

CLINICAL SCENARIO

Oxygen Concentrator & Flow Splitter 1

NAME: _____ DATE: _____

PURPOSE: Teaching / Practice
 Test Result: Pass / Fail / Retest

Scenario Overview

A 4-day old, 2.7 kg baby in the nursery has fast breathing and difficulty sucking. The participant should assess the baby and give oxygen, then wean from oxygen as appropriate and finally clean the equipment.

Reminder to Facilitator

Facilitator team to decide what is essential for participants' understanding; we suggest facilitator team underline or mark these essential items in the **INFORMATION/RESULT** column before beginning the session to ensure these are highlighted in that section.

ALWAYS REMEMBER THE CANDIDATE SHOULD START WITH THE 4 Ss

Safety of the staff and patient

Setting for the environment and patient

Stimulate the patient for response

Shout for help

Begin Scenario

SETTING THE SCENE: A 2.7 kg baby aged 4 days is in the nursery, and the mother is worried because the baby is breathing fast and having difficulty sucking. He feels hot. **WHAT DO YOU DO?**

#	ACTION REQUIRED	INFORMATION / RESULT	COMMENTS:
1	Observe baby	Baby looks small in size, is breathing fast	
2	Baby is with mother in Kangaroo Mother Care. To examine him properly he needs to be placed on a surface (setting) where he can be kept warm and observe responsiveness (stimulate)	The baby makes some movements in response to gentle stimulation	
3	Call for help	Help is on the way	
4	Open the airway (neutral position) and Look, Listen, and Feel for breathing	<ul style="list-style-type: none">The mouth and nose are clearThe baby is breathing fast	
5	Check for other signs of respiratory distress: Head nodding Crackles Grunting Nasal flaring Cyanosis Respiratory rate Pulse oximetry Indrawing / acidotic breathing What is the normal range of SpO ₂ ?	The baby's colour is grey. There is marked chest indrawing and on auscultation both lungs are full of crepitations: <ul style="list-style-type: none">RR is 80 b/minSpO₂ = 88% SpO ₂ of more than 95% is considered normal range	
6	How much oxygen do you give the baby?	0.5 L/min	
7	Please get the oxygen concentrator ready to give oxygen to the baby	<ul style="list-style-type: none">Plug oxygen concentrator's power cable into wall and turn on power at socketSet the flow to 0.5 L/minTurn it on and wait for the indicator light to turn greenCheck that no alarms sound on the machine	

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#	ACTION REQUIRED	INFORMATION / RESULT	COMMENTS:
8	How will you give oxygen to the baby? Please show me how you apply the prongs	<ul style="list-style-type: none"> Through correct sized nasal prongs Correct size is chosen and taped into place Tubing is kept out of baby's grasp 	
9	The baby is now receiving 0.5 L/min oxygen. What do you do?	Recheck the SpO ₂ after 10 minutes	
10	The SpO ₂ is now 85%. What do you do now?	Increase the oxygen to 1 L/min	
11	The SpO ₂ is now stable at 93%. What do you do next?	Document in the notes the date, time, what you have done, and the pre and post oxygen SpO ₂	
12	How often will you monitor the baby and what will you do?	<p>Monitor according to clinical condition OR at least every 4 hours:</p> <ul style="list-style-type: none"> Vital signs – RR, HR, BP (if possible), Temperature Work of breathing (indrawing, colour, restlessness, grunting) and chest auscultation 	
13	The baby has been on O ₂ for 24 hours and is stable, the work of breathing is less, and SpO ₂ has remained at 93% for 12 hours Now what do you do?	<ul style="list-style-type: none"> Reduce oxygen flow by 0.5 L/min, rechecking saturations and clinical conditions after 15 minutes If saturations and condition remain stable, continue reducing oxygen flow by 0.5 L/min, rechecking SpO₂ 15 minutes after each reduction As saturations and clinical condition are stable, remove patient from oxygen 	
14	What do you do next and in what order?	<ul style="list-style-type: none"> Remove nasal prongs from oxygen port Document your actions and the SpO₂ 	
15	How do you clean the nasal prongs and tubing?	<ul style="list-style-type: none"> If reusing, follow hospital protocol for disinfection and drying of tubing If not reusing, discard appropriately 	
16	What do you do with the oxygen concentrator?	<ul style="list-style-type: none"> Always turn off and unplug before cleaning Disinfect the oxygen flowmeter controls using gauze and alcohol 	
17	Please show me what needs regular cleaning on the oxygen concentrator	<ul style="list-style-type: none"> The housing should be cleaned according to ward guidelines for disinfecting surfaces Flowmeter controls and LEDs should be cleaned using alcohol after every use 	
18	How do you clean the gross particle filter?	<p>Gross particle filter, to clean:</p> <ul style="list-style-type: none"> Pull gently from the back of the oxygen concentrator Replace with spare filter Put dirty filter in cool, soapy water and swirl gently to remove debris Remove from soapy water and place in shaded area until completely dry Do not squeeze, do not use when wet Store as spare filter until next cleaning is needed 	

