7. SmartMan Infant Manual –Trainer Menu

Current Version v2.0
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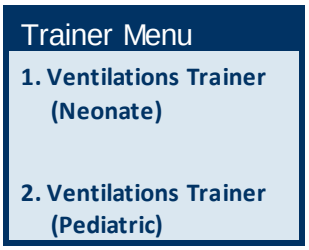
7.0 Infant Manual – Trainer Menu

The Trainer Menu provides special activities for skills which need to be mastered in order to be able to perform CPR on an infant at a high level. Since ventilations are so important to an infant, this section focus on activities designed to improve how you ventilate an infant.

This section is also where you set the lung capacity for all of the skills activities in the rest of the program.

From the Main Menu, the Trainer Menu is in the lower middle section. Depending on the product you purchased, the activities displayed may vary from those shown below.



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7.1 Ventilations Trainer (Neonate)

This activity provides real time feedback as you practice giving a ventilation to an infant. The screen displays the rate that the air is going into the lungs, the volume of the ventilation and a timer will display how long you were pushing air into the lungs.

This activity displays volume going into the on-screen cylinder as air goes into the lungs.

You decide whether to show the tidal nature of a breath or not. This will indicate whether you are allowing a full exhalation.

7.1.1 Aim of This Activity

This activity is designed to help improve how you deliver a ventilation to a neonate. You are to perform ventilations concentrating on the following:

1. Correct head position (neutral position)
2. Establishing an effective seal
3. Rate at which you deliver the air (half a second)
4. Volume of air you deliver (user selectable)
5. Not moving the position of the head on exhalation

This activity is not concerned about the timing between ventilations.

Full Rapid Release of BVM. The user selectable tidal display will indicate the flow rate of the ventilation delivery and whether a slow release of the BVM impeded full exhalation.

7.1.2 Run The Activity

The protocol for delivering a ventilation to a neonate is to deliver enough air to make the chest rise.

- From the Main Menu Click to Start the activity This takes you to the “Information Window”
- Click Open/Close button at left. The manikin is now “active and waiting”. You can either begin practicing ventilations at this stage or you can press the start button to have an option to show a graph of the tidal nature of the ventilation.
    - Option to Show Tidal Curve
    - Click the “Start” Button, Click the “Graph” Button
- Give a ventilation of about ½ of a second.

