COVID-19
Helping you in your role
Assessment and Management Skills Bundle
For your attention

Whilst this bundle of skills is relevant to the care of patients with confirmed or suspected COVID-19, you must adhere to the up to date infection prevention and control measures including the use of personal protective equipment (PPE).

This can be found at:

https://www.hps.scot.nhs.uk/a-to-z-of-topics/covid-19/
What is this programme?

This is a ‘Once for Scotland’ approach to supporting you cope with COVID-19 in your current or newly assigned role.

The programme can be used to support other resources from NES and Boards.

**Remote tele-education**

We are using this online learning package in combination with live 30 minute remote tele-education units which have been specifically developed and can be used for rapidly training staff who have been re-deployed.

**Use by NHS Boards**

This could also be used by Boards as part of a blended approach with face to face learning. The programme could be used to support in house simulated training which could last 30-60 minutes for each unit.
Who is it for?

The following resource has been designed to support:

- any healthcare practitioner working in the NHS or Social Care in Scotland
- practitioners returning to the workplace as part of their induction
- healthcare students who have been recruited

The content of the units will be of relevance to any health or social care practitioner involved in the care of patients with COVID-19 across social, primary and secondary care settings. Some of the skills bundles may also be useful for carers at home.
What will the programme achieve?

Learning outcomes

- To build capacity in the NHS and social care workforce in self-protection against COVID-19
- To build capacity of practitioners in assessing and managing COVID-19 in different healthcare settings
- To build resilience in the NHS and social care workforce through opportunities for simulated practice using tele-education
How is the programme structured?

Three units of skills bundles have been developed to enhance reliability of practice across all settings:

A. Protecting yourself in the workplace skills bundle

B. Assessment and management skills bundle (this unit)

C. Protecting your workplace skills bundle

There are two additional units:

D. Procedural skills using simulation

E. Rehearsing skills using simulation

Users will be able to choose from the menu to meet the needs of their service.

This is a dynamic programme which will be developed as the pandemic and advice changes.
What workplace settings will this programme be relevant to?

Wherever you are working and in whatever role this programme will provide the practical skills you may require to look after those with COVID-19. This hierarchy of education and training needs demonstrates where the units support skills development.
A man aged 36 is brought into a healthcare facility by his family with a high fever, sweating, a dry cough which has just started and difficulty in breathing. He is suspected of having COVID-19.
How do I know this training is up to date?

The units have been developed in line with the best evidence based practice from:

- Health Protection Scotland (HPS)
- Public Health England
- World Health Organisation (WHO)
- NHS Inform
Learning outcomes for this skills bundle. You will have the ability to in different contexts:

- demonstrate relevant infection control measures and communication skills
- gather relevant clinical information
- undertake relevant clinical examination
- undertake relevant skills linked to investigations and findings
- document findings using relevant tools
- initiate management skills using evidence based guidelines
- recognise the parameters being used to inform the national profile of COVID-19
Unit B: Assessment and management skills bundle

To enhance the reliability of the care of patients with COVID-19 we have developed a bundle of skills to support you as a health and social care practitioner working in any setting during the pandemic.

Remember to gain consent for any clinical skill you undertake and to maintain patient confidentiality in accordance with guidelines from your licensing body.
Person-Centred Care

The Health Foundation has developed a framework that comprises four principles of person-centred care:

- Affording people dignity, compassion and respect
- Offering coordinated care
- Offering personalised care
- Encouraging and supporting participation in decision making by patients, consumers, carers and families

A person-centred care approach will support you in the development of the knowledge, skills and confidence you need as a health or social care practitioner to more effectively assess, manage and make informed evidence based decisions about your patient’s health. This bundle gives you the practical skills to enable you to do this.
The Patient Journey

A man aged 36 is brought into a healthcare facility by his family with a high fever, sweating, a dry cough which has just started and difficulty in breathing. He is suspected of having COVID-19.

