

# Home Oxygen Tester Handbook

## 2023 Edition



**Important:**

*This handbook is a guide to assist you with oxygen testing. Check the [SAIL Home Oxygen Policy](#) and your local Policy and Procedure Manuals to ensure you are following protocol. SAIL Policy requires testers to be Saskatchewan Health Authority (SHA) employees.*

*It is the responsibility of the individual completing home oxygen testing to work within their scope of practice (as guided by their regulatory body or supervisor/management) and job responsibilities in their current work environment.*

## About the Saskatchewan Aids Independent (SAIL) Home Oxygen Program

The SAIL Home Oxygen Program provides funding towards the cost of prescribed home oxygen therapy for clients who meet the program criteria. Testing for the program is provided through Saskatchewan Health Authority (SHA) employed qualified health professionals who are trained in home oxygen therapy. Assessment and treatment is delivered through private oxygen suppliers contracted by Saskatchewan Health.

The Lung Saskatchewan is contracted by SAIL (Saskatchewan Aids to Independent Living) to provide education/training, information and resources for health professionals, and clients throughout Saskatchewan on home oxygen testing. Client's who have treaty status are funded by Non-Insured Health Benefits (NIHB) and have different criteria for oxygen testing; please review the [NIHB Home Oxygen Benefits](#) to learn more.

The Lung Saskatchewan is all about breathing. Protecting lung health, preventing lung disease and ensuring that the right resources are available in your community when you need them is our primary focus and highest priority. With the help of our donors, volunteers, and community partners, we are improving lung health one breath at a time in Saskatchewan.

### Client funding questions:

#### SAIL

1-888-787-8996 or Regina 1-306-787-8996

Fax: 1-306-787-8679 Email: [ehb@health.gov.sk.ca](mailto:ehb@health.gov.sk.ca)

#### NIHB in SK

1-866-885-3933 Email: [sasknihbmedicalsuppliesandequipment@sac-isc.gc.ca](mailto:sasknihbmedicalsuppliesandequipment@sac-isc.gc.ca)

### SAIL Home Oxygen Policy:

Available online: <https://publications.saskatchewan.ca/#/products/11690>

### NIHB Home Oxygen Policy:

Available online: <https://www.sac-isc.gc.ca/eng/1585322635380/1585322658309>

### Testing questions:

#### Lung Saskatchewan

1-306-370-9012 Fax: 306-343-7007 Email: [oxygentest@lungsask.ca](mailto:oxygentest@lungsask.ca)

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#### Tester Number:

#### Password:

You are not listed as a tester until you have registered on-line and successfully completed the certification quiz. *Once you are listed as a tester you are strongly encouraged to recertify on-line every 2 years.*

Visit <https://o2.lungsask.ca> to login and complete your certification.

If you have misplaced your tester number or if you do not have a tester number, please email [oxygentest@lungsask.ca](mailto:oxygentest@lungsask.ca)

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## Role of the Home Oxygen Tester

- To understand the testing criteria and SAIL program
- To test/assess clients if they meet the criteria for home oxygen as per policy
- To educate what oxygen therapy is and how it may impact the client
- To communicate with clients, physicians/NP's, home oxygen company health professionals, SAIL, and Lung Sask for testing orders, results, and to ensure therapy is initiated (if needed)
- To advocate for or assist clients in navigating home oxygen treatment

## Home Oxygen Therapy Overview

Many home oxygen clients have been diagnosed with Chronic Obstructive Pulmonary Disease (COPD); however, clients with other lung or cardiac diseases, such as pulmonary fibrosis and heart failure, causing poor gas exchange can also benefit from home oxygen. Gas exchange is the movement of oxygen from the air we breathe to the blood stream and the movement of carbon dioxide out of the blood stream. Gas exchange impairment can be caused by impaired diffusion (lung tissue damage), V/Q mismatch (areas of the lung where blood flow and breathing do not meet) or alveolar hypoventilation (areas that each new breath doesn't expand).

### Effects of Long Term Oxygen Therapy (LTOT)

Two landmark studies from the early 1980's, the Nocturnal Oxygen Therapy Trial and the British Medical Research Council Working Party looked at the effect oxygen therapy had on survival for the COPD patient. These studies showed that the 3-year survival rate for patients with COPD and hypoxia who use LTOT continuously was 65%, compared to 45% for patients who used LTOT for only 12 hours overnight. The survival rate was even lower when no supplementary oxygen was used.

As a result of these studies, the standard treatment with supplemental oxygen is for the client to use oxygen ideally continuously and at least for 18 hours per day. We can say with some confidence that hypoxic clients will live longer if they use supplemental oxygen as prescribed.

The following figure from *Comprehensive Management of Chronic Obstructive Pulmonary Disease* by Jean Bourbeau illustrates the effect COPD has on oxygenation and as a result, the effect hypoxia has on the body as a whole. We should remember that clients with COPD are short of breath mainly due to airflow limitation, not hypoxia, and so may still be short of breath even with oxygen therapy.

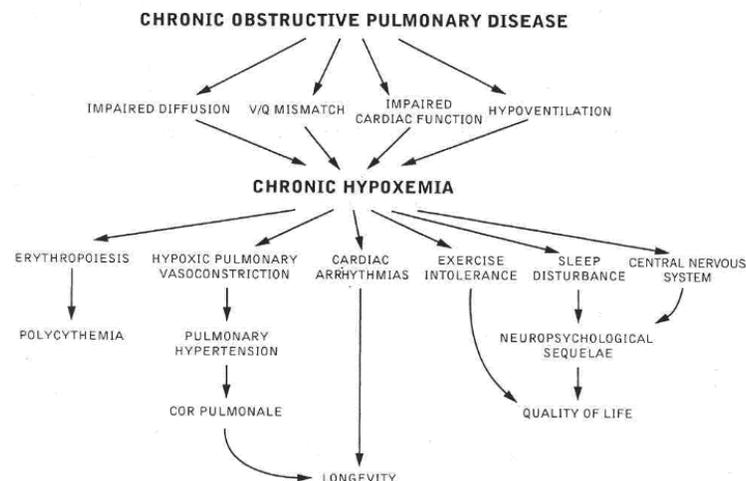


Figure 7-1 Schematic representation of the relationship between chronic obstructive lung disease, hypoxemia, and end organ effects.

## Types of Home Oxygen Funding

### Continuous 'At Rest' Oxygen Therapy

Most clients in Saskatchewan on oxygen have qualified for continuous oxygen. Continuous oxygen is when oxygen is used continuously for at least 18 hours per day. Palliative clients will be prescribed continuous oxygen.

### Exertional Oxygen Therapy

Some clients will have decreased oxygen saturation only during exercise and may benefit from oxygen therapy. Supplementary oxygen is thought to increase oxygen delivery and its utilization by muscles during exercise. Once again, as with continuous oxygen, the client may still be short of breath even with oxygen therapy. More research is needed in this area.

### Nocturnal Oxygen Therapy

There are clients who desaturate to levels that require oxygen therapy only at night, probably due to a decrease in ventilation during some stages of sleep as well as a change in the V/Q relationship in the supine position. Supplemental oxygen therapy is NOT a recommended treatment for sleep apnea.

## Pertinent Information & Definitions

### Smoking cessation

Smoking cessation is the single most important step to reducing the risk of developing lung and heart disease and slowing its progression. Smoking while using oxygen is an extreme fire hazard. Additionally, smoking will limit the effectiveness of oxygen therapy as carbon monoxide reduces oxygen saturation. Clients who smoke should be advised of the health and safety concerns and encouraged to seek help in quitting from their physician, pharmacist, Lung Sask at 1-833-385-LUNG or the Smoker's Helpline at 1-877-513-5333.

### Cor Pulmonale

Cor pulmonale is the enlargement of the right ventricle due to diseases of the lung, thorax, or pulmonary circulation. It can be detected on an ECG that demonstrates higher than normal P waves or on an echocardiogram. Many of those with advanced chronic obstructive lung disease have cor pulmonale. It is associated with a decrease in life expectancy (1).

### Polycythemia

Polycythemia refers to an increase above normal in the number of red blood cells in the circulating blood. This elevation is usually, although not always, accompanied by a corresponding increase in the quantity of hemoglobin and in the hematocrit. Secondary polycythemia often occurs in response to some known stimulus, most commonly hypoxemia. These clients will often have a ruddy or red face. Unchecked polycythemia puts the client at risk for thrombosis. When the hematocrit levels increase beyond 55 to 60%, perfusion of the major organs can be affected (2, 3).

### Sleep Apnea

Apnea literally means no breathing. Sleep apnea refers to pauses in breathing that occur during sleep. These pauses can be from 10 – 30 seconds or longer in severe cases. The number of complete pauses in breathing (apnea) or significant decreases in airflow (hyponea) per hour is designated as the Apnea/Hyponea Index (AHI).

The severity of sleep apnea is based on the AHI as follows:

1. Mild: 5 to 15 events per hour
2. Moderate: 15 to 30 events per hour
3. Severe > 30 events per hour.

Clients who have sleep apnea may have any or all of the following symptoms:

- Excessive day time sleepiness
- Snoring followed by silent pauses
- Choking or gasping during sleep
- Unrefreshing sleep
- Impaired concentration
- Hypertension

Treatment for sleep apnea is Continuous Positive Airway Pressure (CPAP), not oxygen. Overnight oximetry alone is a poor diagnostic tool for sleep apnea but may be used to assess if CPAP or BiPAP therapy is effective for treating hypoxemia.

1. <http://health.allrefer.com/health/cor-pulmonale-cor-pulmonale.html>
2. <http://www.emedicine.com/ped/topic1848.htm>
3. Bourbeau, Neault, Borycki, Comprehensive Management of Chronic Obstructive Pulmonary Disease BC Decker Inc 2002.

