Alberta Health Services

PROTOCOL

TITLE
NEW ONSET OR WORSENING OF PRE-EXISTING DYSPNEA - ADULT

SCOPE
Provincial: Emergency Departments and Urgent Care Centres

DOCUMENT #
HCS-280-01

APPROVAL AUTHORITY
Vice President, Provincial Clinical Excellence

INITIAL EFFECTIVE DATE
April 30, 2021

SPONSOR
Emergency Strategic Clinical Network

REVISION EFFECTIVE DATE
Not applicable

PARENT DOCUMENT TITLE, TYPE, AND NUMBER
Not applicable

SCHEDULED REVIEW DATE
April 30, 2024

NOTE: The first appearance of terms in bold in the body of this document (except titles) are defined terms – please refer to the Definitions section.

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OBJECTIVES

- This protocol is intended for the **adult patients** who present to an Emergency Department (ED) or Urgent Care Centre (UCC) with new onset dyspnea or worsening of an existing respiratory condition.
- To assist **health care professionals** when implementing specific diagnostics, therapeutics, and interventions for patients prior to the initial Physician or Nurse Practitioner (NP) assessment.

APPLICABILITY

Compliance with this document is required by all Alberta Health Services employees, members of the medical and midwifery staffs, students, volunteers, and other persons acting on behalf of Alberta Health Services (including contracted service providers as necessary).

ELEMENTS

1. Points of Emphasis

1.1 The health care professional shall immediately notify the Physician or NP of any patient that is unstable or presents with respiratory distress, increased work of breathing and/or signs and symptoms of hypoxemia.

1.2 Notify Respiratory Therapist (RT), where available, as early as possible in cases of respiratory distress, increased work of breathing and/or signs and symptoms of hypoxemia.

1.3 This protocol may be implemented when:

a) there may be a delay in Physician or NP initial assessment; and

b) when the patient is in an appropriate location to manage ongoing assessment and reassessment.

1.4 The Physician / NP responsible for the patient shall be made aware of all diagnostic studies and/or therapeutic interventions initiated under this protocol as per site process.

1.5 When this protocol has been implemented for a patient who subsequently leaves prior to Physician or NP assessment; follow local process, including documentation requirements and patient follow-up of abnormal results.

1.6 Implement Infection Prevention and Control (IPC) precautions, as appropriate.

2. Inclusion Criteria

2.1 This protocol applies to adult patients presenting with acute onset dyspnea or worsening of an existing respiratory condition.

3. Exclusion Criteria

3.1 This protocol is not intended for patients presenting with the following:

a) Suspected Ischemic Chest pain – refer to AHS *Suspected Ischemic Chest Pain* Protocol;

b) two (2) or more Systemic Inflammatory Response Syndrome (SIRS) criteria – refer to AHS *Suspected Sepsis Assessment and Treatment in the Adult Patient* Protocol;

c) known Asthmatic – refer to AHS *Asthma Exacerbation - Adult* Protocol; or

d) symptoms consistent with carbon monoxide exposure – refer to AHS *Suspected Carbon Monoxide Exposure* Protocol.

4. Assessment and Treatment

4.1 A complete patient assessment is required. Obtain a full set of vital signs including blood pressure, temperature, pulse, respiratory rate, lung/breath sounds, and oxygen saturation. Complete subsequent reassessments as per AHS *Assessment and Reassessment of Patients* Guideline [ESCN]).

4.2 Oxygen therapy:

a) Maintain continuous pulse oximetry monitoring, as clinically indicated.

b) Routine administration of oxygen may be harmful. Do not administer supplemental oxygen unless saturations are less than 92%. If oxygen is administered, titrate to maintain oxygen saturation at 92%.

(i) If the patient states or the healthcare professional suspects that they have chronic hypercapnia (a CO_2 retainer), an oxygen saturation of 88% may be reasonable and oxygen therapy may not be required. A Physician or NP **order** for oxygen is required prior to administration in this population.

(ii) If patient is on home oxygen therapy, maintain baseline oxygen flow rate and only increase after consult with Physician / NP.

4.3 Cardiac Monitoring:

a) Apply cardiac monitor leads; monitor patient in lead II and if available V1. Interpret the rhythm strip and place on patient's **health record**.

4.4 Electrocardiogram (ECG):

a) Complete a 12 lead ECG.

b) If ST segment elevation or depression is present, the health care professional shall bring the ECG to the attention of Physician or NP as soon as possible and initiate AHS *Suspected Ischemic Chest Pain* Protocol.

c) For ECGs without ST elevation: Follow local procedure:

(i) Bring ECG to attention of Physician or NP; or

(ii) assess the ECG for abnormalities that deviate from normal sinus rhythm. Compare current ECG with previous ECG, if available. If any new abnormalities (e.g., bundle branch block, flipped t waves, atrial fibrillation) are present or there are abnormalities present and no previous ECG to compare with, bring the ECG to the attention of Physician or NP.

(iii) Document on the patient's health record when the ECG is given to Physician or NP for their evaluation.

4.5 Initiate intravenous (IV) and infuse 0.9% sodium chloride (normal saline) at 30 mL/hour, or a saline lock as per local practice guidelines.

5. Laboratory Tests

5.1 The following laboratory tests shall be drawn and sent:

a) complete blood count (CBC);

b) electrolytes (sodium, potassium, chloride, carbon dioxide);

c) glucose; and

d) creatinine.

5.2 In consultation with the Physician or NP, consider these additional treatments:

a) Chest x-ray (anterior posterior and lateral); and

b) Venous blood gas (VBG) and/or arterial blood gas (ABG), where available.

5.3 Local practice guidelines may determine the laboratory tests that are included as part of this protocol.

6. Documentation

6.1 The health care professional shall document on the patient's health record:

a) implementation of this protocol;

b) assessments;

c) reassessments;

d) interventions;

e) patient's responses to interventions and;

f) notification of responsible Physician / NP of patient, and of any investigations / procedures done through the protocol.

DEFINITIONS

Adult means a person aged 18 years and older.

Health care professional means an individual who is a member of a regulated health discipline, as defined by the *Health Disciplines Act* (Alberta) or the *Health Professions Act* (Alberta), and who practises within scope and role.

Health record means the collection of all records documenting individually identifying health information in relation to a single person.

Order means a direction given by a regulated health care professional to carry out specific activity(-ies) as part of the diagnostic and/or therapeutic care and treatment to the benefit of a patient. An order may be written (including handwritten and or electronic), verbal, by telephone or facsimile.

Patient means an adult or child who receives or has requested health care or services from Alberta Health Services and its health care providers or individuals authorized to

act on behalf of Alberta Health Services. This term is inclusive of residents, clients and outpatients.

REFERENCES

- Alberta Health Services Governance Documents:
  - *Assessment and Reassessment of Patients* Guideline (# HCS-181-01)
  - *Asthma Exacerbation - Adult* Protocol (#HCS-09-05)
  - *Consent to Treatment/Procedure(s)* Policy (# PRR-01)
  - *Suspected Carbon Monoxide Exposure* Protocol (#HCS-274-01)
  - *Suspected Ischemic Chest Pain* Protocol (#HCS-195-01)
  - *Suspected Sepsis Assessment and Treatment in the Adult Patient* Protocol (#HCS-09-19)