

Module 8 - Internal and External Patient Transport

This module will allow the learner to describe the different considerations regarding internal and external transportation of patients including equipment required, risks, and communication requirements

Rationale

Why is it important for you to learn this material?

Registered Respiratory Therapists are involved in acute critical patient care, which often includes transporting patients. These transports can occur internally within the hospital and externally, where the team is going to pick up a patient or is transporting a patient from one centre to another. In-hospital patients often require transports to diagnostic service areas for assessments via MRI, CT scan, and angiography.

In order to facilitate their role in these types of transports, all Registered Respiratory Therapists should be familiar with the different parameters concerning internal and external transportation of patients including air and ground transportation, risks, medical gas needs, and intra-hospital communications.

Learning Outcome

When you complete this module you will be able to

Describe the different considerations regarding internal and external transportation of patients including equipment required, risks, and communication requirements.

Learning Objectives

Here is what you will be able to do when you complete each objective.

1. Describe the precautions required when transporting patients.
2. Describe the appropriate equipment for an intrahospital patient transport such as MRI and hyperbaric medicine.
3. Describe the appropriate equipment for an out-of-hospital patient transport.
4. Determine medical gas needs: type and amount.
5. Communicate patient and equipment needs to receiving institution/agency.

Objective 1

When you complete this objective you will be able to...

Describe the precautions required when transporting patients: out of hospital, intra-hospital, ground/air/water.

Learning Activity

Complete each of the Learning Activities listed below.

Please read and review the following:

1. Comprehensive Perinatal & Pediatric Respiratory Care, 3rd Edition: Chapter 18, Perinatal Transport for Basic Transport.
2. http://www.rcjournal.com/online_resources/cpgs/tmvpcpg-update.html
3. <http://www.emedicine.com/emerg/topic717.htm>

Objective Checklist:

- Can you describe the following precautions/concerns regarding transportation of patients internally and externally?
 - Safety of the patient and the staff
 - Effects of altitude on PO₂
 - Differences between air and ground transportation vehicles
 - Situations where transport would be indicated or contraindicated

Objective 2

When you complete this objective you will be able to...

Describe the appropriate equipment for an intrahospital patient transport such as MRI and hyperbaric medicine.

Learning Activity

Complete each of the Learning Activities listed below.

Please read and review the following:

1. Comprehensive Perinatal & Pediatric Respiratory Care, 3rd Edition: Chapter 18, Perinatal Transport for Basic Transport.
2. Mosby's Respiratory Care Equipment, 7th Edition: Chapter 14, Transport, Home Care and Alternative Ventilatory Devices pp 728 - 759
3. http://www.aarc.org/marketplace/reference_articles/06.99.035.pdf
4. http://www.rcjournal.com/online_resources/cpgs/tmvpcpg-update.html

Objective Checklist:

- Can you identify the equipment necessary for an in-hospital transport?
- Can you describe the procedure of transporting a ventilated patient?

Objective 3

When you complete this objective you will be able to...

Describe the appropriate equipment for an out-of-hospital patient transport.

Learning Activity

Complete each of the Learning Activities listed below.

Please read and review the following:

1. Comprehensive Perinatal & Pediatric Respiratory Care, 3rd Edition: Chapter 18, Perinatal Transport for Basic Transport.
2. Mosby's Respiratory Care Equipment, 7th Edition: Chapter 14, Transport, Home Care and Alternative Ventilatory Devices pp 728 - 759
3. http://www.aarc.org/marketplace/reference_articles/06.99.035.pdf
4. http://www.rcjournal.com/online_resources/cpgs/tmvpcpg-update.html
5. http://www.umanitoba.ca/colleges/cps/Guidelines_and_Statements/1620.html

Objective Checklist:

- Can you identify the equipment necessary for an external transport?
- Can you describe the mechanics of a basic transport ventilator?

Objective 4

When you complete this objective you will be able to...

Determine medical gas needs: type and amount.

Learning Activity

Complete each of the Learning Activities listed below.

Please read and review the following:

1. Comprehensive Perinatal & Pediatric Respiratory Care, 3rd Edition: Chapter 18, Perinatal Transport for Basic Transport.

Objective Checklist:

- Can you calculate the duration of cylinder gases that would be used on transport?
- Can you describe how FiO₂ requirements can change during air transport?

Objective 5

When you complete this objective you will be able to...

Communicate patient and equipment needs to receiving institution/agency.

Learning Activity

Complete each of the Learning Activities listed below.

Please read and review the following:

1. Comprehensive Perinatal & Pediatric Respiratory Care, 3rd Edition: Chapter 18, Perinatal Transport for Basic Transport.
2. http://www.umanitoba.ca/colleges/cps/Guidelines_and_Statements/1620.html
3. <http://www.dhs.vic.gov.au/ahs/archive/mrccsv/app2.htm>
4. http://www.sccm.org/professional_resources/guidelines/table_of_contents/Documents/Transfer_of_Patients.pdf

Objective Checklist:

- Can you describe the basic communication requirements between the sending and receiving hospitals: patient status, medications, lines, ventilator settings, airway status, and equipment requirements upon arrival (ventilator, IV pumps)?