Stages of COVID-19 illness:

1. Replicative Phase: Viral replication occurs over several days and is often associated with relatively mild symptoms

2. Adaptive Immunity Phase: This leads to falling titres of the virus but can also increase levels of inflammatory cytokines which can lead to tissue damage and cause clinical deterioration

Important clinical implications are:

- Initial clinical symptoms aren’t necessarily predictive of future deterioration
- Anti-viral therapies may need to be deployed early to work optimally
- Evolving clinical profile related to COVID-19
Unit B: Assessment and management skills bundle

Demonstrate relevant infection control measures

Before undertaking the Assessment and management skills bundle for a patient with COVID-19 ensure you have familiarised yourself with the contents of the Self Protection and Workplace protection bundles.

Protecting yourself and your workplace environment

Ensure you adhere to correct COVID-19 hand hygiene and PPE requirements outlined here

Guidance from HPS on COVID-19

PPE Posters various settings
Demonstrate safe communication skills

The programme on safe communication in healthcare practice has been developed to enable you to develop your knowledge and skills in safe communication skills irrespective of where you are practising. It will raise awareness of the impact that your ability to communicate has on patient care. All communication will be impacted by the PPE required which will increase the difficulties with both patients and colleagues.

The units share best evidence based practice on:

- Safe communication with patients (e.g. consultation styles)
- Safe communication with colleagues (e.g. use of SBAR and speaking up tools)
- Safe communication within the organisation (e.g. learning to apologise)
- Safe communication using different mediums (e.g. telephone) and tools (e.g. medicines reconciliation)
The international picture of COVID-19 symptoms

The World Health Organisation have identified 13 symptoms of COVID-19 which are shared on this slide. As we become more familiar with the virus we will better understand why some patients present with one cluster of symptoms and others present with apparently mild symptoms but have severe signs.

Image from: [WHO Coronavirus](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/symptoms)
Unit B: Assessment and management skills bundle

Potential infectious Aerosol Generating Procedures (AGPs) in COVID-19 are:

| Intubation, extubation and related procedures |
| Tracheotomy/tracheostomy procedures |
| Manual ventilation |
| Open suctioning |
| Induction of sputum |
| Bronchoscopy |

- Non invasive ventilation e.g. BiPAP and CPAP
- High frequency oscillating ventilation
- Surgery and post mortem procedures involving high speed devices
- High flow nasal oxygen
- Some dental procedures

It is essential that wherever you are working during the current pandemic that you are aware of what an Aerosol Generating Procedure is so that you can protect yourself with the appropriate PPE.

Resuscitation Council (UK) statements

Resuscitation Council (UK) statements in primary and community healthcare

Resuscitation Council (UK) statements in acute hospital settings
The components of this bundle now provide you with an option to either learn about assessment and management skills for the community setting or for the hospital setting.

**Assessment and Management in community**

- Demonstrate relevant infection control measures and safe communication skills
- Assessment and management in Community Hub
- Paediatric triage and care of sick child
- Care of pregnant woman
- Emergency Medical Retrieval Services (EMRS)

**Assessment and Management in hospital**

- Gather relevant clinical information
- Undertake clinical examination including vital signs
- Laboratory testing and confirmation
- Skills linked to relevant investigations and findings
- Documentation of findings using relevant tools
- Management skills using evidence based guidelines (excludes COVID-19 medications)
  - O₂ therapy
  - Non Invasive Ventilation (masks and machines)
  - Physio care of chest in secondary and ICU settings

Choose Community route

Choose Hospital route
"A man aged 36 is referred by NHS 24 into a Community COVID-19 hub with a high fever, sweating, a dry cough which has just started and difficulty in breathing. He is suspected of having COVID-19"

There is a clear pathway of referral for patients suspected of having COVID-19 from the community to hospital.
"A man aged 36 is referred by NHS 24 into a Community COVID-19 hub with a high fever, sweating, a dry cough which has just started and difficulty in breathing. He is suspected of having COVID-19"

Step 1: Telephone Triage

The assessment of a patient with COVID-19 symptoms by a community hub would initially undergo a telephone triage using a standard questioning proforma for example an adapted SBAR. Patients are either referred urgently to the paramedics for a transfer to hospital or for a face to face hub assessment or are referred for self care (NHS Inform).
“A man aged 36 is referred by NHS 24 into a Community COVID-19 hub with a high fever, sweating, a dry cough which has just started and difficulty in breathing. He is suspected of having COVID-19”

Step 2: Near me Assessment

The near me Assessment is step 2 of the process in a community hub where patients are assessed using remote technology like a Near me camera using a standardised approach for example an adapted SBAR.
The Patient Journey - Assessment and Management in a Community COVID-19 Hub

“A man aged 36 is referred by NHS 24 into a Community COVID-19 hub with a high fever, sweating, a dry cough which has just started and difficulty in breathing. He is suspected of having COVID-19”

Step 1: Telephone Triage

Step 2: Near Me assessment

Step 3: Discuss with clinical supervisor

The 36 year old patient can be discussed with the COVID-19 hub clinical supervisor for advice and if a further opinion is required a secondary care Clinical Decision Group can provide specialist input to minimise need for transmission to hospital.