## SAIL Home Oxygen Therapy Program Overview

In order to receive SAIL Home Oxygen Funding clients must:

- have oxygen prescribed by a physician or nurse practitioner (will be referred to prescriber in this document)
- meet the medical criteria for either continuous, exertional, or nocturnal oxygen, or meet the criteria for end stage palliative care
- be assessed by the Saskatchewan Health Authority (SHA)

**The SAIL Home Oxygen Therapy Program consists of four categories:**

- I. Initial Coverage
- II. Long Term Coverage
- III. Palliative Care Oxygen
- IV. Optional Coverage

### **I. Initial Coverage (short term oxygen therapy):**

When applying for oxygen therapy funding, prescribers should complete the SAIL Request for Initial Oxygen Coverage form and send a copy **with the test results attached** to SAIL and the client's oxygen supplier. Test results should include the date, tester name and number, and signature. If the test results do not meet SAIL oxygen criteria, the client will be responsible for the oxygen costs.

After receiving the application for oxygen therapy funding SAIL will advise the client, supplier, and the prescriber of the eligible level of benefit. All funding will be assigned an effective and expiration date.

- All new clients qualifying for SAIL oxygen coverage will begin with an oxygen concentrator, portable oxygen cylinders or both. Some companies may provide a portable concentrator.
- Clients who qualify for continuous oxygen therapy will initially be covered for 6 months, and will be provided with an oxygen concentrator and 10 portable cylinders per month.
- Stable clients who qualify for exertional oxygen therapy will be provided 6 months coverage initially, and will receive funding for 10 portable cylinders per month only. *(see page 14 for definition of stability)*
- Stable clients with nocturnal (nighttime) desaturation will initially qualify for coverage up to 1 year, and will receive funding for an oxygen concentrator only. *(see page 14 for definition of stability)*

- Renewal testing should be done in the last month of coverage. Extensions can be made by testers if you have an appointment booked. To request this, email [EHS@health.gov.sk.ca](mailto:EHS@health.gov.sk.ca) with client's initials and health card number.

## II. Long Term Coverage:

At the end of the initial oxygen coverage, period oxygen renewal forms will be sent to the client as well as the home oxygen company (who will arrange an order from the prescriber). The form will detail the testing required for the client to continue home oxygen therapy. Once the testing is complete, the form should be returned with the testing results to SAIL and the client's oxygen supplier. SAIL will forward a copy of the completed renewal form will be sent to the appropriate supplier together with a copy of the approval letter issued by SAIL to the client. Failure to receive a renewal notice does not change the client's responsibility for oxygen costs after the expiration date.

- Clients who meet the medical criteria and have had no exacerbation, hospitalization or change in treatment in the previous 30 days are eligible for long-term coverage.
- Clients who meet the criteria but had an exacerbation, hospitalization or change of treatment in the previous 30 days will receive short-term coverage on renewal. (4 additional months)
- Clients who qualify for long-term coverage will require an annual update of their oxygen prescription by their prescriber, but will not require any further formal testing.

## III. End Stage Palliative Care Oxygen:

The following parameters shall be used to help determine whether a terminally ill individual is in the **end stage of the palliative process**:

- Clients must be enrolled with in the SHA Palliative Care Program
- The timeframe for the end stage may be measured in terms of days or weeks of active dying. Time frames are difficult to determine, however, and in some cases, this end stage may be longer than a few weeks or as short as a couple of days.
- There are typically day-to-day changes with deterioration proceeding at a dramatic pace. There is usually a sudden drop in the Palliative Performance Rating according to the Palliative Performance Scale (PPS) developed by the Victoria Hospice Society and the Capital Regional District Home Nursing Care in British Columbia.
- The end stage may be characterized by increasing intensity of need: increased assistance required for physical or psychological need, family exhaustion, usually a requirement for social work, pastoral care and therapies.
- There is documented clinical progression of disease which may include a combination of symptoms such as dyspnea, crescendo pain, profound weakness, being essentially bed bound, increased nausea or drowsy for extended periods.
- The terminally ill individual is assessed a Palliative Performance Rating of 30% according to the PPS.

### Coverage by SAIL:

- requires a prescription only (a signed SAIL Palliative Oxygen Application Form)
- testing is not usually required
- validation is required by a SHA case manager/client assessor-coordinator that the client is enrolled on the SHA's Palliative Care Program client must be assessed a Palliative Performance Rating of 30% according to the PPS.

- is short term only, oxygen equipment funded by SAIL is an oxygen concentrator with appropriate back up provisions, and 10 small cylinders per month.
- SAIL provides coverage for palliative patients for 4 months and can be extended up to 4 months. No testing is required for extensions.

SAIL supplies palliative care oxygen application forms. See appendix for [SAIL Order Form for Palliative Oxygen](#) or request some from [EHB@health.gov.sk.ca](mailto:EHB@health.gov.sk.ca).

#### **IV. Optional Systems for Continuous and Exertional Oxygen**

Clients who qualify for long-term continuous or exertional oxygen therapy may request equivalent funding from the standard package applied towards an optional oxygen system of their choice. SAIL and the client's home oxygen company will be able to provide further direction for the optional system qualification.

Qualifying beneficiaries may select their own oxygen system from within the range of eligible benefits, including an oxygen-conserving device, liquid oxygen system, transfill system, or portable concentrator system. Clients are responsible for extra costs associated with these types of systems. See page 22 for examples of optional systems.

#### **V. Pandemic Oxygen**

Some oxygen funding exceptions were made during the COVID-19 pandemic. Please contact SAIL to discuss further.

### **Testing Standards**

Please refer to the reverse side of SAIL's [Request for Initial Oxygen Coverage](#) application form for testing protocol and the SAIL Home Oxygen Policy.

To be approved, an oxygen funding application must have **one of the following** attached to it:

- An arterial blood gas report complete with lab identification, date and signature, or
- Formal oximetry testing complete with date, name, signature, and tester number of the health professional performing the assessment.

Note: For nocturnal coverage, the underlying diagnosis must be included along with testing results.

**Once a client has been approved for SAIL long-term oxygen funding, repeat testing will not be required for annual renewals.**

## Private Home Oxygen Companies

Clients have their choice of four oxygen companies who provide service throughout Saskatchewan. As user costs, delivery schedules, and services vary among oxygen suppliers, the choice of an oxygen supplier remains solely with the oxygen user. Requests for a change of vendor are considered only if directed by the oxygen user.

### Careica Health

Province-wide toll free: 1-855-672-6262

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### Prairie Oxygen (Air Liquide)

Province-wide toll free: 1-877-738-8702

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### Medigas (Linde)

Province-wide toll free: 1-866-446-6302

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### VitalAire (Air Liquide)

Province-wide toll free: 1-800-252-9384

## Role of the Home Oxygen Company

Oxygen vendors employ health professionals, technicians for equipment, and drivers for delivery of oxygen. Health professionals are contracted to visit their clients on a regular basis (every 4-6 months) to assess their health condition and oxygen status and share this information with the ordering physician or nurse practitioner.

Roles:

- To provide home oxygen therapy to the client
- To assist in the setup of therapy in the home
- To perform regular respiratory and oxygen assessments on their clients
- To provide the best equipment to assist or improve their client's quality of life and oxygen therapy

## Pulse Oximetry

Pulse oximeters give a non-invasive estimation of the arterial hemoglobin oxygen saturation based on the knowledge that hemoglobin absorbs red light differently depending on the degree of oxygenation. This is why arterial blood appears brighter and redder than venous blood.

### How Does a Pulse Oximeter Work?

The pulse oximeter has a peripheral probe that contains two light emitting diodes, one in the visible red spectrum and one in the infrared light spectrum. These beams of light are shone through the tissue onto a light detector. With each pulse, the volume of oxygenated arterial blood in the tissue increases, causing more red light to be absorbed. The microprocessor in the pulse oximeter calculates the oxygen saturation based on the change in red light being detected. The measurement calculated by the oximeter is charted as the SpO<sub>2</sub> (i).

### Limitations:

- Vasoconstriction and hypothermia can cause reduced tissue perfusion leading to a poor or absent signal.
- Movement such as shivering or tremors can cause the heart rate to be overestimated and the saturation to be underestimated.
- High ambient light can confuse the light detector.
- Low perfusion does not give the detector enough information to make an accurate reading. You may try moving the sensor to another site or warming or massaging the extremity.
- Nail polish that is especially dark such as black or brown may cause a problem for the sensor.
- In severe anemia, the saturation will only indicate what percentage of hemoglobin is carrying oxygen; however, the tissues may still be hypoxic due to the lack of oxygen carrying capacity of the blood.
- Carbon monoxide in the blood is also attached to the hemoglobin and may confuse the oximeter because it does not differentiate between carboxyhemoglobin and oxyhemoglobin.
- Pulse oximeters are accurate to within 2%.

### Quality Control:

- ✓ Always compare the pulse reading to the actual pulse measured manually. An incorrect pulse rate means the reading is unreliable.
- ✓ Check a normal person (yourself) to confirm that the oximeter reads between approximately 97 – 100%.
- ✓ If an oximeter does not seem to be working properly, change the batteries, usually the problem will disappear.
- ✓ Warm up hands of someone with poor perfusion or use a forehead/ear probe. If this does not work, ABG is the best option.

1. Hill, Stoneham, *Practical Applications of Pulse Oximetry*, [www.nda.ox.ac.uk/wfsa/html/u11/u1104\\_01.htm](http://www.nda.ox.ac.uk/wfsa/html/u11/u1104_01.htm) 1/10/2007

## Testing for Continuous Oxygen Funding

An arterial blood gas test is the preferred test for continuous home oxygen funding through the SAIL program (criteria below). When this testing is not feasible or as accessible, testing using a pulse oximeter is an acceptable alternative.

### Eligibility Criteria for Continuous Oxygen Funding:

1. Arterial blood gas (after resting for 10 minutes on room air):
    - PaO<sub>2</sub> ≤55 mm Hg
    - PaO<sub>2</sub> ≤59 mm Hg *if* the client has cor pulmonale or polycythemia
- OR**
2. Oximetry (see instructions below):
    - Saturation results ≤ 87% continuously for 2 minutes **OR**
    - Saturation results ≤ 90% continuously for 2 minutes *if* the client has cor pulmonale or polycythemia
    - **AND** must have evidence that the client's saturation results improved with the use of oxygen.