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#	ACTION REQUIRED	INFORMATION / RESULT	COMMENTS:
19	Please show me how you would clean the bacterial filter	<p>Bacterial filter, this is internal to the machine and is made of filter papers or a thick white felt filter:</p> <ul style="list-style-type: none"> • Do not wash this filter in water • Remove it and shake it outside to get rid of the dust in it until the colour has lightened • Replace or set as a spare filter 	
20	How often should filters be cleaned?	<ul style="list-style-type: none"> • Internal and external filters should be checked weekly, with cleaning provided every two weeks or more frequently as needed • Never place a wet filter in an oxygen concentrator 	

THANK YOU

 REMIND PARTICIPANTS:

- Nearly all sick infants benefit from oxygen, especially those with respiratory distress.
- Hypoxia contributes to both morbidity and mortality

 INFECTION PREVENTION AND CONTROL

Be sure to wash your hands thoroughly and to put on gloves before handling the baby or any equipment. After every use, remember to disinfect all consumables and equipment before using them again.

Scenario end

CLINICAL SCENARIO

Oxygen Concentrator & Flow Splitter 2

NAME: _____ DATE: _____

PURPOSE: Teaching / Practice
 Test Result: Pass / Fail / Retest

Scenario Overview

A 3-day old baby in the nursery is breathing very fast. The participant should assess the baby and give oxygen via a flow splitter. Problems with oxygen flow are managed, then the baby is weaned from oxygen and the equipment cleaned after use.

Reminder to Facilitator

Facilitator team to decide what is essential for participants' understanding; we suggest facilitator team underline or mark these essential items in the **INFORMATION/RESULT** column before beginning the session to ensure these are highlighted in that section.

ALWAYS REMEMBER THE CANDIDATE SHOULD START WITH THE 4 Ss

Safety of the staff and patient

Setting for the environment and patient

Stimulate the patient for response

Shout for help

Begin Scenario

SETTING THE SCENE: A 3 kg baby boy aged 2 days is in the nursery and the mother is worried because the baby is breathing fast. **WHAT DO YOU DO?**

#	ACTION REQUIRED	INFORMATION / RESULT	COMMENTS:
1	Observe baby	Baby looks term and is breathing fast	
2	Baby is with mother in Kangaroo Mother Care. To examine him properly he needs to be placed on a surface (setting) where he can be kept warm and observe responsiveness (stimulate)	The baby responds to gentle stimulation	
3	Call for help	Help is on the way	
4	Open the airway (neutral position) and Look, Listen, and Feel for breathing	<ul style="list-style-type: none">The mouth and nose are clearThe baby is breathing fast	
5	Check for other signs of respiratory distress: Head nodding Crackles Grunting Nasal flaring Cyanosis Respiratory rate Pulse oximetry Indrawing / acidotic breathing What is the normal range of SpO ₂ ?	The baby's colour is grey. There is marked chest indrawing and on auscultation both lungs are full of crepitations: <ul style="list-style-type: none">RR is 70 b/minSpO₂ = 90% SpO ₂ of more than 95% is considered normal range	
6	How much oxygen do you give this baby?	0.5 L/min	
7	All concentrators are in use, what can you do?	Use a flow splitter	
8	How much oxygen can each baby receive from this flow splitter?	Max 2 L/min	

