



## Instructions Used to Achieve TLC, FRC or RV During CT Imaging

### Inspiratory CT (TLC)

#### **BREATHING INSTRUCTIONS:**

**For this scan I am going to ask you to take a couple of deep breaths in and out before we have you breathe all the way in and hold your breath.**

**Take a deep breath in** (*watch chest to ensure a deep breath in*)

**Let it out** (*watch chest to ensure air is out*)

**Take a deep breath in** (*watch chest to ensure a deep breath in*)

**Let it out** (*watch chest to ensure air is out*)

**Now breathe all the way IN...IN...IN and HOLD IT IN** (*watch chest to ensure a deep breath in as far as possible*)

**Keep holding your breath – DO NOT BREATHE!**

At end of scan or practice – **Breathe and relax.**

### Expiratory CT (FRC)

#### **BREATHING INSTRUCTIONS:**

**Now I am going to ask you to take a couple of deep breaths in and out before we have you relax and gently let your breath out, similar to the end of a sigh, and hold your breath.**

**Now we're ready again so please,**

**Take a deep breath in** (*watch chest to ensure a deep breath in*)

**Let it out** (*watch chest to ensure air is out*)

**Take a deep breath in** (*watch chest to ensure a deep breath in*)

**Let it out** (*watch chest to ensure air is out*)

**Take another deep breath in** (*watch chest to ensure a deep breath in*)

**Now relax, and gently let your breath out until your chest feels at rest** (*watch chest to ensure neutral position and relaxed exhalation before starting the scan*)

**Now hold your breath – DO NOT BREATHE!**

(*Watch to make sure chest is not moving, spine remains on the table, and patient is not shaking, then start scan and watch for these signs throughout study!*)

**Breathe normally**

## Expiratory CT (RV)

### **BREATHING INSTRUCTIONS:**

**Designate and practice hand signal before beginning (unclenching fist).**

For this last scan, I am going to ask you to take a couple of deep breaths in and out before letting your breath all the way out. You will hold your breath out when you have no more air left and quickly signal to me by unclenching your fist.

Now we're ready again so please,

**Take a deep breath in** (*watch chest to ensure a deep breath in*)

**Let it out** (*watch chest to ensure air is out*)

**Take a deep breath in** (*watch chest to ensure a deep breath in*)

**Let it out** (*watch chest to ensure air is out*)

**Take another deep breath in** (*watch chest to ensure a deep breath in*)

**Now let it all the way OUT...OUT...OUT...as much as possible, and signal to me when you have no more air left and HOLD IT OUT** (*watch chest to ensure all air is out and for hand signal before starting the scan*)

**Now hold your breath – DO NOT BREATHE!**

*At end of scan or practice – Breathe and relax.*