

# RECOVERY IS BEAUTIFUL™

PleuraFlow Active Clearance Technology (ACT)

ICU Training

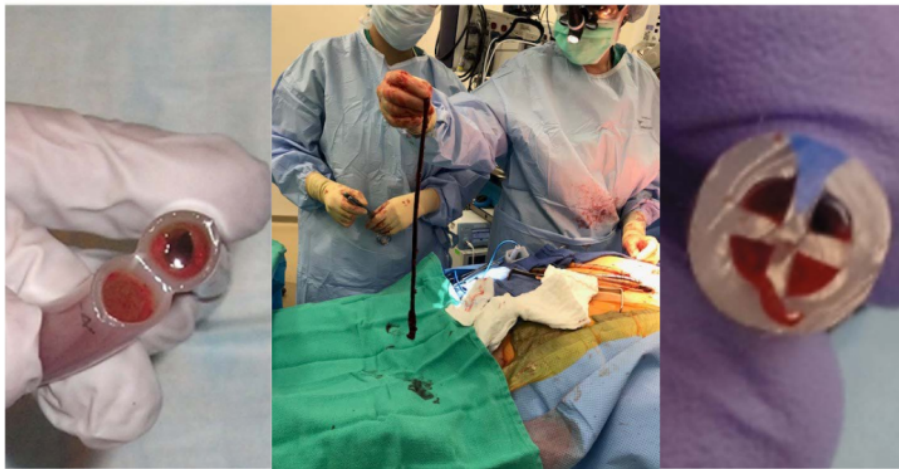
TN112-A



Find a partner & share your experience with chest tubes



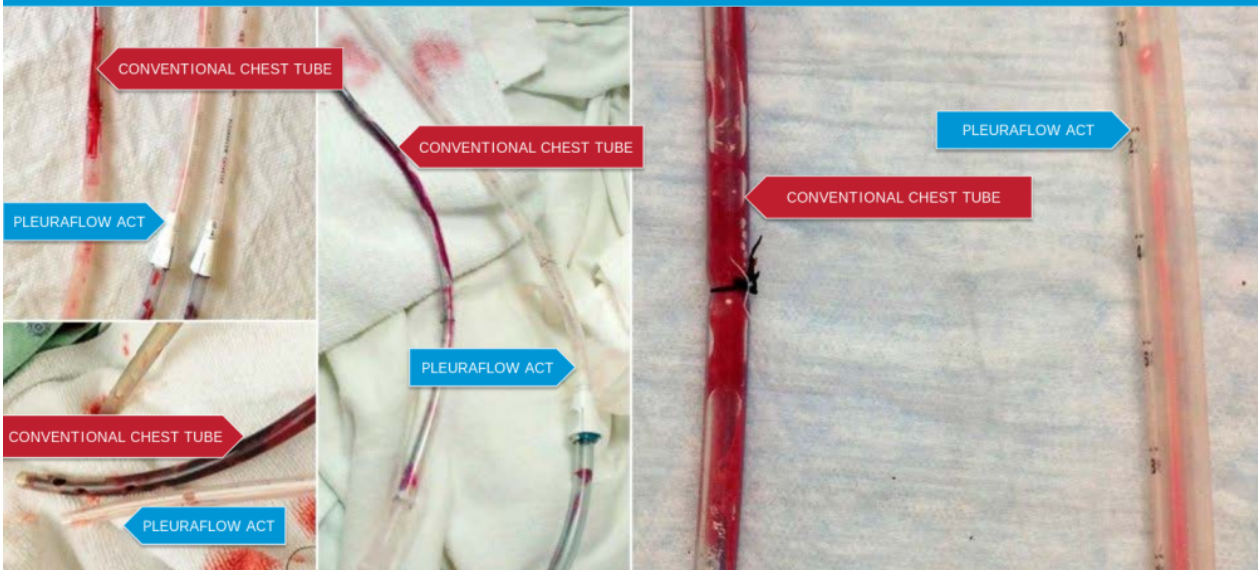
# CHEST TUBES CLOGGING – A FAMILIAR PROBLEM



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# PLEURAFLOW ACT MAINTAINS CHEST TUBE PATENCY



ACTIVITY

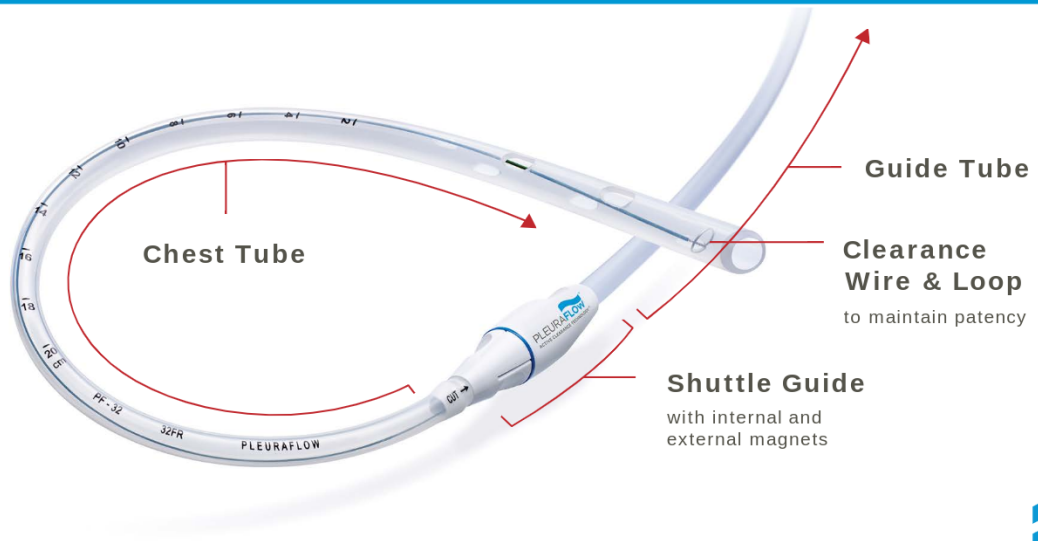
# PLEURAFLOW ICU TRAINING WORKSHEET



SYSTEM & COMPONENTS



# THE PLEURAFLOW ACTIVE CLEARANCE SYSTEM



## AVAILABLE IN VARIOUS SIZES & CONFIGURATIONS



**Straight**  
20, 24, 28, 32 FR



**Long (XDL)**  
20, 24 FR



**Pediatric (SEDL)**  
20 FR SEDL



**Right Angle (RA)**  
24, 28, 32 FR

As with selection and placement of any chest tube, care must be taken to ensure that the tube drainage eyelets remain contained within the chest cavity for the duration of application.