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#	ACTION REQUIRED	INFORMATION / RESULT	COMMENTS:
9	Please set up the flow splitter	<ul style="list-style-type: none"> • Ensure oxygen splitter is secure and the flow regulators are easily adjustable • Make sure flow regulators are open • Connect oxygen splitter tubing from oxygen outlet source to oxygen splitter inlet port • Turn on oxygen at source with as high a flow as the concentrator can produce, the flowmeter beads on the oxygen splitter should pop up • Adjust each port regulator to the required flow rate • Make sure the flow has not changed in any of the other ports 	
10	There is no flow from all the ports of the flow splitter What do you do?	<ul style="list-style-type: none"> • Check that oxygen source is on and oxygen is flowing from the outlet port • Check that oxygen splitter tubing is secure 	
11	Now there is no flow from one port, but other ports are functioning What do you do?	<ul style="list-style-type: none"> • Remove visible debris from the outlet port that is blocked • Disinfect with alcohol after debris has been removed 	
12	The oxygen is now flowing in all ports. How will you give oxygen to the baby? Please show me how you apply the prongs	<ul style="list-style-type: none"> • Through correct sized nasal prongs • Correct size is chosen and taped into place • Tubing is kept out of baby's grasp 	
13	The baby is now receiving 0.5 L/min oxygen. What do you do?	Recheck the SpO ₂ after 10 minutes	
14	The SpO ₂ is now stable at 95%. What do you do next?	Document in the notes the date, time, what you have done, and the pre and post oxygen SpO ₂	
15	How often will you monitor the baby and what will you do?	<p>Monitor according to clinical condition OR at least every 4 hours:</p> <ul style="list-style-type: none"> • Vital signs – RR, HR, BP (if possible), Temperature • Work of breathing (indrawing, colour, restlessness, grunting) and chest auscultation 	
16	What else should you consider doing?	Administer nasal saline drops 4 hourly or more frequently if needed	
17	Shortly after attaching the baby to oxygen, the concentrator starts to alarm What do you do now?	<ul style="list-style-type: none"> • Check if the concentrator is still on • Check that all tubing to the baby and splitter is not kinked and all connections are airtight 	
18	The baby has been on O ₂ for 24 hours and is stable, the work of breathing is less, and SpO ₂ has remained at 95% for 12 hours Now what do you do?	As saturations and clinical condition are stable, remove patient from oxygen	
19	What do you do next and in what order?	<ul style="list-style-type: none"> • Remove nasal prongs from oxygen port • Document your actions and the SpO₂ 	
20	How do you clean the nasal prongs and tubing?	<ul style="list-style-type: none"> • If reusing, follow hospital protocol for disinfection and drying of tubing • If not reusing, discard appropriately 	
21	What do you do with the oxygen concentrator?	<ul style="list-style-type: none"> • Always turn off and unplug before cleaning • Disinfect the oxygen flowmeter controls using gauze and alcohol 	
22	Please show me what needs regular cleaning on the oxygen concentrator	<ul style="list-style-type: none"> • The housing should be cleaned according to ward guidelines for disinfecting surfaces • Flowmeter controls and LEDs should be cleaned using alcohol after every use 	

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#	ACTION REQUIRED	INFORMATION / RESULT	COMMENTS:
23	How do you clean the gross particle filter?	Gross particle filter, to clean: <ul style="list-style-type: none"> • Pull gently from the back of the oxygen concentrator • Replace with spare filter • Put dirty filter in cool, soapy water and swirl gently to remove debris • Remove from soapy water and place in shaded area until completely dry • Do not squeeze, do not use when wet • Store as spare filter until next cleaning is needed 	
24	Please show me how you would clean the bacterial filter	Bacterial filter, this is internal to the machine and is made of filter papers or a thick white felt filter: <ul style="list-style-type: none"> • Do not wash this filter in water • Remove it and shake it outside to get rid of the dust in it until the colour has lightened • Replace or set as a spare filter 	
25	How often should filters be cleaned?	<ul style="list-style-type: none"> • Internal and external filters should be checked weekly, with cleaning provided every two weeks or more frequently as needed • Never place a wet filter in an oxygen concentrator 	
26	Please show me how you would clean the flow splitter	Clean the dials and housing with 70% alcohol	

THANK YOU

i DISCUSS WITH PARTICIPANTS: IS OXYGEN HARMFUL TO BABIES?

If the oxygen saturations are not monitored appropriately or the flow rate is inadvertently changed there is a risk that the baby will receive too much oxygen. Whilst oxygen can be lifesaving, too much can cause problems especially in premature babies, including:

- **Retinopathy of prematurity:** in premature babies, high blood oxygen levels can result in development of abnormal blood vessels on the retina, causing potential visual impairment or even blindness
- **Chronic lung disease:** prolonged use of oxygen in premature babies causes lung fibrosis through inflammatory processes

! INFECTION PREVENTION AND CONTROL

Be sure to wash your hands thoroughly and to put on gloves before handling the baby or any equipment. After every use, remember to disinfect all consumables and equipment before using them again.