Near me access to remote decision making
The Patient Journey - Assessment and Management in a Community COVID-19 Hub

Pregnant Women

Although the COVID-19 hub will mainly see adult patients there should be agreed protocols and pathways for pregnant women of any gestation thought to have symptoms of COVID-19 and/or positive contacts.

Paediatric Referrals

There should also be an initial contact triage tool or guideline for children who have symptoms or a carrier risk from COVID-19 in the Community COVID-19 Hub.
Paediatric Inflammatory Multisystem Syndrome

Reported in late April there has been a surge in presentations in children of an inflammatory syndrome linked to COVID-19. This is now referred to as the Paediatric Inflammatory Multisystem Syndrome and has been reported in the USA, Italy and the UK. It has been compared to Kawasaki disease and toxic shock. The syndrome appears to be rare and the outcomes are normally good. The age group affected are older than typical Kawasaki being mainly in their teens.

Covid-19: Cases of inflammatory syndrome in children surge after urgent alert

In a more recent study published in the BMJ on 28th August 2020 of 651 children and young people in the UK aged less than 19 years admitted to 138 hospitals enrolled into the International study with laboratory confirmed SARS-CoV-2. Children and young people have less severe acute covid-19 than adults.

Read the study
Unit B: Assessment and management skills bundle

Management skills using evidence based guidelines

Paediatrics:

NES Resources on Emergency Management of children and young people

Paediatric airway management skills (BASICS Scotland):

Paediatric airway and ventilation – child under 1
Paediatric airway and ventilation – child over 1

Generic support on the sick child in the community (RRHEAL):

Supporting the sick child
Unit B: Assessment and management skills bundle

Management skills using evidence based guidelines

Care of pregnant women with COVID-19

Link to advice on Midwifery and Obstetrics
This link to the NICE guidelines on managing symptoms in the community provides recommendations for practitioners which should be taken into account along with individual needs and preferences.

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

NICE guideline
Published: 3 April 2020
www.nice.org.uk/guidance/ng163
Assessment and management skills using evidence based guidelines

Emergency Medical Retrieval Service:

The Emergency Medical Retrieval Service (EMRS) has some useful guidelines on conditions related to the stabilisation of patients being transferred from remote and rural community settings to assessment and therapeutic centres which could be adapted for COVID-19
“A man aged 36 is referred by a Community COVID-19 hub for a face to face consultation in an assessment centre or hospital COVID-19 ward with a high fever, sweating, a dry cough which has just started and difficulty in breathing. He is suspected of having COVID-19.”

Assessment will include:
- Gathering relevant clinical information
- Undertaking a focused examination including vital signs
- Carrying out relevant investigations including testing for COVID-19
Gather Relevant Clinical Information:

**Systemic cluster of symptoms**
- Fever varies from 43-98% in reported studies
- Associated with headache
- Myalgia

**Respiratory cluster of symptoms**
- Upper respiratory symptoms (rhinorrhea and sore throat)
- Lower respiratory symptoms (dry cough most common, pleurisy, dyspnoea, chest tightness, haemoptysis, sputum)

**Enteric cluster of symptoms**
- Gastrointestinal symptoms in 10% (diarrhoea and nausea)

Evidence from over 16,000 UK patients

Respiratory history and examination

Gastrointestinal symptoms often precede development of fever and cough (Wang et al, 7/2/20)

Note: Elderly can develop hypoxaemia without being short of breath (Xie et al, 2020)
Focused clinical examination including vital signs:

- Temperature/Pulse rate/Respiratory rate
- Blood pressure
- Oxygen saturations using pulse oximeter
- Chest examination including both respiratory and cardiovascular systems