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## ACTIVITY PLEURAFLOW ICU TRAINING WORKSHEET





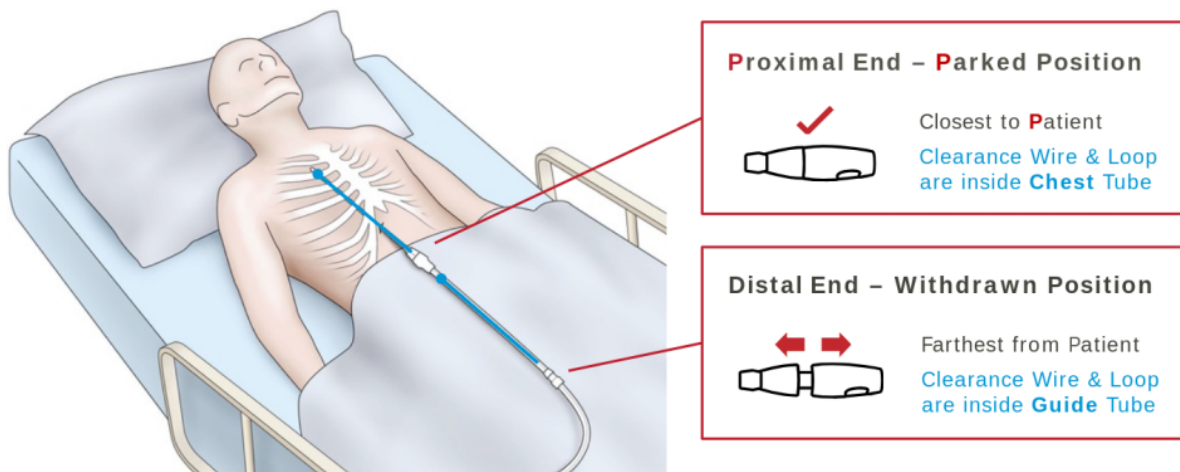
# PLEURAFLOW ICU TRAINING WORKSHEET

1. The PleuraFlow ACT System is comprised of a \_\_\_\_\_ and \_\_\_\_\_ .
2. The Guide Tube houses the Clearance Wire & Loop which is advanced and retracted within the Chest Tube. (True or False)
3. The purpose of the Clearance Wire & Loop is to minimize or prevent occlusions with clot within the Chest Tube. (True or False)
4. The Shuttle Guide connects with the Clearance Wire & Loop via a magnetic system which enables movement of the Clearance Wire & Loop on the inside of the Guide Tube and Chest Tube by moving the Shuttle Guide on the outside. (True or False)

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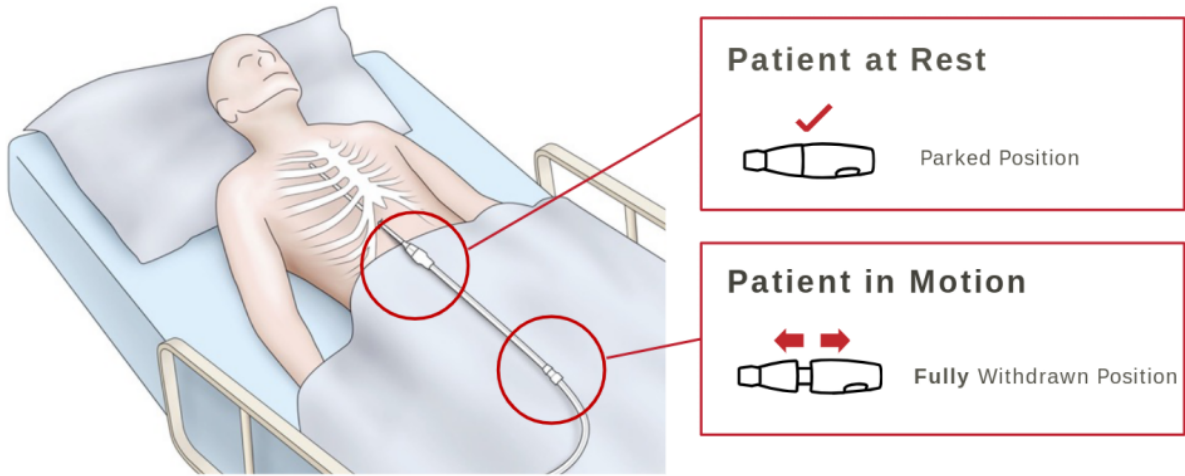
## PLEURAFLOW SYSTEM IN USE



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## PLEURAFLOW SYSTEM IN USE



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# ACTIVITY PLEURAFLOW ICU TRAINING WORKSHEET



## PLEURAFLOW ICU TRAINING WORKSHEET

5. The Proximal End is the end \_\_\_\_\_ to the patient.
6. The \_\_\_\_\_ is the end furthest from the patient.
7. When the Shuttle Guide is at the proximal end of Guide Tube (Clearance Wire & Loop are within the Chest Tube) it is in the \_\_\_\_\_ Position.
8. When the Shuttle Guide is at the distal end of Guide Tube (Clearance Wire & Loop are within the Guide Tube) it is in the \_\_\_\_\_ Position.

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## PLEURAFLOW ICU TRAINING WORKSHEET

9. Complete the following with regards to Patient Ambulation:

When the Patient needs to be moved (from the bed, from a chair, walking), you should \_\_\_\_\_ the Shuttle Guide to retract the Clearance Wire & Loop into the Guide Tube.

When the Patient is at rest (in bed – supine/raised, or in a chair), the Shuttle Guide should be in the \_\_\_\_\_, with the Clearance Wire & Loop in the Chest Tube.