Scenario end

CLINICAL SCENARIO

Oxygen Concentrator & Flow Splitter 3A

NAME: _____ DATE: _____

PURPOSE: Teaching / Practice
 Test Result: Pass / Fail / Retest

Scenario Overview

A 10-day old baby weighing 3 kg has diarrhoea, fast breathing and difficulty breast feeding. The baby must be assessed, oxygen saturations measured, and oxygen given. When the oxygen saturations improve and the baby is stable for 24 hours, oxygen is weaned and finally removed. The nasal prongs and oxygen concentrator must be cleaned.

Reminder to Facilitator

Facilitator team to decide what is essential for participants' understanding; we suggest facilitator team underline or mark these essential items in the **INFORMATION/RESULT** column before beginning the session to ensure these are highlighted in that section.

ALWAYS REMEMBER THE CANDIDATE SHOULD START WITH THE 4 Ss

Safety of the staff and patient

Setting for the environment and patient

Stimulate the patient for response

Shout for help

Begin Scenario

SETTING THE SCENE: A 3 kg baby aged 10 days is in the nursery and the mother is worried because the baby is breathing fast and has diarrhoea. He is having difficulty sucking. **WHAT DO YOU DO?**

#	ACTION REQUIRED	INFORMATION / RESULT	COMMENTS:
1	Observe baby	Baby looks term and is breathing fast	
2	Baby is with mother in Kangaroo Mother Care. To examine him properly he needs to be placed on a surface (setting) where he can be kept warm and observe responsiveness (stimulate)	The baby makes some movements in response to gentle stimulation	
3	Call for help	Help is on the way	
4	Open the airway (neutral position) and Look, Listen, and Feel for breathing	<ul style="list-style-type: none">The mouth and nose are clearThe baby is breathing fast	
5	Check for other signs of respiratory distress: Head nodding Crackles Grunting Nasal flaring Cyanosis Respiratory rate Pulse oximetry Indrawing / acidotic breathing This baby is sick and needs further evaluation, meanwhile please put the baby on oxygen	The baby's colour is pink. There is no chest indrawing and on auscultation both lungs are clear: <ul style="list-style-type: none">RR is 68 b/minSpO₂ = 90%	
6	How much oxygen do you give this baby?	0.5 L/min	
7	Please get the oxygen concentrator ready to give oxygen to the baby	<ul style="list-style-type: none">Plug oxygen concentrator's power cable into wall and turn on power at socketSet the flow to 0.5 L/minTurn it on and wait for the indicator light to turn greenCheck that no alarms sound on the machine	

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#	ACTION REQUIRED	INFORMATION / RESULT	COMMENTS:
8	How much oxygen can each baby receive from this flow splitter?	Max 2 L/min	
9	How will you give oxygen to the baby? Please show me how you apply the prongs	<ul style="list-style-type: none"> • Through correct sized nasal prongs • Correct size is chosen and taped into place • Tubings are kept out of baby's grasp 	
10	The baby is now receiving 0.5 L/min oxygen. What do you do?	Recheck the SpO ₂ after 10 minutes	
11	The SpO ₂ is now stable at 93%. Now what do you do?	Document in the notes the date, time, what you have done, and the pre and post oxygen SpO ₂	
12	How often will you monitor the baby and what will you do?	<p>Monitor according to clinical condition OR at least every 4 hours:</p> <ul style="list-style-type: none"> • Vital signs – RR, HR, BP (if possible), Temperature • Work of breathing (indrawing, colour, restlessness, grunting) and chest auscultation 	
13	What else should you consider doing?	Administer nasal saline drops 4 hourly or more frequently if needed	
14	The baby has been on O ₂ for 16 hours and is stable, the work of breathing is less, and SpO ₂ has remained at 94% for 12 hours Now what do you do?	<ul style="list-style-type: none"> • As saturations and clinical condition are stable, remove patient from oxygen • Recheck SpO₂ after 10 mins 	
15	What do you do next and in what order?	<ul style="list-style-type: none"> • Remove nasal prongs from oxygen port • Document your actions and the SpO₂ 	
16	How do you clean the nasal prongs and tubing?	<ul style="list-style-type: none"> • If reusing, follow hospital protocol for disinfection and drying of tubing • If not reusing, discard appropriately 	
17	What do you do with the oxygen concentrator?	<ul style="list-style-type: none"> • Always turn off and unplug before cleaning • Disinfect the oxygen flowmeter controls using gauze and alcohol 	
18	Please show me what needs regular cleaning on the oxygen concentrator	<ul style="list-style-type: none"> • The housing should be cleaned according to ward guidelines for disinfecting surfaces • Flowmeter controls and LEDs should be cleaned using alcohol after every use 	
19	How do you clean the gross particle filter?	<p>Gross particle filter, to clean:</p> <ul style="list-style-type: none"> • Pull gently from the back of the oxygen concentrator • Replace with spare filter • Put dirty filter in cool, soapy water and swirl gently to remove debris • Remove from soapy water and place in shaded area until completely dry • Do not squeeze, do not use when wet • Store as spare filter until next cleaning is needed 	
20	Please show me how you would clean the bacterial filter	<p>Bacterial filter, this is internal to the machine and is made of filter papers or a thick white felt filter:</p> <ul style="list-style-type: none"> • Do not wash this filter in water • Remove it and shake it outside to get rid of the dust in it until the colour has lightened • Replace or set as a spare filter 	