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**Should the Roth score be used in the remote assessment of breathlessness?**

The Roth score should not be used in the remote assessment of breathlessness in the context of COVID-19, for three reasons:
- It may be normal when the patient is severely hypoxic
- It may be abnormal when the patient is not hypoxic
- It could overshadow a more holistic assessment of the patient

#EvidenceCOVID

Trish Greenhalgh
2.4.20

Centre for Evidence-Based Medicine (CEBM)
Unit B: Assessment and management skills bundle

Clinical Examination - Resources

Respiratory Examination Video

Chest Examination (developed for Physiotherapists)
Laboratory testing and confirmation of COVID-19

A number of concerns have been raised about the sensitivity of diagnostic testing which appears to vary from 60-90%. This may in part be due to sampling techniques from bronchial lavage, sputum, and the nasopharynx. In addition, specificity of tests may have been compromised early in the pandemic due to the presence of other corona viruses. Like all clinical practice a negative test result in the presence of symptoms does not exclude COVID-19.

How to obtain an upper respiratory tract diagnostic sample

How to package COVID-19 diagnostic sample for onward transportation
You must adhere to the up to date infection prevention and control measures including the use of personal protective equipment (PPE). This can be found at: [https://www.hps.scot.nhs.uk/a-to-z-of-topics/covid-19/](https://www.hps.scot.nhs.uk/a-to-z-of-topics/covid-19/)

## Unit B: Assessment and management skills bundle

### Skills linked to relevant investigations and findings

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<tr>
<th>Venepuncture</th>
<th>ABG</th>
<th>IV cannulation</th>
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<td>FBC</td>
<td>Arterial blood gases</td>
<td>Fluid support</td>
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<td>Coagulation studies</td>
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<td>Creatinine Procalcitonin</td>
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<td>CRP</td>
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<tr>
<td>Ferritin, etc</td>
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<tr>
<td><a href="#">Procedures from NHS Lothian – click to view videos</a></td>
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The Patient Journey - Assessment and Management in Hospital

“A man aged 36 is referred by a Community COVID-19 hub for a face to face consultation in an assessment centre or hospital COVID-19 ward with a high fever, sweating, a dry cough which has just started and difficulty in breathing. He is suspected of having COVID-19.”

Management considerations will include:
- Interpretation of blood test and radiological investigations
- Documentation of findings using relevant tools
- Use of evidence based guidelines

Severity Criteria for COVID-19

- Approx 14% develop severe disease requiring hospitalisation and oxygen support (Team NCPERE China CDC weekly 2020 (2)8 113-22)
- 5% require admission to ITU. COVID-19 can be complicated by ARDS, sepsis and septic shock, multi-organ failure and cardiac injury. Older age and co-morbid disease are also seen as risk factors for severity of disease (Yang X et al Lancet Resp Medicine 2020)
- There are several evidence based guidelines including those from the Surviving Sepsis Campaign COVID-19 Panel which has issued 54 statements related to infection control and testing, haemodynamics, ventilation and therapy in ICU.
Unit B: Assessment and management skills bundle

Relevant blood test interpretation of findings:

- ABGs interpretation (link to medical resource)
- ABGs interpretation (useful for all HCPs developed for Physiotherapists)
A specific COVID-19 coagulopathy is now being reported which has been called Pulmonary Intravascular Coagulopathy (PIC) described in the link below.

COVID-19 causes new clotting disorder – Dublin study

A useful review of the mechanisms of the different coagulation changes seen in COVID-19 including the extreme hypercoaguable state rarely seen in DIC is shared here.

Coagulation disorder in COVID-19
## Skills linked to relevant radiological investigations and findings

### Chest X-Ray findings

Typical finding is patchy ground glass opacities which tend to be peripheral and basal which consolidate and increase with severe disease

### CT findings

**Non-severe**

multi-lobular and subpleural ground glass opacity and consolidation after 15 days

**Severe**

multi-lobular and subpleural ground glass opacity and consolidation progressing to multi-lobar subsegmental consolidation after 4 days

*From W Guan Z et al NEJM 2020*

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**Chest X-Rays (useful for all HCPs developed for Physiotherapists)**
Unit B: Documentation of findings using relevant tools