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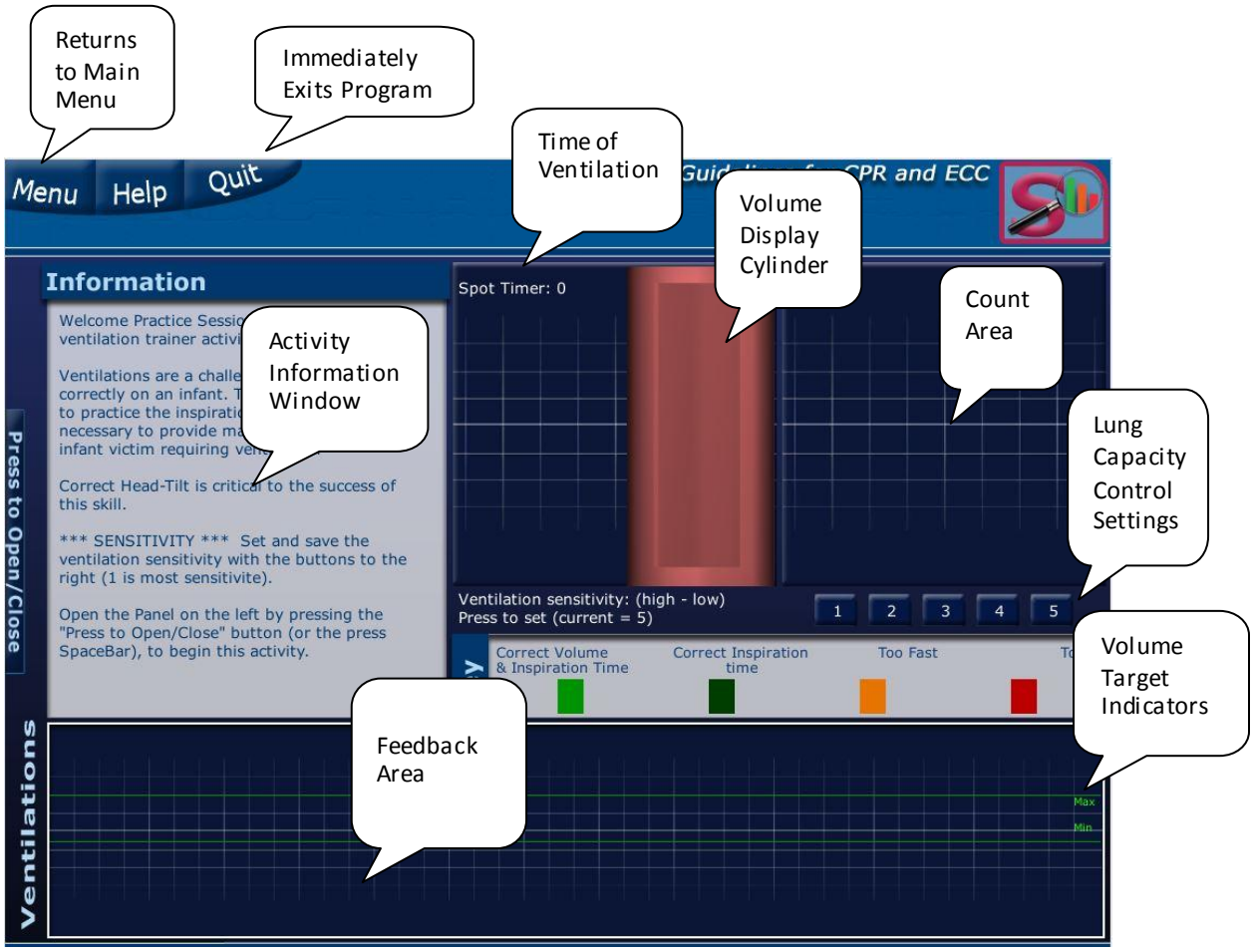
The Ventilations Trainer will run for about 70 seconds, then it will stop and display information about each ventilation that you performed. At the top of each ventilation, the exact time for how long you were pushing air into the lungs will be displayed.

If you want to stay in the activity and run it again, press the Re-set Button.

7.1.3 What You See In The Activity

The activity screen provides the feedback as you perform. It also displays information on how the skills were performed once they are finished.

Each section of the sections displays different information. The image below describes each.



7.1.4 Feedback During The Activity

The feedback is there to help you change if you are not performing as well as you would like. Each area of feedback is designed to give you information on a specific part of the ventilation which you must control in order to provide effective ventilations according to the Guidelines.

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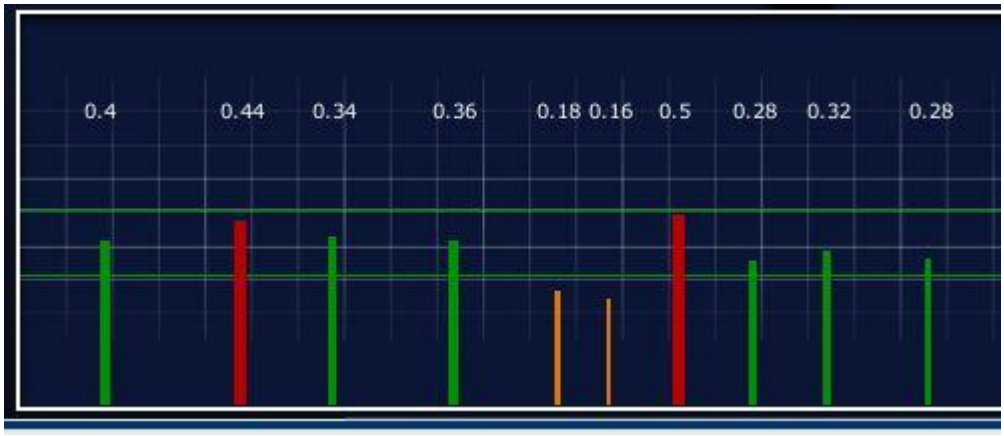
The Colored Bars

As you perform skills, a colored bar representing your ventilation will appear in the feedback area. Your target is to produce a ventilation of the correct volume (Between the two green lines in the feedback area). Also it must be delivered at the correct rate. The color of the bar will indicate both the rate and volume.