continue to the following page 

#	ACTION REQUIRED	INFORMATION / RESULT	COMMENTS:
21	How often should filters be cleaned?	<ul style="list-style-type: none"> Internal and external filters should be checked weekly, with cleaning provided every two weeks or more frequently as needed Never place a wet filter in an oxygen concentrator 	

THANK YOU

i REMIND PARTICIPANTS:

- **How an oxygen concentrator works:** it concentrates 85 - 100% oxygen from room air using two sieve beds made of a substance that absorbs nitrogen
- **Where to place an oxygen concentrator:** the oxygen concentrator should be in a clear space close to the patient. The concentrator must be placed between 30 - 35 cm from the wall, to allow good ventilation and to not overheat

! INFECTION PREVENTION AND CONTROL

Be sure to wash your hands thoroughly and to put on gloves before handling the baby or any equipment. After every use, remember to disinfect all consumables and equipment before using them again.

Scenario end

CLINICAL SCENARIO

Oxygen Concentrator & Flow Splitter 3B

NAME: _____ DATE: _____

PURPOSE: Teaching / Practice
 Test Result: Pass / Fail / Retest

Scenario Overview

Another baby requires oxygen but there is no free oxygen concentrator. The participant should set up a flow splitter with the oxygen concentrator, deal with a blocked outlet oxygen port, give oxygen to and monitor the baby. When the concentrator alarms go off the participant should know why and clean the filters. When no longer required the concentrator and all tubing must be cleaned.

Reminder to Facilitator

Facilitator team to decide what is essential for participants' understanding; we suggest facilitator team underline or mark these essential items in the **INFORMATION/RESULT** column before beginning the session to ensure these are highlighted in that section.

ALWAYS REMEMBER THE CANDIDATE SHOULD START WITH THE 4 Ss

Safety of the staff and patient

Setting for the environment and patient

Stimulate the patient for response

Shout for help

Begin Scenario

SETTING THE SCENE: Another baby requires oxygen but there is no free oxygen concentrator. **WHAT DO YOU DO?**

#	ACTION REQUIRED	INFORMATION / RESULT	COMMENTS:
1	All concentrators are in use, what can you do?	Use a flow splitter	
2	How much oxygen can each baby receive from this flow splitter?	Max 2 L/min	
3	Please set up the flow splitter	<ul style="list-style-type: none">• Ensure oxygen splitter is secure and the flow regulators are easily adjustable• Make sure flow regulators are open• Connect oxygen splitter tubing from oxygen outlet source to oxygen splitter inlet port• Turn on oxygen at source with as high a flow as the concentrator can produce, the flowmeter beads on the oxygen splitter should pop up• Adjust each port regulator to the required flow rate• Make sure the flow has not changed in any of the other ports	
4	There is no flow from all the ports of the flow splitter What do you do?	<ul style="list-style-type: none">• Check that oxygen source is on and oxygen is flowing from the outlet port• Check that oxygen splitter tubing is secure	
5	Now there is no flow from one port, but other ports are functioning What do you do?	<ul style="list-style-type: none">• Remove visible debris from the outlet port that is blocked• Disinfect with alcohol after debris has been removed	
6	The oxygen is now flowing in all ports. How will you give oxygen to the baby? Please show me how you apply the prongs	<ul style="list-style-type: none">• Through correct sized nasal prongs• Correct size is chosen and taped into place• Tubing is kept out of baby's grasp	