### Pulse Oximetry Testing Procedure for Continuous Oxygen Funding:

- This requires a two-part test.
- This test may be performed on a hospitalized patient who is ready for discharge, within 48 hours prior to discharge from hospital.

#### Part 1: Room Air Test

1. Confirm if client has SAIL or [NIHB \(treaty\) health benefits](#). If SAIL, proceed with the following:
2. Ensure oxygen is removed and client can rest seated or lying down for up to 10 minutes on room air. Monitor for desaturations and record. SAIL needs proof of desaturation as per criteria above; a spot check every 30 seconds or less is adequate.
3. Print the strip or make a note of the time the room air strip was completed and symptoms the client was feeling. Label the printed results **Room Air Test**. See example in the Appendix.

#### *Proceed to Part 2 only if the oxygen saturation was:*

- <87% for two consecutive minutes
- <90% for two consecutive minutes if client has known cor pulmonale or polycythemia. *Don't know if the client has cor pulmonale or polycythemia?* Complete test as if they do and report these results to the ordering prescriber (see Flow Chart page 13).

#### Part 2: Supplementary Oxygen Test (oxygen supplied by the SHA)

1. The client rests for at least 10 minutes while using supplementary oxygen.
2. Start with a low flow rate (1-2 litres/minute).
3. Adjust the oxygen as needed to achieve an oxygen saturation of 90-92%
4. While the client remains resting with oxygen on, record a 5-minute oximetry strip, (spot check every 30 seconds or less is adequate).
5. Print the strip or make notes for later printing. At the top of this strip, write **Supplementary Oxygen Test**.

*Results that meet criteria must be attached to the SAIL application and include the tester number, name, date, and signature. Contact the home oxygen company of choice to set up oxygen as soon as possible/before discharge.*

## Clients who meet the SAIL funding criteria

- Initial coverage is for 6 months.
- A concentrator and 10 portable cylinders per month will be supplied.
- The client chooses their supplier from the list of companies operating in this province.
- To achieve maximum benefit from continuous home oxygen therapy, oxygen should be used ideally 24 hours per day, and at the very least 18 hours.

## Clients who do not meet SAIL funding criteria at rest:

If the client does not qualify for continuous oxygen coverage after the resting test, consider requesting an ABG (especially if borderline results). Or do exertional testing and/or overnight oximetry to determine if the client requires oxygen during exercise or for nocturnal desaturation and is stable. A MD/NP order is required.

If the SAIL funding criteria has not been met, and the prescriber determines that oxygen therapy is still appropriate, it may be ordered and the client will pay the cost for this.

## Continuous Testing Clients with High Flow O2 (or for those who cannot tolerate removing O2)

There are clients who require oxygen flows of greater than 6 LPM, and should not have their oxygen removed for a room air test. Others may not feel well or are anxious without their oxygen. If you need to test someone like this, please use the following method.

1. Leave the oxygen on at the prescribed level.
2. Obtain a 5-minute oximeter strip.
3. Leave the oximeter attached.
4. Turn down the oxygen slowly until the SpO<sub>2</sub> falls to 87%. (90% with cor pulmonale)
5. Obtain a 2-minute oximeter strip at 87% saturation.
6. Return oxygen flow to prescribed level.

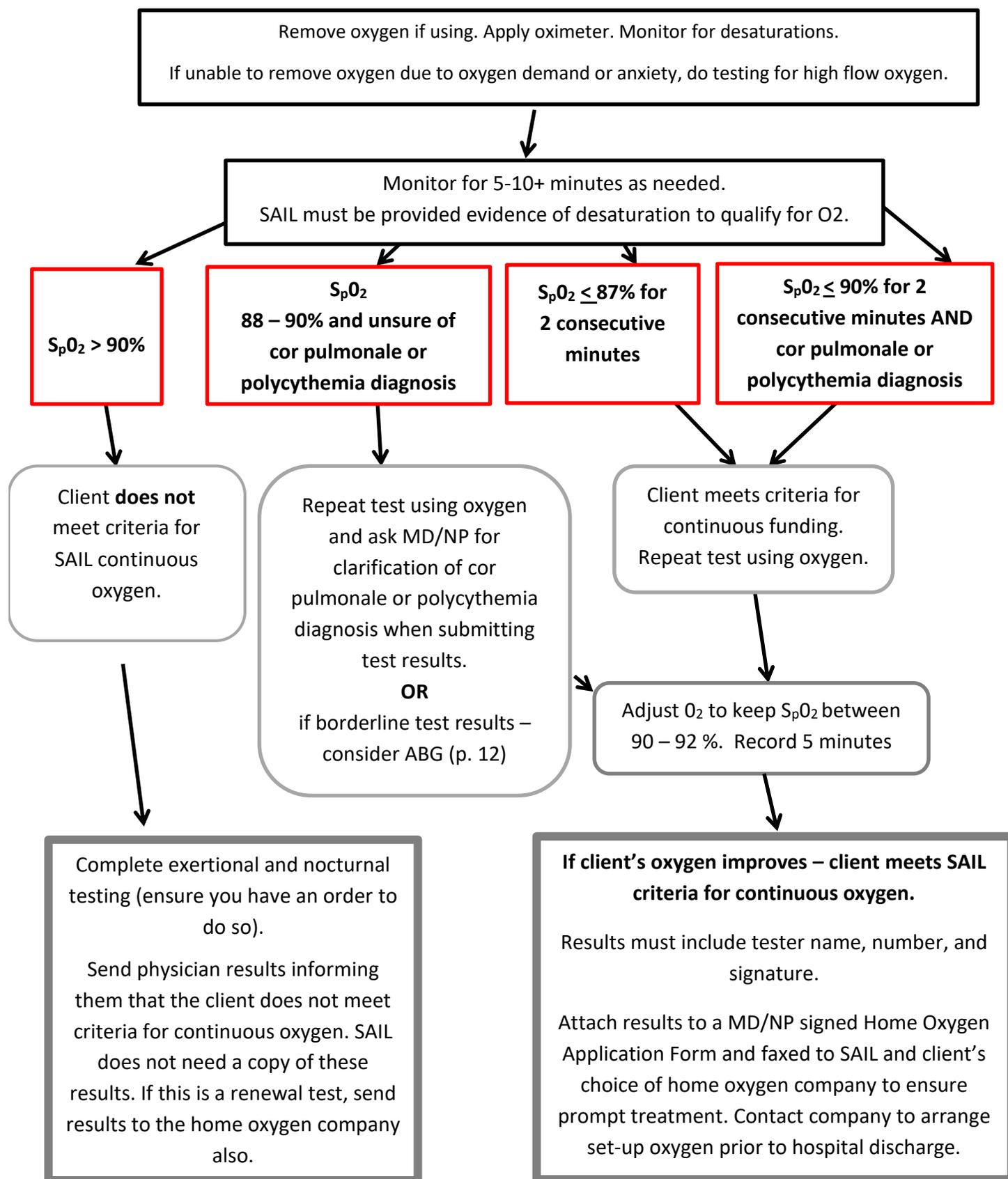
## How long do oxygen cylinders last?

Cylinder size	1 LPM	2 LPM	3 LPM	4 LPM	5 LPM
E (29" tall)	10h	5h	4 h	2.5h	2h
D (19.5" tall)	5h	2.5h	2h	1.5h	1h
C (14" tall)	4h	2h	1h		

\*Chart adapted from Prairie Oxygen's "Regulator and Cylinder Operations" Handout, 2017

The hours listed above are based on a full cylinder. As flow increases, the length of time decreases. Clients are often scared to leave their home in case they run out of oxygen as they only get 10 tanks per month. Ask the oxygen supplier for a copy if your client does not have one as it may help with planning outings and providing comfort. An oxygen conserving device (OCD) can help a cylinder last longer. An OCD may be provided through the SAIL Optional Funding (see page 22) to clients who have shown good use of their oxygen and who are using multiple tanks per month. Clients can discuss this with their provider.

## Pathway for Oximetry Testing for Continuous Oxygen Funding



## Testing for Exertional Oxygen Funding

Exertional oxygen therapy is provided when a client is hypoxemic only on exertion and has improved exercise tolerance with the use of oxygen.

### Before testing is started, you must be able to answer yes to the following 4 questions:

1. Is the patient stable? (no hospitalization, no exacerbation or no change in treatment due to cardiorespiratory illness in the past 30 days)?
2. Is there a physician or NP order for the test?
3. Is the client's resting oxygen saturation greater than 87%?
4. Is the test conducted in an appropriate facility or safe location?

### Eligibility Criteria for Exertional Oxygen Funding

To be eligible for oxygen funding, oximetry on room air must show:

1. A minimum of 20 seconds of continuous oxygen saturation  $\leq 87\%$  AND
2. An improvement in exercise capacity of 20% with supplementary oxygen must be documented.

#### Part 1: Room Air Test

1. After the client has been seated for 10 minutes, he/she should walk on the level at a comfortable pace (or exercise on a treadmill, exercise bicycle, arm bicycle, or self-propelling a wheelchair).
2. Stop the test at the onset of symptoms and or when client has had minimum of 20 seconds of continuous oxygen saturation  $\leq 87\%$ .
3. Record the symptoms and the time of onset on the oximetry strip.
4. Record the distance walked (or time on treadmill or bicycle).

**Proceed to Part 2** only if the client's oxygen saturation has been  $< 87\%$  for 20 seconds. If client is unable to walk far enough to meet criteria due to symptoms, stop test and consider nocturnal testing.

#### Part 2: Supplementary Oxygen Test (oxygen is arranged/supplied by the testing site)

1. The client rests for 10 minutes while receiving oxygen at 2 litres per minute.
2. The client repeats the exercise protocol (same as part 1).
3. Adjust the oxygen as needed to achieve an exercise saturation of 90-92%.
4. Stop the test with the onset of symptoms.
5. Record the symptoms and the time of onset on the oximetry strip in detail – see p. 18).
6. Record the distance walked (or time on treadmill or bicycle).
7. Record the oxygen flow rate during used during the test.