The space between the ventilation is the time elapsed since the previous ventilation. In this activity, you can wait as long as you wish. Concentrate on getting the rate and volume correct.

The activity will terminate in about 70 seconds. When it has finished, it will put the exact time for each ventilation on top of the bar. In the image below:



The Volume Display Cylinder

The Volume Display Cylinder will help you control the volume of your ventilation. It will fill up with a solid green bar as you push air into the lungs. When you begin the activity, there will be two dotted green lines on this cylinder. These green lines represent the target volume. The position of these lines will change depending on the setting of the lung capacity.

The Spot Timer

The spot timer begins running as soon as it detects air going into the lungs. It will stop when air stops being pushed into the lungs. The spot timer will indicate exactly how long you were inspiring the infant.

7.1.5 Show Tidal Information

A ventilation is considered to be tidal in nature. A good breath is a smooth even flow in and out with no air held inside of the lungs after release of the BVM. A full rapid release of the BVM at the maximum volume ensuress this will happen.

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Turn On Tidal Display

From the Second screen: SmartBaby BVM Trainer window, click on the “Start” Button. Then click on the “Graph” Button. This will create a blank window where the tidal curve will be displayed.

Turn off the tidal display.

Once the tidal area is showing, there is a button at the bottom of that window. Click on the “Information” Button and the window will close.

Return to Activity “Information” Screen

With the Tidal window open, you can return to the first page of this Activity by clicking on the “Press to Open/Close Button at the right of this window (about the middle of the screen).

7.1.6 Neonate Change Lung Capacity

At any stage when you are in the activity, you can change the lung capacity of the neonate. To do this you must be in the Ventilations Trainer (Neonate) Activity. You will see the number from 1 to 5 in the middle of the screen. 1 is the least capacity and 5 is the maximum capacity.

Click on the number you wish to use as the setting.

This will take a second or two. When the green lines for the target lung capacity at the bottom of the screen in the feedback area will change position you are ready to go.

It will also take you to the first screen in the Activity (Information)

This sets the lung capacity not only for the Ventilations Trainer Activity but for all of the ventilation and breath skills in the rest of the program as well.

7.2 Ventilations Trainer (Pediatric)

This activity provides real time feedback as you practice giving a ventilation to an infant. The screen displays the rate that the air is going into the lungs, the volume of the ventilation and a timer will display how long you were pushing air into the lungs.

This activity displays volume going into the on-screen cylinder as air goes into the lungs.

You decide whether to show the tidal nature of a breath or not. This will indicate whether you allowed a full exhalation.

7.2.1 Aim of This Activity

This activity is designed to help improve how you deliver a ventilation to a pediatric infant. The exercise is to perform ventilations concentrating on the following:

1. Correct head position (neutral position)
2. Establishing an effective seal
3. Rate at which you deliver the air (half a second)
4. Volume of air you deliver (user selectable)
5. Not moving the tilt of the head on exhalation

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This activity is not concerned about the timing between ventilations.

Full Rapid Release of BVM. The user selectable tidal display will indicate the eveness of the ventilation delivery and whether a slow release of the BVM impeded exhalation.

7.2.2 Run The Activity

The protocol for delivering a ventilation to a pediatric infant is to deliver enough air to make the chest rise.

- From the Main Menu, Click to Start the activity. This takes you to the "Information Window"
- Click Open/Close button at left. The manikin is now "active and waiting". You can either begin practicing ventilations at this stage or you can press the start button to have an option to show a graph of the tidal nature of the ventilation.
    - Option to Show Tidal Curve
    - Click the "Start" Button, Click the "Graph" Button
- Give a ventilation of about ½ of a second.

The Ventilations Trainer will run for about 70 seconds, then it will stop and display information about each ventilation that you performed. At the top of each ventilation, the exact time for how long you were pushing air into the lungs will be listed.

