



ENSURING COMFORT AT END OF LIFE

Objectives:

- Understand how to assess and document respiratory distress using the Respiratory Distress Observation Scale (RDOS) in a patient that cannot self report
- Understand how to appropriately treat respiratory distress
- Documenting and treating anxiety, agitation and restlessness
- Treating other symptoms that might need to be managed

Assessing Respiratory Distress

- Respiratory distress or dyspnea is a common symptom of someone who is nearing the end of life
- If a patient can say “I can’t breath” or “I am so short of breath,” there is no question that the patient is in respiratory distress.
- For those patient that cannot self report, there is a respiratory distress observation scale that a registered nurse (RN) can use to objectively assess respiratory distress or dyspnea
- The Respiratory Distress Observation Scale (RDOS) objectively scores respiratory distress allowing for appropriate objective treatment

Respiratory Distress Observation Scale (RDOS)

Variable	0 points	1 point	2 points	Total
Heart rate per minute	<90 beats	90-109 beats	≥110 beats	
Respiratory rate per minute	≤18 breaths	19-30 breaths	>30 breaths	
Restlessness: non-purposeful movements	None	Occasional, slight movements	Frequent movements	
Accessory muscle use: rise in clavicle during inspiration	None	Slight rise	Pronounced rise	
Paradoxical breathing pattern	None		Present	
Grunting at end-expiration: guttural sound	None		Present	
Nasal flaring: involuntary movement of nares	None		Present	
Look of fear	None		Eyes wide open, facial muscles tense, brow furrowed, mouth open	

- The RDOS is a validated and reliable tool for most patients that cannot self report respiratory distress
- Each variable is scored based on assessment.
 - Heart Rate
 - Respiratory Rate
 - Restlessness
 - Accessory Muscle Use
 - Paradoxical Breathing Pattern
 - Grunting at End Expiration
 - Nasal Flaring
 - Look of Fear
- The numbers are added up to give you a total score
 - If the total score of the RDOS is > 3 the patient is in respiratory distress
 - If total score of the RDOS is ≤ 3 the patient is considered comfortable

Respiratory Distress Observation Scale (RDOS)

Variable	0 points	1 point	2 points	Total
Heart rate per minute	<90 beats	90-109 beats	≥110 beats	
Respiratory rate per minute	≤18 breaths	19-30 breaths	>30 breaths	
Restlessness: non-purposeful movements	None	Occasional, slight movements	Frequent movements	
Accessory muscle use: rise in clavicle during inspiration	None	Slight rise	Pronounced rise	
Paradoxical breathing pattern	None		Present	
Grunting at end-expiration: guttural sound	None		Present	
Nasal flaring: involuntary movement of nares	None		Present	
Look of fear	None		Eyes wide open, facial muscles tense, brow furrowed, mouth open	

- Heart Rate
- Respiratory Rate
- Restlessness
- Accessory Muscle Use

Based on assessment, assign a 0, 1 or 2 for these parameters

It may be necessary to count heart rate and respiratory rate for a full minute

It may be necessary to use a stethoscope to assess apical heart rate

- If the total score of the RDOS is > 3 the patient is in respiratory distress
- If total score of the RDOS is ≤ 3 the patient is considered comfortable

Respiratory Distress Observation Scale (RDOS)

Variable	0 points	1 point	2 points	Total
Heart rate per minute	<90 beats	90-109 beats	≥110 beats	
Respiratory rate per minute	≤18 breaths	19-30 breaths	>30 breaths	
Restlessness: non-purposeful movements	None	Occasional, slight movements	Frequent movements	
Accessory muscle use: rise in clavicle during inspiration	None	Slight rise	Pronounced rise	
Paradoxical breathing pattern	None		Present	
Grunting at end-expiration: guttural sound	None		Present	
Nasal flaring: involuntary movement of nares	None		Present	
Look of fear	None		Eyes wide open, facial muscles tense, brow furrowed, mouth open	

- If the total score of the RDOS is > 3 the patient is in respiratory distress
- If total score of the RDOS is ≤ 3 the patient is considered comfortable

