infusion 2.4mg over 24h Glycopyrronium : Subcutaneous injection 200micrograms every hour as required, Subcutaneous infusion 1.2mg over 24h

From End of Life Care Guidance when a Person is Imminently Dying from COVID-19 Lung Disease Scottish Palliative Care Guidelines

<https://www.palliativecareguidelines.scot.nhs.uk/guidelines/symptom-control/end-of-life-care-guidance-when-a-person-is-imminently-dying-from-covid-19-lung-disease.aspx>

<b>Managing antibiotic treatment</b>	
Initial	Do not offer an antibiotic for treatment or prevention of pneumonia if: COVID-19 is likely to be the cause and symptoms are mild.
Offer an oral antibiotic for treatment of pneumonia	<p>In people who can or wish to be treated in the community if the likely cause is bacterial or it is unclear whether the cause is bacterial or viral and symptoms are more concerning or they are at high risk of complication.</p> <p>Doxycycline 200 mg on the first day, then 100 mg once a day for 4 days (5-day course in total); doxycycline should not be used in pregnancy alternative: amoxicillin 500 mg 3 times a day for 5 days. Doxycycline is preferred because it has a broader spectrum of cover than amoxicillin, particularly against <i>Mycoplasma pneumoniae</i> and <i>Staphylococcus aureus</i>, which are more likely to be secondary bacterial causes of pneumonia during the COVID-19 pandemic.</p>

Care home-based oxygen therapy and subcutaneous fluids – take specialist advice. <https://www.nice.org.uk/guidance/NG173>

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