National Early Warning Score NEWS2 Clinical Observation Chart

- Aligned to Resuscitation Council (UK) ABCDE sequence
- Unified approach used across all settings to determine the urgency of clinical response in hospital or pre-hospital scenarios
- Used to standardise approach in detecting and grading severity of acute illness
- For use in patients over 16 years of age
NEWS2 Chart

ABCDE Alignment left hand side of chart
Scoring numbers are in middle of chart
NEWS2 score determined from 6 parameters

- A and B respiratory rate
- A and B SpO₂
- C systolic blood pressure
- C pulse rate
- D level of consciousness or new confusion (ACVPU)
- E temperature

Note section for those on supplemental O₂ to maintain recommended O₂ sats where score is uplifted by 2 points
### Unit B: Documentation of findings using relevant tools

#### NEWS2 Chart Scores

<table>
<thead>
<tr>
<th>Score Level</th>
<th>Detailed Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low Score (1-4)</strong></td>
<td>prompts assessment by registered nurse for decision re escalation</td>
</tr>
<tr>
<td><strong>Medium Score (5-6)</strong></td>
<td>is key trigger for urgent review by clinician with competencies in assessment of acute illness</td>
</tr>
<tr>
<td><strong>Score ≥ 7</strong></td>
<td>is key trigger threshold for emergency assessment by clinical team / critical outreach team to consider transfer to high dependency/ICU</td>
</tr>
</tbody>
</table>

#### Single Red Score

Single red score (unusual) in any parameter needs urgent review by clinician
Unit B: Documentation of findings using relevant tools

Glasgow Coma Scale (GCS)
Can be used with NEWS2 score

**Eye opening**
- spontaneous
- to sound
- to pressure
- none

**Verbal response**
- orientated
- confused
- words
- sounds
- none

**Motor response**
- obey commands
- localising
- normal flexion
- abnormal flexion
- extension
- none

more on Glasgow Coma Scale (GCS)
Clinical Frailty Scale (CFS)

The Clinical Frailty Scale (CFS) is a tool that can be used to help determine the critical care pathway for a COVID-19 patient as per guidelines produced by NICE (2020).

Clinical Frailty Scale

1 Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.

2 Well – People who have no active disease symptoms but are less fit than category 1. Offers, they exercise or are very active occasionally, e.g. seasonally.

3 Managing Well – People whose medical problems are well controlled, but are not regularly active beyond routine walking.

4 Vulnerable – While not dependent on others for daily help, often symptoms limit activities. A common complaint is being “stuck up”, and/or being tired during the day.

5 Mildly Frail – These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

6 Moderately Frail – People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (sitting, standing) with dressing.

7 Severely Frail – Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~6 months).

8 Very Severely Frail – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

9 Terminally Ill – Approaching the end of life. This category applies to people with a life expectancy ~6 months, who are not otherwise evidently frail.

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common symptoms in mild dementia include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In moderate dementia, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In severe dementia, their memory is not able to help themselves.
Management skills using evidence based guidelines

Oxygen Therapy

The normal oxygen saturation range in healthy individuals on air is between 94-100% measured by a pulse oximeter.

The exception is those patients who are at risk of type 2 respiratory failure because of significant COPD. In these patients the target saturation should be 88-92%.

Oxygen is a treatment for hypoxia and not for breathlessness.

Oxygen flow is measured in litres per minute. It is delivered using a flow meter which reads from 0-15 L/min (the level of the middle of the floating ball is the correct flow reading).
Unit B: Assessment and management skills bundle

Management skills using evidence based guidelines

Common Oxygen delivery devices include:

- **Nasal cannula**
  - For low O₂ concentrations
  - Max 6 L/min
  - For non critical patients

- **Fixed performance mask**
- **Variable performance mask**
- **Rebreather mask**
Common Oxygen delivery devices include:

- **Nasal cannula**
- **Fixed performance mask** (e.g. Venturi)
  - Allow delivery of precise concentration
  - Useful for those with type 2 respiratory failure
  - Different colours for different flow rate
- **Variable performance mask**
- **Rebreather mask**
Common Oxygen delivery devices include:

- **Nasal cannula**
- **Fixed performance mask**
- **Variable performance mask**
- **Rebreather mask**

**Variable performance mask**
- Use in acute situations
- Do not use in COPD patients
Unit B: Assessment and management skills bundle