*Results that meet criteria must be attached to the SAIL application and include the tester number, name, date, and signature. Contact the home oxygen company of choice to set up oxygen as soon as possible. If client does not meet criteria, please state this on your results and fax to the MD/NP. SAIL does not need a copy of results that do not meet criteria.*

### **Clients who meet the SAIL funding criteria**

- The client chooses their supplier from the list of companies operating in this province.
- Test results must be attached to the SAIL Home Oxygen application.
- Clients who qualify under these criteria will receive funding for 10 portable oxygen cylinders per month for 6 months initially.

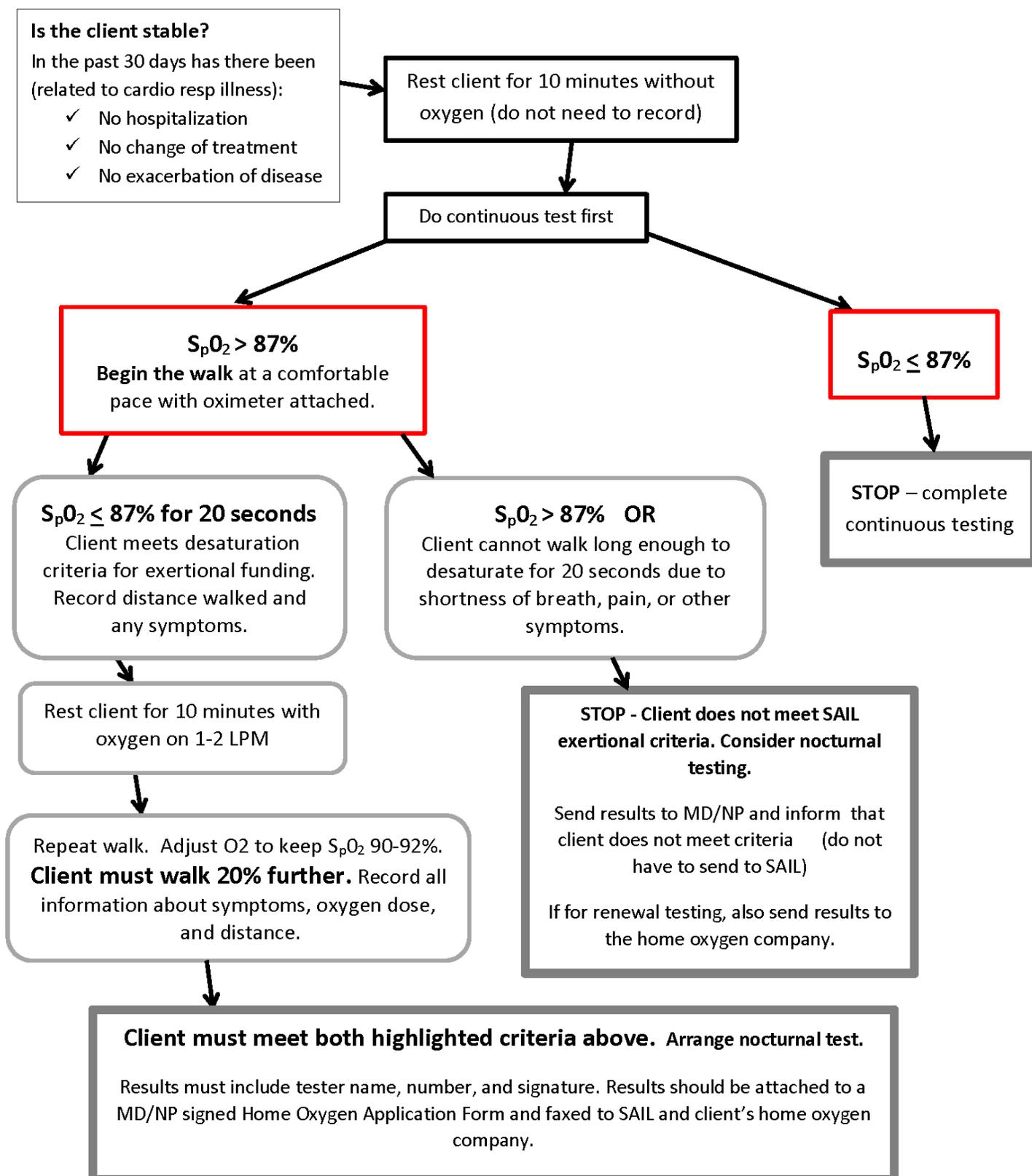
**It is highly recommended that exertional testing be completed in a facility (e.g. hospital, clinic, LTC, exercise clinic).**

### **Reasons to test in a facility:**

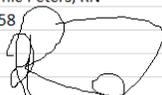
1. Access to oxygen.
2. A controlled environment with a level walking surface.
3. Distances can be measured for accurate testing.
4. Back up support if someone falls, faints, or has a medical emergency.

If this is not possible, use your clinical judgement and comfort depending on the client. If deemed appropriate, it may be safe to complete this testing at home.

## Pathway for Oximetry Testing for Exertional Oxygen



## Example of a PM10N Oximeter Excel Oximetry Report

	A	B
1	<b>Nellcor Analytics Tool Export</b>	
2	Facility Name	LTC Facility
3	Facility Address	Saskatoon, SK
4	Physician Name	Dr. Marcoux
5		
6	Patient ID	111 111 111
7	Patient Name	Blow, Joe
8	Patient DOB	07/22/1953
9	Patient Age	69
10		
11	Case Notes	Testing done at LTC Facility. Client did not meet criteria for continuous oxygen. See results.
12		
13	Tester:	Jaimie Peters, RN
14	Tester number	3458
15	Signature:	
16		
17		

### Continuous

	A	B	C	D	E	F	G	H	I
1	Date/Time	SpO2	Pulse Rate						
2	2/19/2020 11:22:10	96	87	Client sat at rest for 10 minutes on room air.					
3	2/19/2020 11:22:30	95	92						
4	2/19/2020 11:22:50	94	94						
5	2/19/2020 11:23:16	95	92	Client comfortable and talking easily					
6	2/19/2020 11:23:45	95	92						
7	2/19/2020 11:23:59	94	90						
8	2/19/2020 11:24:15	95	90	Client does not meet criteria for continuous					

### Exertional

9	2/19/2020 11:41:00	96	88	Started the walk - walking very fast					
10	2/19/2020 11:42:00	96	111	Walked 180 ft					
11	2/19/2020 11:42:28	94	111						
12	2/19/2020 11:42:55	91	119						
13	2/19/2020 11:43:19	89	125	States she is feeling good					
14	2/19/2020 11:43:44	90	126	Coughing started 'dry throat'					
15	2/19/2020 11:43:45	89	126	Round 2 of walk -another 180 ft					
16	2/19/2020 11:44:16	88	129						
17	2/19/2020 11:44:51	88	131	3rd Round - another 180ft					
18	2/19/2020 11:45:14	87	130	States doing good but slower and starting to cough more					
19	2/19/2020 11:46:12	87	131						
20	2/19/2020 11:46:13	88	131						
21	2/19/2020 11:47:00	88	105	Stopped for a drink states she does not usually walk that much					
22	2/19/2020 11:47:01	88	135						
23	2/19/2020 11:47:02	88	136						
24	2/19/2020 11:47:03	89	136						
25	2/19/2020 11:47:33	88	134	4th round walk stopped and continued to desaturate					
26	2/19/2020 11:47:36	87	133						
27	2/19/2020 11:47:41	86	132						
28	2/19/2020 11:47:42	86	133						
29	2/19/2020 11:47:48	87	131						
30	2/19/2020 11:47:49	87	130						
31	2/19/2020 11:47:50	87	130						
32	2/19/2020 11:47:51	87	130						
33	2/19/2020 11:47:56	87	129	Total distance ~720 feet					
34	2/19/2020 11:47:57	87	128	23 second of desaturation but client not too concerned					
35	2/19/2020 11:48:40	90	118	Attempted a second walk and up stairs					
36	2/19/2020 11:48:41	90	117						
37	2/19/2020 11:49:24	95	107	Client sob and anxious about 18 stairs but did not desaturate					
38	2/19/2020 11:49:51	95	105						
39	2/19/2020 11:50:21	97	106						
40	2/19/2020 11:50:36	100	121	Rested and saturations improved					
41	2/19/2020 11:50:41	99	114						
42									

# OXIMETRY PRINTOUT FORM

Client's Name: MRS. R.