- Paradoxical Breathing Pattern
- Grunting at End Expiration
- Nasal Flaring
- Look of Fear

For these assessment parameters, patients either exhibit the symptoms or they don't

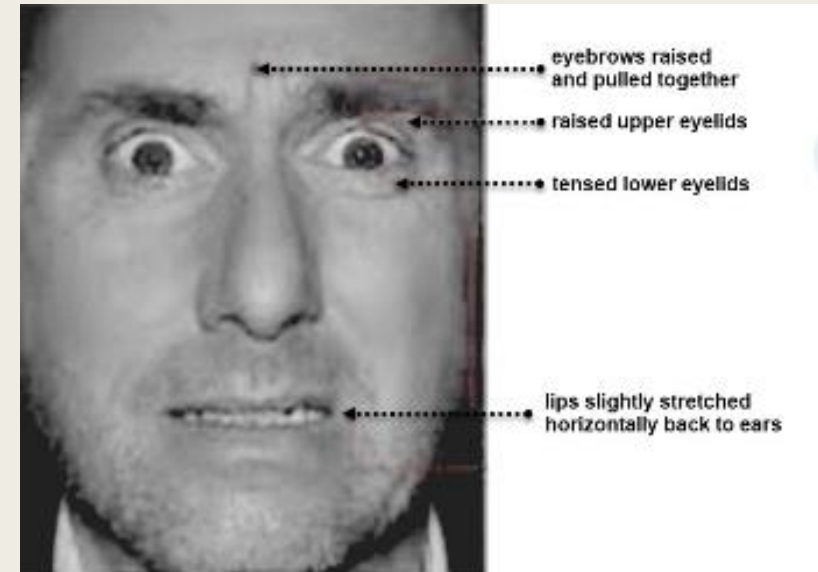
What is Paradoxical Breathing

- The RDOS measures autonomic nervous system responses to hypoxia and hypercarbia
- Paradoxical breathing is one such response
- When a patient has paradoxical breathing, the diaphragm works opposite how it normally does

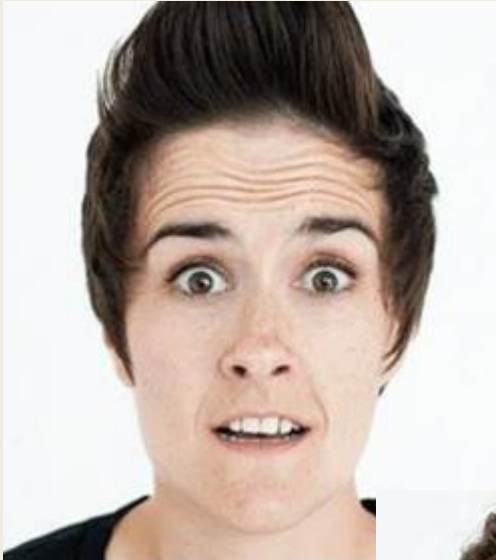
Normal Breathing	Paradoxical Breathing
Inhale/diaphragm moves down	Inhale/diaphragm moves up
Exhale/diaphragm moves up	Exhale/diaphragm moves down
Abdomen doesn't move much in normal breathing	Abdomen moves a lot Breathing appears see-saw like

Assessing Look of Fear

- The look of fear is consistent among all cultures and languages
- Look of fear is universal
- Look of fear is the brain's response to hypoxia and is controlled by the amygdala
- Amygdala is responsible for human emotional responses



Which Pictures Show the Look of Fear?



Not only is the look of fear a universal expression, it is also universally identified

Every culture will be able to identify the look of fear

Every nurses knows fear when it is exhibited by their patients

Respiratory Distress Observation Scale (RDOS)

Variable	0 points	1 point	2 points	Total
Heart rate per minute	<90 beats	90-109 beats	≥110 beats	
Respiratory rate per minute	≤18 breaths	19-30 breaths	>30 breaths	
Restlessness: non-purposeful movements	None	Occasional, slight movements	Frequent movements	
Accessory muscle use: rise in clavicle during inspiration	None	Slight rise	Pronounced rise	
Paradoxical breathing pattern	None		Present	
Grunting at end-expiration: guttural sound	None		Present	
Nasal flaring: involuntary movement of nares	None		Present	
Look of fear	None		Eyes wide open, facial muscles tense, brow furrowed, mouth open	

Don't forget!!!!