Management skills using evidence based guidelines

Common Oxygen delivery devices include:

- **Nasal cannula**
- **Fixed performance mask**
- **Variable performance mask**
- **Rebreather mask**

**Rebreather mask**
- For higher conc of $O_2$
- For use in critically unwell
- 15 L/min
Unit B: Use of evidence based guidelines

Setting up Non Invasive Ventilation
This link goes to several short video clips including:

- How to fit masks on patients for CPAP and Non invasive ventilation (NIV)
- How to set up different ventilators

Please take appropriate IPC including PPE for COVID-19 as many of these are AGPs

There are also some key guidelines:

- QEUH Respiratory medicine COVID-19 respiratory failure SOPs
- London NIV Respiratory support guidelines

NHS GG&C COVID-19 Resp Failure, CPAP… IV Resources
Use of Dexamethasone

In 2104 patients hospitalized with Covid-19, a study in the NEJM reported that the use of dexamethasone resulted in lower 28-day mortality among those who were receiving either invasive mechanical ventilation or oxygen alone at randomization but not among those receiving no respiratory support.

Most treatments of dexamethasone including at the University of Oxford trialled act in one of the following ways:

- preventing viral replication
- Inhibiting cell entry
- Selectively attenuating the adaptive immune cytokine mediated inflammatory response
Unit B: Assessment and management skills bundle

Management skills using evidence based guidelines
Physiotherapy care of chest in secondary and ICU settings

Facilitation of Cough

Airway Clearance Techniques

Assessment and Monitoring
Unit B: Assessment and management skills bundle

Management skills using evidence based guidelines

Physiotherapy care of mobilisation in secondary and ITU settings:

Controlled mobilisation which could be adapted for COVID-19 patients:
Paediatric Inflammatory Multisystem Syndrome

Reported in late April there has been a surge in presentations in children of an inflammatory syndrome linked to COVID-19. This is now referred to as the Paediatric Inflammatory Multisystem Syndrome and has been reported in the USA, Italy and the UK. It has been compared to Kawasaki disease and toxic shock. The syndrome appears to be rare and the outcomes are normally good. The age group affected are older than typical Kawasaki being mainly in their teens.

Covid-19: Cases of inflammatory syndrome in children surge after urgent alert

In a more recent study published in the BMJ on 28th August 2020 of 651 children and young people in the UK aged less than 19 years admitted to 138 hospitals enrolled into the International study with laboratory confirmed SARS-CoV-2. Children and young people have less severe acute covid-19 than adults.

Read the study
The components of this bundle provide you with an option to review the other context.

Proceed to common skills content (see below) by pressing ‘next’ slide button

- Prevention support
- resuscitation
- confirmation of death
- death certification
- bereavement support
Prevention Support
Advice re Vitamin D

**Scottish Government advice re: Vitamin D**

Everyone (including children) should consider taking a daily supplement containing 10 micrograms of vitamin D.

It is specifically recommended that groups at higher risk of vitamin D deficiency take a daily supplement. These groups include:

- all pregnant and breastfeeding women
- infants and children under 5 years old
- people who have low or no exposure to the sun,
- people from minority ethnic groups with dark skin who require more sun exposure to make vitamin D

A useful discussion on the protective nature of Vitamin D and its use in the prevention and treatment of acute respiratory infections can be found in this *Lancet* article

**Vitamin D for COVID-19: a case to answer**
Prevention Support
There are three other pathways of prevention support in relation to COVID-19
• Test and Protect
• Development of a vaccine
• Rehabilitation to prevent long term sequelae

One of the most recent potential game changers in the test, trace isolate and support strategy of NHS Scotland has been the development of an Antigen test which can give a result in 12 minutes and which is highly specific for COVID-19. Until now tests have been on antibodies which are detected using PCR which takes longer.

This has not had final approval but the Scottish Government have ordered them in anticipation.