Physician: DR. P

Tester: FRAN HILL

Tester Registration Number: 3107

ROOM AIR TEST	SUPPLEMENTARY OXYGEN TEST																																																																																																																																																							
<p>HELLCOR N-20P PULSE OXIMETER VERSION 1.2.4</p> <p>PATIENT <u>MRS R</u> 06-07-00 10:08</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>TIME</th> <th>SAT</th> <th>BPM</th> </tr> </thead> <tbody> <tr><td>00:30</td><td>0%</td><td>0</td></tr> <tr><td>01:00</td><td>0%</td><td>0</td></tr> <tr><td>01:30</td><td>0%</td><td>0</td></tr> <tr><td>02:00</td><td>0%</td><td>0</td></tr> <tr><td>02:30</td><td>97%</td><td>97</td></tr> <tr><td>* 02:33</td><td>96%</td><td>96</td></tr> <tr><td>* 02:52</td><td>95%</td><td>91</td></tr> <tr><td>03:00</td><td>96%</td><td>87</td></tr> <tr><td>03:30</td><td>95%</td><td>90</td></tr> <tr><td>04:00</td><td>96%</td><td>93</td></tr> <tr><td>04:30</td><td>95%</td><td>107</td></tr> <tr><td>05:00</td><td>95%</td><td>106</td></tr> <tr><td>* 05:04</td><td>94%</td><td>107</td></tr> <tr><td>* 05:10</td><td>93%</td><td>108</td></tr> <tr><td>05:30</td><td>93%</td><td>112</td></tr> <tr><td>* 05:46</td><td>91%</td><td>114</td></tr> <tr><td>06:00</td><td>90%</td><td>114</td></tr> <tr><td>* 06:17</td><td>89%</td><td>113</td></tr> <tr><td>06:30</td><td>89%</td><td>117</td></tr> <tr><td>* 06:45</td><td>87%</td><td>119</td></tr> <tr><td>07:00</td><td>87%</td><td>117</td></tr> <tr><td>* 07:04</td><td>85%</td><td>116</td></tr> <tr><td>07:30</td><td>85%</td><td>112</td></tr> <tr><td>08:00</td><td>88%</td><td>107</td></tr> <tr><td>08:30</td><td>89%</td><td>106</td></tr> <tr><td>09:00</td><td>90%</td><td>106</td></tr> </tbody> </table> <p>CASE SUMMARY:</p> <p>SpO<sub>2</sub>:</p> <p>MIN: 85%</p> <p>MAX: 98%</p> <p>MEAN: 91%</p> <p>PULSE RATE:</p> <p>Min: <u>95</u></p> <p>Max: <u>119</u></p>	TIME	SAT	BPM	00:30	0%	0	01:00	0%	0	01:30	0%	0	02:00	0%	0	02:30	97%	97	* 02:33	96%	96	* 02:52	95%	91	03:00	96%	87	03:30	95%	90	04:00	96%	93	04:30	95%	107	05:00	95%	106	* 05:04	94%	107	* 05:10	93%	108	05:30	93%	112	* 05:46	91%	114	06:00	90%	114	* 06:17	89%	113	06:30	89%	117	* 06:45	87%	119	07:00	87%	117	* 07:04	85%	116	07:30	85%	112	08:00	88%	107	08:30	89%	106	09:00	90%	106	<p><input type="checkbox"/> Free Walking distance <u>150</u> m</p> <p><input type="checkbox"/> Treadmill speed _____ km/hr</p> <p><input type="checkbox"/> Bicycle work rate _____ watts</p>	<p>HELLCOR N-20P PULSE OXIMETER VERSION 1.2.4</p> <p>PATIENT <u>MRS. R</u> 06-07-00 10:19</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>TIME</th> <th>SAT</th> <th>BPM</th> </tr> </thead> <tbody> <tr><td>00:30</td><td>93%</td><td>96</td></tr> <tr><td>* 00:31</td><td>92%</td><td>96</td></tr> <tr><td>01:00</td><td>94%</td><td>91</td></tr> <tr><td>01:30</td><td>95%</td><td>95</td></tr> <tr><td>02:00</td><td>95%</td><td>95</td></tr> <tr><td>02:30</td><td>94%</td><td>101</td></tr> <tr><td>03:00</td><td>94%</td><td>107</td></tr> <tr><td>* 03:00</td><td>93%</td><td>109</td></tr> <tr><td>03:30</td><td>92%</td><td>108</td></tr> <tr><td>04:00</td><td>92%</td><td>113</td></tr> <tr><td>* 04:14</td><td>91%</td><td>111</td></tr> <tr><td>04:30</td><td>91%</td><td>113</td></tr> <tr><td>05:00</td><td>92%</td><td>110</td></tr> <tr><td>05:30</td><td>92%</td><td>111</td></tr> <tr><td>06:00</td><td>92%</td><td>111</td></tr> <tr><td>06:30</td><td>91%</td><td>114</td></tr> <tr><td>* 06:43</td><td>90%</td><td>111</td></tr> <tr><td>07:00</td><td>92%</td><td>108</td></tr> <tr><td>07:30</td><td>92%</td><td>105</td></tr> <tr><td>08:00</td><td>94%</td><td>102</td></tr> <tr><td>08:30</td><td>95%</td><td>96</td></tr> <tr><td>09:00</td><td>95%</td><td>94</td></tr> </tbody> </table> <p>CASE SUMMARY:</p> <p>SpO<sub>2</sub>:</p> <p>MIN: 90%</p> <p>MAX: 96%</p> <p>MEAN: 93%</p> <p>PULSE RATE:</p> <p>MIN: 84</p> <p>MAX: 114</p> <p>MEAN: 104</p> <p>TIME 09:06</p>	TIME	SAT	BPM	00:30	93%	96	* 00:31	92%	96	01:00	94%	91	01:30	95%	95	02:00	95%	95	02:30	94%	101	03:00	94%	107	* 03:00	93%	109	03:30	92%	108	04:00	92%	113	* 04:14	91%	111	04:30	91%	113	05:00	92%	110	05:30	92%	111	06:00	92%	111	06:30	91%	114	* 06:43	90%	111	07:00	92%	108	07:30	92%	105	08:00	94%	102	08:30	95%	96	09:00	95%	94
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<p><i>explained test</i></p> <p><i>started walking in hallway with no oxygen</i></p> <p><i>slightly short of breath</i></p> <p><i>very short of breath end of test.</i></p> <p><i>patient continued to desaturate when resting.</i></p>		<p><i>Oxygen @ 1 LPM</i></p> <p><i>started walking</i></p> <p><i>continued walk same as before but was able to walk further, slightly short of breath.</i></p> <p><i>increased O<sub>2</sub> to 1.5 LPM</i></p> <p><i>Mrs. R. had increase SaO<sub>2</sub> and endurance on oxygen.</i></p>																																																																																																																																																						

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please apply tape only to  
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## Testing for Nocturnal Oxygen Funding

Testing during the night is requested to determine whether a client is hypoxemic during sleep only. Rural testing is coordinated provincially through a contract with the Lung Sask and SHA Health Centres. Centres and respiratory therapy departments who have their own nocturnal oximeters may perform their own testing. Requisitions for rural nocturnal testing are sent to the Lung Sask office by either fax or email and are prioritized by Lung Sask staff.

This is a 2-part test on a stable client who has **not had** a hospitalization, exacerbation, or change of treatment for a cardiorespiratory event treatment in the past 30 days.

### Eligibility Criteria for Nocturnal Oxygen Funding

To be eligible for nocturnal oxygen funding the testing must show:

1. An **oxygen saturation of  $\leq 87\%$  for more than 30% of the night.**
2. The second night's test must also show a **significant improvement with oxygen therapy.**

#### **Part 1: Room Air Test** (If the client has a CPAP/BiPAP, this should always be used for nocturnal testing)

1. An oximeter is sent to the requisitioning home care office from the Lung Sask office in Saskatoon.
2. The client is monitored throughout the night using an oximeter with 12 or more hours of memory.
3. The oximeter is then returned to the Lung Sask to be downloaded ***OR if the client has oxygen available, client will do a second night of testing at home with oxygen applied.***

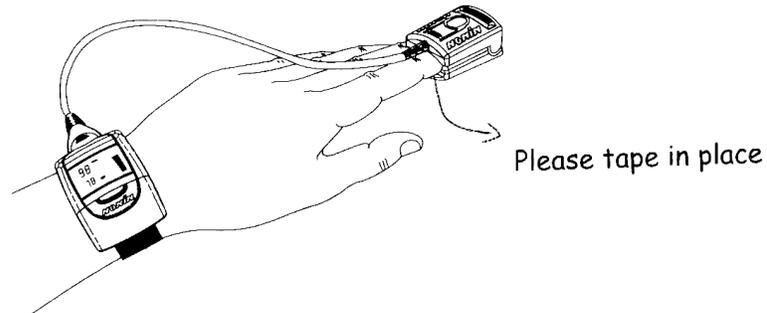
#### **Part 2: Supplementary Oxygen Test** (A CPAP oxygen connector can be provided if needed)

1. When the downloaded information from an overnight oximetry test indicates that the client requires nocturnal oxygen therapy, a second night of testing will be completed.
  2. The client is monitored throughout the night while using supplemental oxygen, supplied by the health region or by the client if a concentrator is available.
  3. Record the flow rate of oxygen used.
  4. The oximeter is then returned to Lung Sask for downloading of data. The results of the overnight studies are faxed directly to the requesting prescriber and oxygen supplier.
- Clients who qualify under these criteria are supplied with an oxygen concentrator.
  - Both the test results and the diagnosis that caused the desaturation must be included with the requisition when it is sent to SAIL.
  - The Overnight Oximetry form and Sleep Apnea Screening Tool is sent with each nocturnal oximeter. Please assist your clients in filling these out. (See Appendix).
  - The returning SHA health centre is responsible for return shipping costs.

**NOTE: Nocturnal oximetry is also used by sleep physicians to monitor sleep apnea therapy so at times some testing will be requested for non-oxygen funding purposes.**

## WristOx Oximeter Instructions

- The oximeter is shipped to you ready to use.
- You do not need to change batteries and the sensor is connected.
- The client's finger acts as the On/Off switch, it turns on and off automatically when a finger is inserted into the sensor.
- You may demonstrate the use of the oximeter to the client – if it turns on it will not affect the nighttime test.
- If it becomes uncomfortable in the night, it can be moved to a different finger.



Please return the oximeter and paperwork **immediately** in a shipping envelope. Return shipping costs and oxygen supplementation are the Health Region's responsibility.