- If the RDOS is > 3 the patient is in respiratory distress
 - Patients should receive medication for an RDOS > 3
- If the RDOS is ≤ 3 the patient is considered comfortable
 - Patient that are 3 or less do not receive medication for respiratory distress

Documenting RDOS

The screenshot shows the Flowsheets application interface. The top menu bar includes options like File, Add Rows, LDAAvatar, Cascade, Add Col, Insert Col, Data Validate, Hide Device Data, Last Filed, Reg Doc, Graph, Go to Date, and More. The left sidebar has a search bar and a list of items: Respiratory Dis... and RASS (Richmo...). The central table displays patient data for 3/28/20, with columns for Admission (Current) from 3/7/2020 i..., 0000, 1200, and Last Filed. The right sidebar has a search bar with 'RDOS' entered and a 'Heart Rate Per Minute' section with a dropdown menu showing options: 0=Less than 90 beats, 1=90 - 109 beats, and 2=Greater than or equal to 110 beats. A red arrow points from the '2=Greater than or equal to 110 beats' option to the 'Row Information' section below it.

Admission (Current) from 3/7/2020 i...	0000	1200	Last Filed
Respiratory Distress Observation Scale			
Heart Rate Per Minute			
Respiratory Rate Per Minute			
Restlessness: Non-Purposeful Movements			
Paradoxical breathing pattern: Abdomen			
Accessory muscle use: Rise in clavicle			
Grunting at end-expiration: guttural sound			
Nasal Flaring: Involuntary movement of			
Look of fear			
RDOS Score			

➤ Documentation of RDOS can be found by searching “RDOS” in the upper right hand corner within the flowsheets activity

➤ Each parameter has a description in the right side bar

RDOS Practice

Patient parameters:

- Heart rate 120
- Resp rate 28
- No restlessness
- Slight rise in clavicles
- No paradoxical pattern
- No grunting at end expiration
- Nasal flaring present
- No look of fear

RDOS Practice

Variable	0 points	1 point	2 points	Total
Heart rate per minute	<90 beats	90-109 beats	≥110 beats	2
Respiratory rate per minute	≤18 breaths	19-30 breaths	>30 breaths	1
Restlessness: non-purposeful movements	None	Occasional, slight movements	Frequent movements	0
Accessory muscle use: rise in clavicle during inspiration	None	Slight rise	Pronounced rise	1
Paradoxical breathing pattern	None		Present	0
Grunting at end-expiration: guttural sound	None		Present	0
Nasal flaring: involuntary movement of nares	None		Present	2
Look of fear	None		Eyes wide open, facial muscles tense, brow furrowed, mouth open	0

Total = 6

Treating Respiratory Distress (RDOS > 3)

- In the last phase of life when a patient is nearing death, respiratory distress is a common symptom
- Morphine is the drug of choice to treat respiratory distress
- To control a patient's respiratory distress, patients may require much more morphine than nurses are used to giving
- Using the objective scale will ensure the patient is medicated appropriately to relieve respiratory distress while not overmedicating
- The overall goal is for patients to be comfortable and without respiratory distress

Giving Morphine for Respiratory Distress

- Based on the Comfort Care Order Set, the RN will assess the RDOS on admission and then every 4 hours.
- If the RDOS is > 3 give:
 - Morphine 2 mg IV
 - WITH
 - Ativan 0.5 mg IV
- Assess the RDOS in 10 minutes

In 10 minutes...Assess the RDOS

RDOS ≤ 3

- If the RDOS is ≤ 3 , the patient is comfortable, not in significant respiratory distress.
- Check the RDOS in approximately 4 hours based on the worklist.
- This is a good time to try and wean the oxygen down.