Find out more about the 12 minute test
Unit B Assessment and Management

Prevention Support

There are three other pathways of prevention support in relation to COVID-19
• Test and Protect
• Development of a vaccine
• Rehabilitation to prevent long term sequelae

Development of Vaccine

It normally takes a long run in time to develop a safe vaccine. Currently 10 vaccines are in clinical trials. The University of Oxford and AstraZeneca will have Phase 3 data this autumn. The accelerated schedules for a COVID-19 vaccine is due to the use of emerging vaccine technology platforms. Sanofi and GlaxoSmithKline are working together on a protein sub unit approach. What is exciting is the collaboration across commercial companies and borders.
Rehabilitation of post COVID-19 patients to prevent long term sequelae

There was even in the early stages of the pandemic a realisation that patients could be left with significant long term sequelae both physical (affecting multiple systems) and psychological.

The Stanford Hall UK Consensus identified some rehabilitation recommendations

1. Rehabilitation treatment plans should be individualised according to the patient’s needs, taking into consideration their comorbidities. Level of evidence: Level 5. Level of agreement: mean score 9.70 (95% CI 9.46 to 9.97).

2. For patients with COVID-19, rehabilitation should be aimed at relieving symptoms of dyspnoea, psychological distress and improving participation in rehabilitation, physical function and quality of life. Level of evidence: Level 5. Level of agreement: mean score 9.48 (95% CI 9.11 to 9.85).

3. Patients should be reviewed through the rehabilitation process. Level of evidence: Level 5. Level of agreement: mean score 8.90 (95% CI 8.23 to 9.58).

4. Patients should receive education about their condition and given strategies on how to manage recovery. Level of evidence: Level 5.


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Resuscitation

The Resuscitation Council (UK) has provided the following on COVID-19

- Resuscitation Council (UK) statements
- Resuscitation Council (UK) statements in primary and community healthcare
- Resuscitation Council (UK) statements in acute hospital settings

What to do in the community to resuscitate a person with suspected COVID-19

Out of hospital cardiac arrest guidance during COVID-19 pandemic
Unit B: Assessment and management skills bundle

Management skills using evidence based guidelines

Confirmation of death can be carried out by any registered health professional in Scotland.

Confirmation of death resources
Management skills using evidence based guidelines

Medical Certificate of Cause of Death

The medical certificate of cause of death can only be issued by a registered medical practitioner.

Guidance to Medical Practitioners for Death Certification during the COVID-19 Pandemic

Following the Certification of Death (Scotland) Act 2011 the Death Certification Review Service was established to provide a single system of independent scrutiny to improve quality and accuracy. The Death Certification Review Service has been suspended during the pandemic.

http://www.healthcareimprovementscotland.org/our_work/governance_and_assurance/death_certification.aspx

You must adhere to the up to date infection prevention and control measures including the use of personal protective equipment (PPE). This can be found at:

https://www.hps.scot.nhs.uk/a-to-z-of-topics/covid-19/
Unit B: Assessment and management skills bundle

Bereavement support

NES Delivering news of death by telephone

NES Bereavement Advice

Cruse COVID-19 guidance
How long will the Covid-19 pandemic last?

The R0 is the Reproduction value one of the key figures that will help us understand whether the pandemic is under control and we can relax the lockdown.

The R0 figure is the number of other people one infected person is likely to infect. This needs to be less than 1 to enable us to say it is under control and preferably less than 0.5. In the link below there is modelling linked to the R value in several COVID-19 countries prior to lockdown and the paper explores intermittent and early release approaches from lockdown and which would likely cause a resurgence.

medRxiv - Estimates of the ongoing need for social distancing and control measures post-‘lockdown’ from trajectories of COVID-19 cases and mortality
Research into COVID-19

The National Institute for Health Research (NIHR) has established a UK wide portal for urgent COVID-19 research prioritising funding for potential diagnostic tests, treatments and vaccines.

Examples of treatment studies include:

• University of Oxford lead Recovery study of additional optional treatments to enhance recovery

• University of Southampton lead ACCORD study which is using an adaptive platform to assess multiple candidate agents for the treatment of COVID-19 at the same time recruiting 1800 patients from 12 UK centres

• Utrecht University Medical centre Remap CAP study to determine the best treatment for patients admitted to ICU with severe illness from COVID-19

https://www.nihr.ac.uk/covid-studies/
Evaluation

Thank you for taking your time to work through this skills bundle.

CSMEN would greatly appreciate a further 5 minutes of your time to complete our online evaluation. Your comments will help us to continue in developing and improving this bundle in future versions.

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