## Oxygen Delivery Systems

Clients are supplied with home oxygen through private oxygen companies who provide both the equipment and the services of medical professionals, either respiratory therapists or nurses. Several options are available to meet the needs of clients. The following chart summarizes the equipment currently available:

<u>System</u>	<u>Advantages</u>	<u>Disadvantages</u>
<b>Compressed Oxygen Cylinders</b>	<ul style="list-style-type: none"> <li>• Good for small volume</li> <li>• No waste or loss</li> <li>• Stores oxygen indefinitely</li> <li>• Most available</li> </ul>	<ul style="list-style-type: none"> <li>• Heavy &amp; bulky</li> <li>• High pressure system (2200 PSI)</li> <li>• Limited volume of oxygen</li> <li>• Multiple cylinders required for ambulation</li> <li>• Frequent deliveries required</li> <li>• Storage area required</li> </ul>
<b>Oxygen Concentrator</b>	<ul style="list-style-type: none"> <li>• No waste or loss</li> <li>• Low pressure system (15 PSI)</li> <li>• Cost effective as a continual supply of oxygen</li> <li>• No delivery refills required</li> <li>• Convenient and attractive at home</li> </ul>	<ul style="list-style-type: none"> <li>• Electrical disruption renders system inoperable</li> <li>• Back-up oxygen is required</li> <li>• Portable oxygen is required for ambulation</li> <li>• Electrical costs increase</li> </ul>
<b>Liquid Oxygen</b>	<ul style="list-style-type: none"> <li>• Provides large quantities of oxygen</li> <li>• Low pressure system (20-25 PSI)</li> <li>• Portable, light-weight units can be refilled from reservoir (up to 8 hour supply at 2 LPM)</li> <li>• Valuable for pulmonary rehabilitation</li> </ul>	<ul style="list-style-type: none"> <li>• Loss of oxygen due to venting</li> <li>• Must be delivered as required</li> <li>• Low temperature safety precautions</li> <li>• Not available through all companies</li> <li>• Not available in all regions of the province</li> </ul>

## Optional systems

For those clients with long term funding who meet certain criteria and are willing to pay an extra fee, specialized equipment the following systems are available in Saskatchewan (see page 9). Clients should discuss options with their home oxygen provider.

### Oxygen conserving device (OCD)

- Saves oxygen by delivering a bolus at the beginning of inhalation and shutting off during exhalation
- Flow sensor starts oxygen when client takes a breath
- Small cylinder will last 3-4 times longer with OCD
- Not all clients can tolerate this type of oxygen delivery



### Trans fill concentrator

- SAIL optional coverage
- Limited availability
- Fill cylinder from concentrator
- No need for delivery of cylinders
- No limit on cylinders
- Beneficial for rural, active client
- Requires some skill to fill cylinders



### Portable oxygen concentrator

- Can be plugged into car cigarette lighter
- Operated by battery
- Costs may be covered by the SAIL program
- May be rented by clients for travel
- Expensive to purchase



## Home Oxygen Safety

Oxygen does not burn, but it causes other materials to burn more easily and rapidly. You may need to discuss and assess these concerns when testing a client in their home (e.g. nocturnal testing).

***Home oxygen can be used safely if you keep in mind two principles:***

### **1. Do not provide a source of ignition for a fire to start:**

- Never smoke or vape while using oxygen
- Do not allow anyone to smoke in your home
- Stay at least 5 feet from open flames such as fireplaces, gas stoves, and candles
- Do not store oxygen near sources of heat (radiators, heaters, steam pipes) or electrical appliances
- Do not use extension cords for oxygen concentrators
- Avoid operating electrical appliances such as razors or hairdryers while using oxygen
- Avoid static electricity and sparks by using cotton bedding and clothes. Do not use wool, nylon or synthetic fabrics.
- Do not use oil-based skin creams such as petroleum jelly, petroleum-based creams, or lip products

### **2. Avoid creating an oxygen-enriched atmosphere:**

- Keep oxygen tanks in a well ventilated area
- Do not store in closets, behind curtains, or other confined spaces
- Secure the oxygen tank to a fixed object or place in a stand

***Remember: the fire risk is still present for a while after the oxygen has been turned off.***

# Appendix

# Application for Initial SAIL Oxygen Funding

Saskatchewan Aids to Independent Living  
 3475 Albert Street  
 Regina, SK S4S 6X6  
 Phone: 1-888-787-7121 or 1-888-787-8996  
 Fax: 306-787-8679

Date: \_\_\_\_\_

## Patient Identification

Name: \_\_\_\_\_ Health Services Number: \_\_\_\_\_

Telephone: \_\_\_\_\_ Date of Birth: \_\_\_\_\_

Street Address or P.O. Box: \_\_\_\_\_ City/Town: \_\_\_\_\_ Province: \_\_\_\_\_ Postal Code: \_\_\_\_\_

## Prescription: Please complete only the applicable section(s) and attach corresponding test results.

Funds a concentrator and 10 portable cylinders per month for patients who are hypoxemic at rest.

**Continuous Oxygen**

**Rx** Flow: \_\_\_\_\_ lpm  
 By: Nasal Cannulae   
 Other: \_\_\_\_\_

Does this patient have cor pulmonale or polycythemia?

Yes  No

RESPIROLOGIST ONLY:

Does this patient have advanced irreversible lung disease?

Yes  No

Funds 10 portable cylinders per month for patients who are hypoxemic on exertion. (These provide a limited supply for use on exertion.)

**Exertional Oxygen**

**Rx** Flow: \_\_\_\_\_ lpm  
 By: Nasal Cannulae   
 Other: \_\_\_\_\_

Has this patient had an exacerbation, a change in treatment, or a hospitalization related to a cardio-pulmonary event in the 30 days prior to testing?

Yes  No

Funds a concentrator for use at night for patients who are hypoxemic while sleeping.

**Nocturnal Oxygen**

**Rx** Flow: \_\_\_\_\_ lpm  
 By: Nasal Cannulae   
 Other: \_\_\_\_\_

Has this patient had an exacerbation, a change in treatment, or a hospitalization related to a cardio-pulmonary event in the 30 days prior to testing?

Yes  No

**Diagnosis** for which nocturnal oxygen is requested:  
 \_\_\_\_\_

Current test results must be attached to all applications. The funding criteria are summarized on the reverse. Typically, testing should be within 48 hours prior to initiation of home oxygen therapy. For determining eligibility, SAIL does not recognize tests directed or performed by oxygen suppliers.

## Prescriber – Physician or Nurse Practitioner

Name: \_\_\_\_\_ Prescriber's Signature: \_\_\_\_\_

Telephone: \_\_\_\_\_ Date: \_\_\_\_\_

Street Address or P.O. Box: \_\_\_\_\_ City/Town: \_\_\_\_\_ Province: \_\_\_\_\_ Postal Code: \_\_\_\_\_

## Follow-up Prescriber (if the renewal should be sent to another physician, please specify below).

Name: \_\_\_\_\_ Telephone: \_\_\_\_\_

Street Address or P.O. Box: \_\_\_\_\_ City/Town: \_\_\_\_\_ Province: \_\_\_\_\_ Postal Code: \_\_\_\_\_

## Patient's Supplier Selection

Please mark your choice of oxygen supplier below and sign where indicated. It is recommended that you contact more than one supplier before making your selection. Your supplier will require a copy of this requisition and your signature in order to seek payment from Saskatchewan Health.

Careika Health  Medigas A Prairix Company  Prairie Oxygen Ltd.  Vitaleire Healthcare

Patient's Signature: \_\_\_\_\_

[saskatchewan.ca](http://saskatchewan.ca)



## SAIL Oxygen Funding Criteria

**Continuous Oxygen** – funds a concentrator and 10 portable cylinders for oxygen use 18+ hours daily for patients who are hypoxic at rest.

***In the absence of* cor pulmonale or polycythemia**

**Criteria:**

The patient, while at rest after being seated for 10 minutes, must have a  $PO_2 \leq 55$  mm Hg or a pulse oximetry saturation  $\leq 87\%$  for a minimum of 2 continuous minutes.

***With* cor pulmonale or polycythemia**

**Criteria:**

The patient, while at rest after being seated for 10 minutes, must have a  $PO_2 \leq 59$  mm Hg or a pulse oximetry saturation  $\leq 90\%$  for a minimum of 2 continuous minutes.

*If oximetry is used to show qualification, both the test on room air and the test on prescribed oxygen must be attached. Oxygen should be prescribed sufficient to raise the saturation to between 90% and 92%, or to raise the  $PO_2$  to between 60 and 65 mm Hg.*

*Initial coverage is limited to 4 months.*

**Exertional Oxygen** – funds 10 portable cylinders per month for oxygen use on exertion.

**For exertional oxygen funding, patients must not have been hospitalized for a cardiorespiratory event or had an exacerbation or change of treatment in the 30 days prior to testing. Criteria:**

This requires a two part test:

Part 1 is a maximum exercise symptom limited room air test. After being seated for 10 minutes, the patient should use a treadmill, an exercise bicycle, or walk on the level at a comfortable pace. Stop the test with the onset of symptoms. Record the symptoms, the time of onset, and the distance.

Part 2 requires the patient to rest for 10 minutes while receiving 2 litres per minute of oxygen after completing part 1. The patient should then repeat the test in part 1 while using oxygen. Oxygen should be adjusted as needed to maintain the saturation at 90% – 92% during exercise. Stop the test with the onset of symptoms. Record the symptoms, the time of onset, and the distance.

For eligibility for oxygen funding:

- Oximetry on room air must show a pulse oximetry saturation  $\leq 87\%$  continuously for a minimum of 20 seconds ***and***
- There must be documentation of improvement in exercise capacity of 20% with oxygen use; that is the onset of symptoms is delayed by at least 20%.

*Ideally, oxygen should be prescribed sufficient to maintain the saturation to between 90% and 92% during exertion.*

*Initial coverage is limited to 6 months.*

**Nocturnal Oxygen** – funds a concentrator for oxygen use at night for patients who require oxygen while sleeping.

**Criteria for a patient who has not been hospitalized for a cardiorespiratory event or had an exacerbation or change of treatment in the past 30 days.** Nocturnal funding applications should only be made for patients whose blood gas or oximetry results do not show qualification for continuous oxygen.

- Nocturnal oximetry testing shall be done both on room air and with supplemental oxygen. Both complete tests and the underlying diagnosis must be included with the application for funding.
- Patients shall demonstrate nocturnal hypoxemia through saturations  $\leq 87\%$  on overnight oximetry for a period of more than 30% of the test time. Measured saturation with the application of oxygen therapy should show evidence of significant improvement.
- Benefits may be considered on an exceptional basis when prescribed by a respirologist. Documentation of polysomnography results or other supporting evidence must be provided.