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#	ACTION REQUIRED	INFORMATION / RESULT	COMMENTS:
7	Please get the oxygen concentrator ready to give oxygen to the baby	<ul style="list-style-type: none"> • Plug oxygen concentrator's power cable into wall and turn on power at socket • Set the flow to 0.5 L/min • Turn it on and wait for the indicator light to turn green • Check that no alarms sound on the machine 	
8	The baby is now receiving 0.5 L/min oxygen. What do you do?	Recheck the SpO ₂ after 10 minutes	
9	The SpO ₂ is now stable at 95%. What do you do next?	Document in the notes the date, time, what you have done, and the pre and post oxygen SpO ₂	
10	How often will you monitor the baby and what will you do?	<p>Monitor according to clinical condition OR at least every 4 hours:</p> <ul style="list-style-type: none"> • Vital signs – RR, HR, BP (if possible), Temperature • Work of breathing (indrawing, colour, restlessness, grunting) and chest auscultation 	
11	What else should you consider doing?	Administer nasal saline drops 4 hourly or more frequently if needed	
12	Shortly after attaching the baby to oxygen, the concentrator starts to alarm What do you do now?	<ul style="list-style-type: none"> • Check if the concentrator is still on • Check that all tubing to the baby and splitter is not kinked and all connections are airtight 	
13	The concentrator is on, but the low oxygen concentration alarm is displayed	<ul style="list-style-type: none"> • Check the filters for dust and debris and if present, replace the filters with spare, clean filters • Allow the machine to run for 10 minutes 	
14	The baby has been on O ₂ for 24 hours and is stable, the work of breathing is less, and SpO ₂ has remained at 95% for 12 hours Now what do you do?	As saturations and clinical condition are stable, remove patient from oxygen	
15	What do you do next and in what order?	<ul style="list-style-type: none"> • Remove nasal prongs from oxygen port • Document your actions and the SpO₂ 	
16	How do you clean the nasal prongs and tubing?	<ul style="list-style-type: none"> • If reusing, follow hospital protocol for disinfection and drying of tubing • If not reusing, discard appropriately 	
17	What do you do with the oxygen concentrator?	<ul style="list-style-type: none"> • Always turn off and unplug before cleaning • Disinfect the oxygen flowmeter controls using gauze and alcohol 	
18	Please show me what needs regular cleaning on the oxygen concentrator	<ul style="list-style-type: none"> • The housing should be cleaned according to ward guidelines for disinfecting surfaces • Flowmeter controls and LEDs should be cleaned using alcohol after every use 	
19	How do you clean the gross particle filter?	<p>Gross particle filter, to clean:</p> <ul style="list-style-type: none"> • Pull gently from the back of the oxygen concentrator • Replace with spare filter • Put dirty filter in cool, soapy water and swirl gently to remove debris • Remove from soapy water and place in shaded area until completely dry • Do not squeeze, do not use when wet • Store as spare filter until next cleaning is needed 	

continue to the following page 

#	ACTION REQUIRED	INFORMATION / RESULT	COMMENTS:
20	Please show me how you would clean the bacterial filter	Bacterial filter, this is internal to the machine and is made of filter papers or a thick white felt filter: <ul style="list-style-type: none"> • Do not wash this filter in water • Remove it and shake it outside to get rid of the dust in it until the colour has lightened • Replace or set as a spare filter 	
21	How often should filters be cleaned?	<ul style="list-style-type: none"> • Internal and external filters should be checked weekly, with cleaning provided every two weeks or more frequently as needed • Never place a wet filter in an oxygen concentrator 	
22	Please show me how you would clean the flow splitter	Clean the dials and housing with 70% alcohol	

THANK YOU

i DISCUSS WITH PARTICIPANTS: IS OXYGEN HARMFUL TO BABIES?

If the oxygen saturations are not monitored appropriately or the flow rate is inadvertently changed there is a risk that the baby will receive too much oxygen. Whilst oxygen can be lifesaving, too much can cause problems especially in premature babies, including:

- **Retinopathy of prematurity:** in premature babies, high blood oxygen levels can result in development of abnormal blood vessels on the retina, causing potential visual impairment or even blindness
- **Chronic lung disease:** prolonged use of oxygen in premature babies causes lung fibrosis through inflammatory processes

! INFECTION PREVENTION AND CONTROL

Be sure to wash your hands thoroughly and to put on gloves before handling the baby or any equipment. After every use, remember to disinfect all consumables and equipment before using them again.

Scenario end

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Newborn Essential Solutions and Technologies–Education Clinical Scenarios:
Oxygen Concentrator & Flow Splitter

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