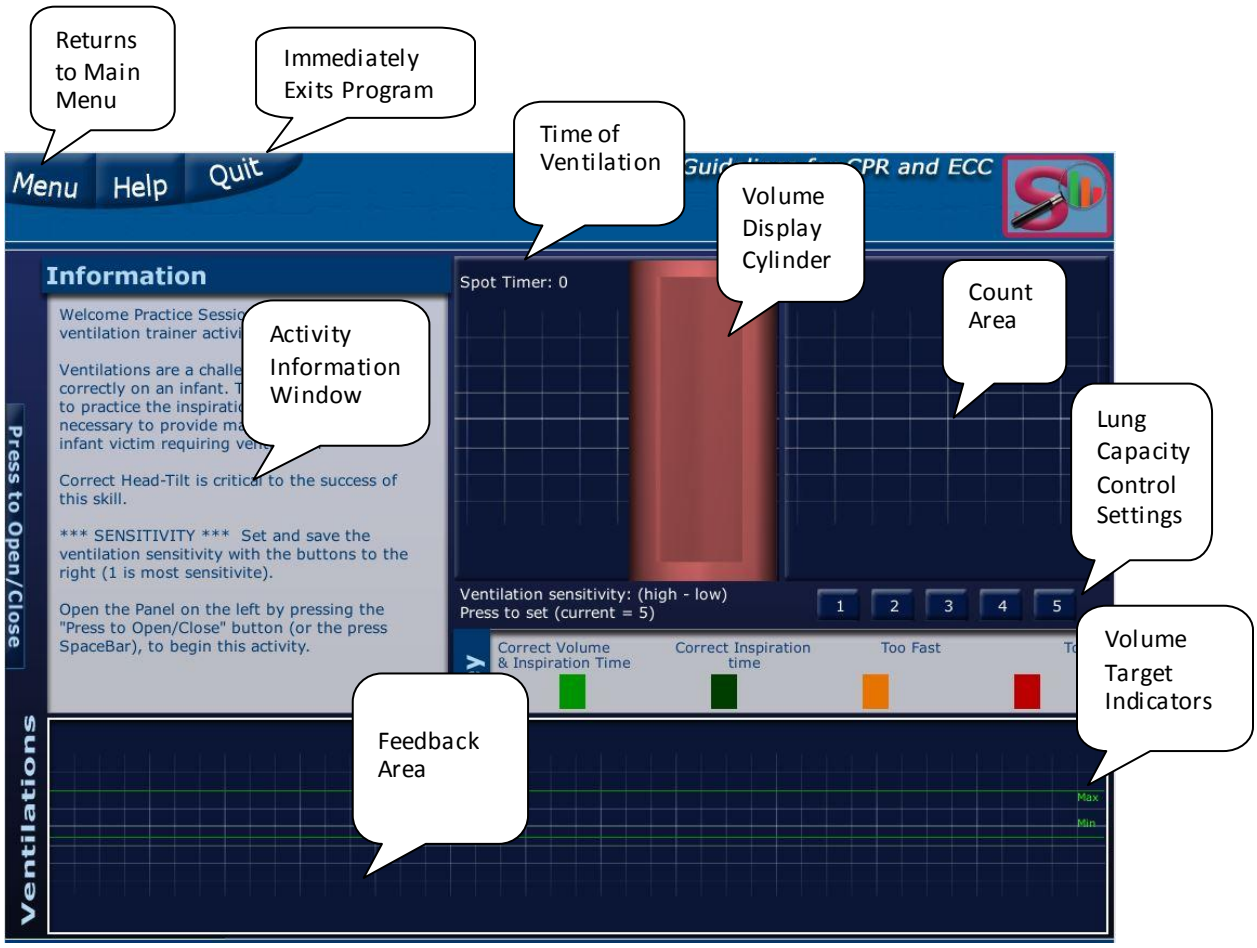
If you want to stay in the activity and run it again, press the Re-set Button.

7.2.3 What You See In The Activity

The activity screen provides the feedback as you perform. It also displays information on how the skills were performed once they are finished.