*Initial coverage in a stable patient is for up to 1 year*



Saskatchewan Health  
Aids to Independent Living  
3475 Albert Street  
Regina, SK S4S 6X6  
Telephone: (306) 787-7121  
Fax: (306) 787-8679

## Application for Renewal of SAIL Oxygen Funding

Please return directly to SAIL before  
coverage expires on

**MARCH 31, 2007**

**MR. JOHN DOE**  
**PO BOX 99**  
**SOMETOWN SASKATCHEWAN S0S 0S0**

**HSN 123456789**

Did this patient have an exacerbation of their cardiorespiratory disease in the 30 days prior to testing? Yes  No   
Did this patient have a change in the treatment of their cardiorespiratory disease in the 30 days prior to testing? . . Yes  No   
Has this patient been hospitalized for a cardiorespiratory event in the 30 days prior to testing? Yes  No

If the answer to any of the above is "Yes" coverage will be short term only.

Please attach blood gas or oximetry results which correspond to the coverage prescribed below. All test results must be dated, signed and labelled by the tester indicating the necessary testing conditions and the laboratory or agency doing the testing. Tests directed or performed by oxygen suppliers are not recognized by SAIL for oxygen coverage applications.

**Test results must be attached to this form.** See the reverse side of this form for details.

**Prescription: Please complete only the applicable section(s) and attach the corresponding test results.**

Funds a **concentrator and 10 portable** cylinders per month for patients who are hypoxemic at rest.

**Continuous Oxygen**

Rx Flow: \_\_\_\_\_ lpm

By: Nasal Cannulae

Other: \_\_\_\_\_

Does this patient have cor pulmonale or polycythemia?

Yes  No

Check one of the above.

Funds **10 portable cylinders** per month for patients who are hypoxemic on exertion. (These provide a limited supply for use on exertion.)

**Exertional Oxygen**

Rx Flow: \_\_\_\_\_ lpm

By: Nasal Cannulae

Other: \_\_\_\_\_

Funds a **concentrator** for use at night for patients who are hypoxemic while sleeping.

**Nocturnal Oxygen**

Rx Flow: \_\_\_\_\_ lpm

By: Nasal Cannulae

Other: \_\_\_\_\_

With all nocturnal oximetry tests please provide the **diagnosis** for which nocturnal oxygen is requested:

\_\_\_\_\_  
\_\_\_\_\_

**Please complete only if oxygen funding is to be discontinued.**

**Discontinue Oxygen Funding**

This patient is no longer hypoxemic or no longer meets SAIL program criteria for funding. Oxygen coverage will be discontinued on the renewal date above.

**Prescribing Physician**

!! Please print the correct name and address if those shown below are different. !!

**DR. JANE DOE**  
**BOX 99**  
**BIGCITY SK S0S 0S0**

**SUPPLIER**

Prescriber's signature:

Date:

y / m m m / d d

**Physician providing follow-up** (If future renewals should be sent to another physician please specify below.)

Name	Telephone Number
Address	City, Town, or Village Province Postal Code

A copy of this form will be sent with approved oxygen coverage to the oxygen supplier.

\*\* may not be exactly as seen in current forms



**Saskatchewan Health**  
**Aids to Independent Living**  
 3475 Albert Street  
 Regina, SK S4S 6X6  
 Telephone: (306) 787-7121  
 Fax: (306) 787-8679

## Application for Renewal of SAIL Oxygen Funding

Please return directly to SAIL before  
coverage expires on

**MARCH 31, 2007**

**MR. JOHN DOE**  
**PO BOX 99**  
**SOMETOWN SASKATCHEWAN S0S 0S0**

**HSN 123456789**

No test results are required for renewal of patient's **continuous oxygen coverage**.

A prescription renewal is required. Please complete the sections below.

**Prescription: Please complete only the applicable section(s) and attach the corresponding test results.**

Funds a **concentrator and 10 portable cylinders** per month for patients who are hypoxemic at rest.

### Continuous Oxygen

**Rx Flow:** \_\_\_\_\_ lpm  
**By:** Nasal Cannulae   
 Other: \_\_\_\_\_

Does this patient have cor pulmonale or polycythemia?

**Yes**  **No**   
 Check one of the above.

Funds **10 portable cylinders** per month for patients who are hypoxemic on exertion. (These provide a limited supply for use on exertion.)

### Exertional Oxygen

**Rx Flow:** \_\_\_\_\_ lpm  
**By:** Nasal Cannulae   
 Other: \_\_\_\_\_

Funds a **concentrator** for use at night for patients who are hypoxemic while sleeping.

### Nocturnal Oxygen

**Rx Flow:** \_\_\_\_\_ lpm  
**By:** Nasal Cannulae   
 Other: \_\_\_\_\_

With all nocturnal oximetry tests please provide the **diagnosis** for which nocturnal oxygen is requested:  
 \_\_\_\_\_  
 \_\_\_\_\_

**Please complete only if oxygen funding is to be discontinued.**

### Discontinue Oxygen Funding

This patient is no longer hypoxemic or no longer meets SAIL program criteria for funding. Oxygen coverage will be discontinued on the renewal date above.

**Prescribing Physician**

⇓ Please print the correct name and address if those shown below are different. ⇓

**DR. JANE DOE**  
**BOX 99**  
**BIGCITY SK S0S 0S0**

**SUPPLIER**

Prescriber's signature: \_\_\_\_\_

Date: \_\_\_\_\_

y y / m m m / d d d

**Physician providing follow-up** (If future renewals should be sent to another physician please specify below.)

<small>Name</small>	<small>Telephone Number</small>		
<small>Address</small>	<small>City, Town, or Village</small>	<small>Province</small>	<small>Postal Code</small>

A copy of this form will be sent with approved oxygen coverage to the oxygen supplier.

\*\* may not be exactly as seen in current forms

# Regional Health Authority Request for End Stage Palliative Oxygen Benefits

Saskatchewan Aids to Independent Living  
 3475 Albert Street  
 Regina, SK S4S 6X6  
 Phone: 1-888-787-7121 or 1-888-787-8996  
 Fax: 306-787-8679

Date: \_\_\_\_\_

Patient Identification			
Name:	Health Services Number:		
Telephone:	Date of Birth:		
Street Address or P.O. Box:	City/Town:	Province:	Postal Code:

End Stage Palliative Designation		
I certify that this client has been assessed, by Regional Health Authority staff, as meeting the criteria for end stage palliative care, as defined in the Saskatchewan Health policy entitled "Policy Direction Regarding Supplies and Charges Related to Palliative Care" (criteria on the reverse of this form) and is eligible to receive the range of benefits described in that policy.		
Signature of Case Manager:	Date:	RHA Name:
Name of Case Manager (Please Print):	Telephone:	

Prescription	
Flow Required: _____ lpm By Nasal Cannulae <input type="checkbox"/> Other: _____ Use: Continuous <input type="checkbox"/> Other: _____	Saskatchewan Health will fund the following equipment for continuous oxygen therapy: <ul style="list-style-type: none"> <li>Oxygen concentrator; and</li> <li>10 small cylinders per month (maximum).</li> </ul>

Prescriber – Physician or Nurse Practitioner	
Name:	Prescriber's Signature:
Telephone: _____ Date: _____	
Street Address or P.O. Box:	City/Town: _____ Province: _____ Postal Code: _____

Follow-up Prescriber (if the renewal should be sent to another prescriber, please specify below).	
Name:	Telephone:
Street Address or P.O. Box:	City/Town: _____ Province: _____ Postal Code: _____

Patient's Supplier Selection				
Please mark your choice of oxygen supplier below and sign where indicated. It is recommended that you contact more than one supplier before making your selection. Your supplier will require a copy of this requisition and your signature in order to seek payment from Saskatchewan Health.				
Careira Health <input type="checkbox"/>	Medigas A Praxair Company <input type="checkbox"/>	Praxair Oxygen Ltd. <input type="checkbox"/>	Vitalaire HealthCare <input type="checkbox"/>	Patient's Signature: _____



### End Stage Palliative Oxygen Criteria

**The following parameters shall be used to help determine whether a terminally ill individual is in the end stage of the palliative process:**

1. The time frame for the end stage may be measured in terms of days or weeks of active dying. Time frames are difficult to determine, however, and in some cases, this end stage may be longer than a few weeks or as short as a couple of days.
2. There are typically day-to-day changes with deterioration proceeding at a dramatic pace. There is usually a sudden drop in the Palliative Performance Rating according to the Palliative Performance Scale developed by the Victoria Hospice Society and the Capital Regional District Home Nursing Care in British Columbia.
3. The end stage may be characterized by increasing intensity of need: increased assistance required for physical or psychological need, family exhaustion, usually a requirement for social work, pastoral care and therapies.
4. There is documented clinical progression of disease which may include a combination of symptoms such as dyspnea, crescendo pain, profound weakness, being essentially bed bound, increased nausea or drowsy for extended periods.
5. The terminally ill individual is assessed a Palliative Performance Rating of 30% according to the Palliative Performance Scale developed by the Victoria Hospice Society and the Capital Regional District Home Nursing Care in British Columbia.