RDOS > 3

- Give morphine 4 mg IV
- Assess RDOS in 10 minutes

Assessing and Treating the RDOS

RDOS ≤ 3

- If the RDOS is ≤ 3 , the patient is comfortable, not in significant respiratory distress.
- Check the RDOS in approximately 4 hours based on worklist task
- This is a good time to try and wean the oxygen down.

- **Whenever the RDOS becomes ≤ 3 , 4 hour assessments can be resumed**
- **This is a great time to wean oxygen down**
- **Oxygen may be discontinued if patients have an RDOS ≤ 3**
- **Once oxygen is discontinued respiratory distress is treated with medication only. Oxygen shouldn't be placed back on patient**

RDOS > 3

- If the RDOS continues to be > 3 , increase the dose to morphine 8 mg IV
- Assess RDOS in 10 minutes
- If RDOS is ≤ 3 assess RDOS in approximately 4 hours based on worklist task
- If the RDOS continues to be > 3 , increase the dose of morphine to 12 mg IV
- Assess RDOS in 10 minutes
- If RDOS is ≤ 3 assess RDOS in approximately 4 hours based on worklist task
- If RDOS continues to be > 3 , increase the dose to 16 mg IV
- Assess RDOS in 10 minutes
- If the RDOS > 3 , notify the provider for further dosing adjustments



Ongoing Assessment and Treatments of Respiratory Distress

Example

- If a patient's respiratory distress was controlled with 4 mg of morphine and more than 10 minutes has passed and they are exhibiting an RDOS of > 3 or say they are having difficulty breathing, medicate with 4 mg
- The last dose that achieved an RDOS of ≤ 3 is the subsequent dose
- Give 4 mg and escalate as needed

Example

- If a patient's respiratory distress was controlled with 12 mg of morphine and more than 10 minutes has passed and they are exhibiting an RDOS of > 3 or say they are having difficulty breathing, medicate with 12 mg
- The last dose that achieved an RDOS of ≤ 3 is the subsequent dose
- Give 12 mg and escalate as needed

Patients That Can Self Report Respiratory Distress

- Some patients will be able to self report respiratory distress
- For these patients begin treatment the same way:
 - Morphine 2 mg IV
 - WITH
 - Ativan 0.5 mg IV
- Ask the patient about their breathing in 10 minutes and escalate dosage the same way with morphine:
 - 4mg→8mg →12mg →16mg →Notify provider
- If at any point the patient states they are comfortable, resume assessment approximately every 4 hours

Anxiety, Agitation, and Restlessness

- Patients at the end of life may have anxiety, agitation and restlessness
- If a patient is exhibiting any of those behaviors or can verbalize them, ask first about respiratory distress or assess an RDOS
- Sometimes anxiety, agitation and restlessness are due to respiratory distress
 - If patient is in respiratory distress, treat using morphine based on the MAR instructions
 - If the patient is not in respiratory distress, treat with the appropriate medication to treat anxiety, agitation and restlessness that is on the MAR.

Patient Responsiveness

- Some patients may fluctuate between being able to verbalize respiratory distress and being non-verbal or unresponsive
 - For these patients, you can also change assessment tools
 - If a patient ever becomes non-verbal or unresponsive, use RDOS to assess level of respiratory distress and treat appropriately

Making this Happen in an Isolation Room

- If you have a patient that appears to be having respiratory distress, get a buddy RN to help get meds from the Pyxis until the patient's RDOS is ≤ 3
- Attached to the policy is a worksheet that you can take into the room if an isolation WOW is not available
- This will allow you to score the patient and treat appropriately

Other Symptom Management

Go to the MAR

- Toradol can be given for fever
- Morphine can be given for pain in addition to respiratory distress
- Glycopyrrolate can be given for terminal congestion
- Zofran can be given for nausea

The MAR will guide treatment of other end of life symptoms

For Patients and Families

- Provide emotional support
- Offer spiritual support and place an order for spiritual care in needed
- Provide HFHS hospice education material to families for end-of-life symptom management, bereavement resources, and triage number for phone advice