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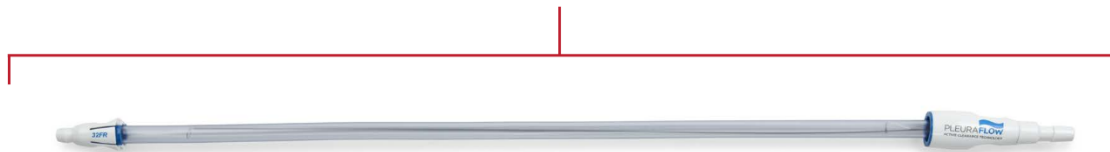


# SYSTEM FUNCTION & USE

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PleuraFlow Active Clearance **Guide Tube**



PleuraFlow **Chest Tube**



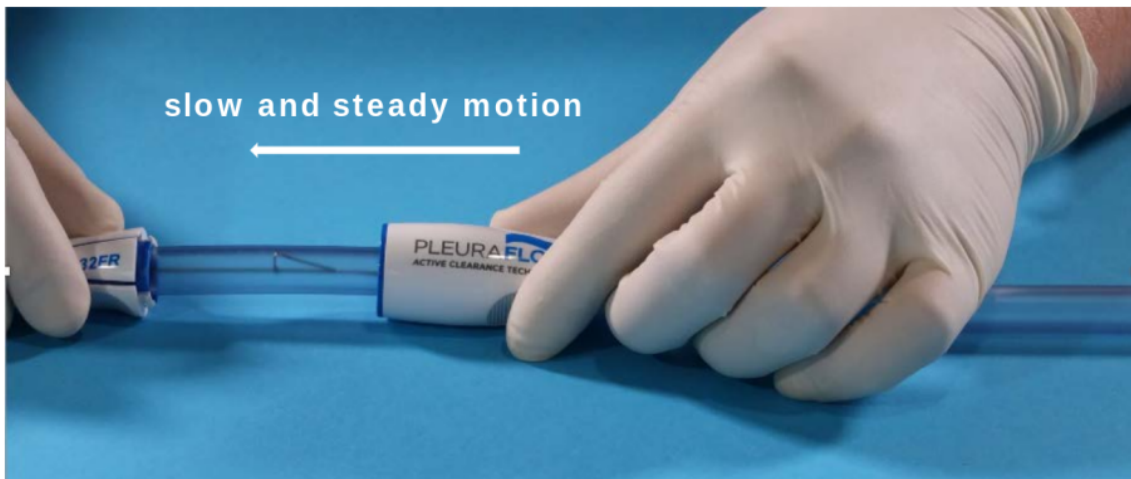
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To assemble, connect Chest Tube to proximal end of Guide Tube.  
Ensure **straight & flush connection**.

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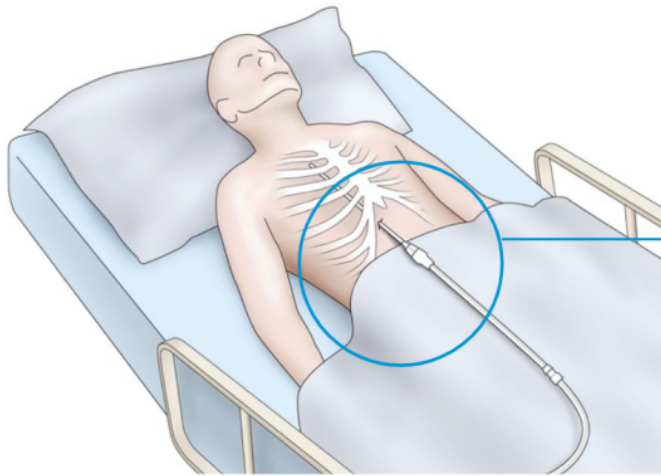


Move Clearance & Wire Loop into parked position.  
Ensure a **slow and steady motion**.

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## WHEN PATIENT ARRIVES IN THE ICU



### Parked Position

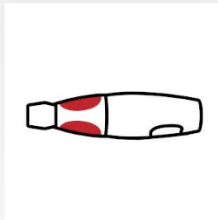


if not in Parked position,  
contact OR and inquire

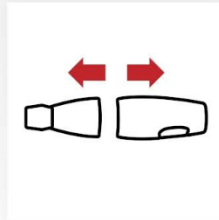
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## S-W-A-P

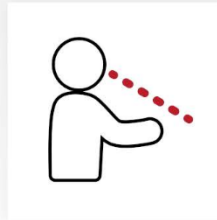
**S**queeze



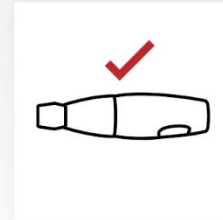
**W**ithdraw



**A**ssess



**P**ark



EXERCISE  
ACTUATE THE DEVICE



**Don't Wait.**

**Actuate.**



## ICU RECOMMENDED ACTUATION SCHEDULE

Phase	Timing	Frequency	Cycles / Hour
Early Bleeding	0-8 Hours	Every 15 Minutes*	4 per hour
Slowed Bleeding	8-24 Hours	Every 30 Minutes*	2 per hour
Serosanguineous Drainage	> 24 Hours	Every Hour*	1 per hour

\* This should be repeated as necessary to keep the tube patent and free of any occlusions.