Each section of the sections displays different information. The image below describes each.

Top



7.2.4 Feedback During The Activity

The feedback is there to help you change if you are not performing as well as you would like. Each area of feedback is designed to give you information on a specific part of the ventilation which you must control to provide ventilations according to the Guidelines.

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The Colored Bars

As you perform skills, a colored bar representing your ventilation will appear in the feedback area. Your target is to produce a ventilation of the correct volume (Between the two green lines in the feedback area). Also it must be delivered at the correct rate. The color of the bar will indicate both the rate and volume.

The space between the ventilation is the time elapsed since the previous ventilation. In this activity, you can wait as long as you wish. Concentrate on getting the rate and volume correct.

The activity will terminate in about 70 seconds. When it has finished, it will put the exact time for each ventilation on top of the bar. In the image below:

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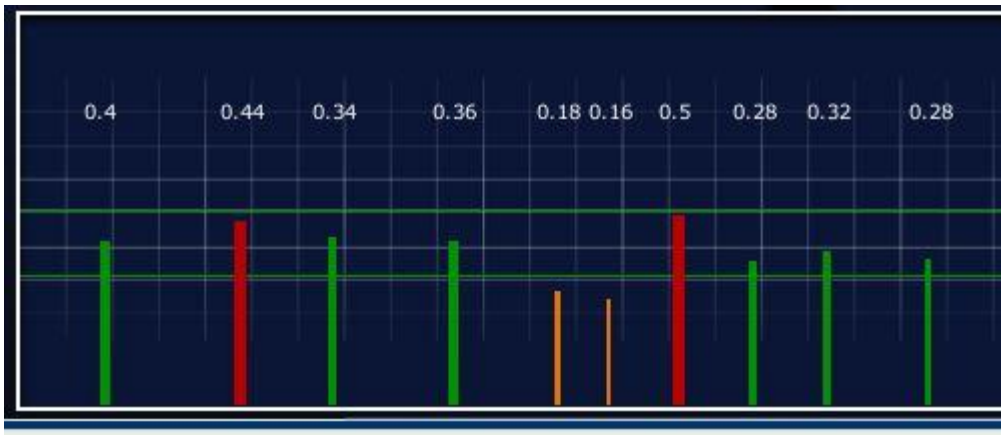

The Volume Display Cylinder

The Volume Display Cylinder will help you control the volume of your ventilation. It will fill up with a solid green bar as you push air into the lungs. When you begin the activity, there will be two dotted green lines on this cylinder. These green lines represent the target volume. The position of these lines will change depending on the setting of the lung capacity.

The Spot Timer

The spot timer begins running as soon as it detects air going into the lungs. It will stop when there is a stop in air being pushed into the lungs. The spot timer will indicate exactly how long you were ventilating the infant.

7.2.5 Show Tidal Information

A ventilation is considered to be tidal in nature. A good breath is a smooth even flow in and out with no air held inside of the lungs. A full rapid release of the BVM at the point of maximum volume allows this to happen.

Turn On Tidal Display

From the Second screen: SmartBaby BVM Trainer window, click on the “Start” Button. Then click on the “Graph” Button. This will create a blank window where the tidal curve will be displayed.

Top

Turn off the tidal display.

Once the tidal area is showing, there is a button at the bottom of that window. Click on the “Information” Button and the window will close.

Return to Activity “Information” Screen

With the Tidal Window open, you can return to the first page of this Activity by clicking on the “Press to Open/Close Button at the right of this window (about the middle of the screen).

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7.2.6 Pediatric Change Lung Capacity

At any stage when you are in the activity, you can change the lung capacity of the pediatric infant. To do this you must be in the Ventilations Trainer (Pediatric) Activity. You will see the number from 1 to 5 in the middle of the screen. 1 is the least capacity and 5 is the maximum capacity.

Click on the number you wish to use as the setting.

This will take a second or two. Then the green lines for the target lung capacity at the bottom of the screen in the feedback area will change position.

It will also take you to the first screen in the Activity (Information)

This sets the lung capacity not only for the Ventilations Trainer Activity but for all of the breath and ventilation skills in the rest of the program as well.

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