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### ACTIVITY PLEURAFLOW ICU TRAINING WORKSHEET



## PLEURAFLOW ICU TRAINING WORKSHEET

10. Complete the words that correspond to each letter of an Actuation "S-W-A-P":

S \_\_\_\_\_

W \_\_\_\_\_

A \_\_\_\_\_

P \_\_\_\_\_

11. Complete the recommended Actuation Schedule:

Phase	Timing	Frequency
Early Bleeding	0-8 Hours	
Slowed Bleeding	8-24 Hours	Q30 min (2/hr)
Serosanguineous Drainage	> 24 Hours	Q60 min (1/hr)

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## CLOT CAN FORM ON CLEARANCE WIRE & LOOP



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# Dislodging Clot



ACTIVITY  
PLEURAFLOW ICU  
TRAINING WORKSHEET



## PLEURAFLOW ICU TRAINING WORKSHEET

12. Complete the following with regards to dislodging excessive clot:

- Clot may be seen adherent to the Clearance Wire & Loop during the process of clearing the Chest Tube. This is \_\_\_\_\_ and to be expected.
- If obstructive clot begins to accumulate, you should: \_\_\_\_\_ the Chest Tube or Guide Tube where the clot is accumulating or you should \_\_\_\_\_ the Clearance Wire through the Chest Tube or Guide Tube while advancing the Shuttle Guide.

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**Magnetic Release** – An Important Safety Feature

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# Magnetic Release



## EXERCISE MAGNETIC RELEASE



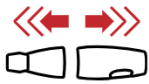
## MAGNETIC RELEASE – COMMON CAUSES IN THE ICU

1



**Inadequate actuation frequency**  
leading to clot formation

2



**Actuation motion done too quickly**  
go slow and steady

3



**Kinks, bends, or constriction**  
consider repositioning patient

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ADDITIONAL SUPPORT - THE ZIP





The ZIP is a reusable accessory.  
Clean with 70% isopropyl wipes  
**before** and **after** each use.



## ZIP WARNINGS & CONTRAINDICATORS

- 1 Do not place THE ZIP within 6 inches of a medical device with conductive and/or magnetic parts, such as:
  - implanted pulse generators
  - pacemakers
  - implantable defibrillators
- 2 Do not use if in proximity to an MRI
- 3 The ZIP is designed for use with the PleuraFlow System only
- 4 Use the ZIP only to **retract** the Clearance Wire & Loop

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## ACTIVITY PLEURAFLOW ICU TRAINING WORKSHEET





## PLEURAFLOW ICU TRAINING WORKSHEET

13. Decoupling is the separation of the internal and external magnets, disabling movement of the Clearance Wire & Loop. This can occur due to kinks, bends or chest tube constriction. (True or False)
14. The ZIP is an accessory that provides additional magnetic coupling strength when necessary. (True or False)

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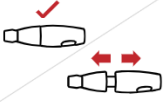


### PLEURAFLOW DEVICES ARE NOT MRI SAFE



- Patients may not enter an MRI room until the PleuraFlow device has been removed.
  - Retract the PleuraFlow clearance member fully from the patient.
  - Clamp the patients' chest tube following the usual ICU chest-clamping protocol.
  - Disconnect the PleuraFlow ACT system from the chest tube and discard it. A new sterile device may be reconnected later if clinically indicated.
- The chest tube may now be connected directly to the drainage canister with a regular chest drain extension tube from the canister manufacturer.



## PLEURAFLOW SYSTEM – ICU KEY TAKEAWAYS

-  Don't Wait. Actuate. Q15 – Q30 – Q60
-  Parked position the patient is at rest.  
Withdrawn when the patient needs to be moved.
-  Dislodge clots with a flick or squeeze
-  The ZIP provides additional magnetic coupling strength

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