# Oximetry Printout Form

Client's name: \_\_\_\_\_

Health card number: \_\_\_\_\_

Physician: \_\_\_\_\_

Tester & tester umber: \_\_\_\_\_

Test date: \_\_\_\_\_

<u>ROOM AIR TEST</u>	<u>SUPPLEMENTARY OXYGEN TEST</u>						
<div data-bbox="138 655 446 1753" style="border: 1px solid black; background-color: #e0e0e0; padding: 10px; text-align: center;">attach oximeter print-out here</div>	<div data-bbox="1193 667 1502 1789" style="border: 1px solid black; background-color: #e0e0e0; padding: 10px; text-align: center;">attach oximeter print-out here</div>						
<table><tr><td style="padding: 2px;"><input type="checkbox"/> <b>Free Walking</b> distance _____m</td><td style="padding: 2px;">distance _____m</td></tr><tr><td style="padding: 2px;"><input type="checkbox"/> <b>Treadmill</b> speed _____km/hr</td><td style="padding: 2px;">speed _____km/hr</td></tr><tr><td style="padding: 2px;"><input type="checkbox"/> <b>Bicycle</b> work rate _____watts</td><td style="padding: 2px;">work rate ____watts</td></tr></table>		<input type="checkbox"/> <b>Free Walking</b> distance _____m	distance _____m	<input type="checkbox"/> <b>Treadmill</b> speed _____km/hr	speed _____km/hr	<input type="checkbox"/> <b>Bicycle</b> work rate _____watts	work rate ____watts
<input type="checkbox"/> <b>Free Walking</b> distance _____m	distance _____m						
<input type="checkbox"/> <b>Treadmill</b> speed _____km/hr	speed _____km/hr						
<input type="checkbox"/> <b>Bicycle</b> work rate _____watts	work rate ____watts						

# Nocturnal Oxygen Testing Instructions



This test evaluates your oxygen needs while you sleep. This test will help your doctor determine the best treatment for you. To meet funding criteria for nocturnal (nighttime) oxygen, two nights of testing may be required. One night will be while you are sleeping without oxygen on (room air test) and one may be while wearing oxygen (oxygen test). A minimum of 3-4 hours of sleep is required for both tests.

## INSTRUCTIONS:

### **At BEDTIME:**

1. Secure oximeter around your wrist with the black Velcro band.
2. Place finger probe on any finger. It should automatically turn on. Secure finger probe with tape.
3. Wear your CPAP/BiPAP/dental device, if you have one.
4. On the **Nocturnal Oxygen Testing - Communication Form**, write down what time you put the oximeter on.
5. If a test with oxygen is needed, you will follow the same steps but also wear oxygen.

\* You may change fingers in the night if it becomes uncomfortable. The oximeter will automatically turn off when the finger probe is removed; make a note on the **Nocturnal Oxygen Testing - Communication Form** if this happens.

### **In the MORNING:**

1. Take off the oximeter.
2. Complete the **Nocturnal Oxygen Testing - Communication Form** and the **Sleep Apnea Screening Tool** (even if you have sleep apnea).
3. Return the oximeter and papers to your local oxygen tester (i.e. home care nurse, respiratory therapy department).

### CPAP/BiPAP Instructions:

This test may be used to assess how a CPAP or BiPAP is managing your sleep apnea; it is not a test that can diagnose sleep apnea. If you have a CPAP or BiPAP, you should wear this for all nighttime testing. When needed, oxygen should be applied via an adaptor into the CPAP or BiPAP (not under the CPAP mask).

### **Special instructions:**

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---

---

Tape finger probe here





## Nocturnal Oxygen Testing - Communication Form

Please read the included **Nocturnal Oxygen Testing Instructions** document.

**Tester:** Please ensure all sections of this form are completed and that client is *STABLE*.

**Client:** Fill out time oximeter on/off, time oxygen applied, and #4.

### 1. Client information

Name: \_\_\_\_\_

Health Card Number: \_\_\_\_\_

Home Oxygen Company (if applicable)\*: Careica  Medigas  Prairie Oxygen/Vitalaire

Non-Insured Health Benefits (NIHB/Treaty): Yes  No

Client's date of birth (month/day/year): \_\_\_\_\_ Male  Female  Other

Reason for testing (e.g. diagnosis/renewal testing): \_\_\_\_\_

2. Prescriber's name (physician or nurse practitioner): \_\_\_\_\_

Prescriber's fax number: \_\_\_\_\_

### 3. Please check the appropriate box and chart accurate date:

<input type="checkbox"/> <b>Room air (no oxygen) test</b> <b>Date:</b> _____ Time oximeter on (bedtime): _____ Time oximeter taken off (usually morning): _____ Wearing: CPAP <input type="checkbox"/> or BiPAP <input type="checkbox"/> NA <input type="checkbox"/>
<input type="checkbox"/> <b>Oxygen test</b> <b>Date:</b> _____ Oxygen flow (e.g. 2 LPM): _____ LPM      Via: Concentrator <input type="checkbox"/> Cylinder <input type="checkbox"/> <small>Portable concentrator not recommended for nocturnal tests</small> Time oxygen on: _____ Time oximeter on (bedtime): _____ Time oximeter taken off: _____ Wearing a CPAP <input type="checkbox"/> or BiPAP <input type="checkbox"/> NA <input type="checkbox"/>

4. **Tell us about your night:** How did you sleep? Did you wake up? What time? Did you snore? Etc.

Room air test: \_\_\_\_\_

Oxygen test: \_\_\_\_\_

5. **Tester name & number:** \_\_\_\_\_

Fax number: \_\_\_\_\_

**It is the responsibility of the health authority for the return shipping payment to Lung Saskatchewan, 2308 Arlington Avenue, Saskatoon SK S7J 3L3**

\*test results will be forwarded to the physician, tester, and home oxygen company

# Sleep Apnea Screening & Assessment

Name:
HSN:
Birthdate:

## Epworth Sleepiness Scale:

How likely are you to doze off or fall asleep in the following situations, in comparison to feeling just tired? This refers to your usual way of life in recent times.

Use the scale to choose the most appropriate number for each situation:

- 0 = would never doze
- 1 = slight chance of dozing
- 2 = moderate chance of dozing
- 3 = high chance of dozing

Sitting and reading	
Watching TV	
Sitting still in a public place (ie. meeting or theatre)	
As a passenger in a car for an hour without a break	
Lying down to rest in the afternoon when the circumstances allow	
Sitting and talking to someone	
Sitting quietly after lunch without having drunk alcohol	
In a car or bus while stopped for a few minutes in traffic	
<b>TOTAL</b>	

Sleepiness Score Ranges: 0-6 Normal | 7-10 Mild | 11-16 Moderate | 17+ Severe

## STOP-Bang Questionnaire: A screening tool for sleep apnea

Circle yes or no on the below questions:

<b>S</b>	Do you <b>Snore Loudly</b> (loud enough to be heard through closed doors or your bed-partner elbows you for snoring at night?)	Yes	No	Unknown
<b>T</b>	Do you often feel <b>Tired, Fatigued, or Sleepy</b> during the daytime (such as falling asleep during driving or talking to someone)?	Yes	No	Unknown
<b>O</b>	Has anyone <b>Observed</b> you stop breathing or choking/gasping during your sleep?	Yes	No	Unknown
<b>P</b>	Do you have or are being treated for <b>High Blood Pressure</b> ?	Yes	No	Unknown

<b>B</b>	Is your <b>BMI</b> more than 35 kg/m <sup>2</sup> ? (See BMI calculation chart on back page.)	Yes	No	Unknown
<b>A</b>	Are you <b>AGE</b> 50 or older?	Yes	No	Unknown
<b>N</b>	For males, is your <b>Neck Size</b> (shirt collar) 17"/43 cm or larger? For females, is your <b>Neck Size</b> (shirt collar) 16"/41 cm or larger? ( <i>Measured around Adams apple</i> )	Yes	No	Unknown
<b>G</b>	Are you <b>Male</b> ?	Yes	No	Unknown

**Low risk of sleep apnea:** Yes to 0-2 questions

**Intermediate risk of sleep apnea:** Yes to 3-4 questions

**High risk of sleep apnea:** Yes to 5-8 questions or  
 Yes to 2 or more of 4 STOP questions + male gender or  
 Yes to 2 or more of 4 STOP questions + BMI > 35 kg/m<sup>2</sup> or  
 Yes to 2 or more of 4 STOP questions + neck circumference



# BMI Chart

		Underweight		Healthy		Overweight		Obese		Extremely Obese												
WEIGHT	lbs	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290
	kgs	41	45	50	54	59	64	68	73	77	82	86	91	95	100	104	109	113	118	122	127	132
HEIGHT	ft/in	Underweight		Healthy		Overweight		Obese		Extremely Obese												
4'8"	142.2	20	22	25	27	29	31	34	36	38	40	43	45	47	49	52	54	56	58	61	63	65
4'9"	144.7	19	22	24	26	28	30	32	35	37	39	41	43	45	48	50	52	54	56	58	61	63
4'10"	147.3	19	21	23	25	27	29	31	33	36	38	40	42	44	46	48	50	52	54	56	59	61
4'11"	149.8	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	51	53	55	57	59
4'12"	152.4	18	20	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51	53	55	57
5'1"	154.9	17	19	21	23	25	26	28	30	32	34	36	38	40	42	43	45	47	49	51	53	55
5'2"	157.4	16	18	20	22	24	26	27	29	31	33	35	37	38	40	42	44	46	48	49	51	53
5'3"	160.0	16	18	19	21	23	25	27	28	30	32	34	35	37	39	41	43	44	46	48	50	51
5'4"	162.5	15	17	19	21	22	24	26	27	29	31	33	34	36	38	39	41	43	45	46	48	50
5'5"	165.1	15	17	18	20	22	23	25	27	28	30	32	33	35	37	38	40	42	43	45	47	48
5'6"	167.6	15	16	18	19	21	23	24	26	27	29	31	32	34	36	37	39	40	42	44	45	47
5'7"	170.1	14	16	17	19	20	22	24	25	27	28	30	31	33	34	36	38	39	41	42	44	45
5'8"	172.7	14	15	17	18	20	21	23	24	26	27	29	30	32	33	35	37	38	40	41	43	44
5'9"	175.2	13	15	16	18	19	21	22	24	25	27	28	30	31	33	34	35	37	38	40	41	43
5'10"	177.8	13	14	16	17	19	20	22	23	24	26	27	29	30	32	33	34	36	37	39	40	42
5'11"	180.3	13	14	15	17	18	20	21	22	24	25	27	28	29	31	32	33	35	36	38	39	40
5'12"	182.8	12	14	15	16	18	19	20	22	23	24	26	27	28	30	31	33	34	35	37	38	39
6'1"	185.4	12	13	15	16	17	18	20	21	22	24	25	26	28	29	30	32	33	34	36	37	38
6'2"	187.9	12	13	14	15	17	18	19	21	22	23	24	26	27	28	30	31	32	33	35	36	37
6'3"	190.5	11	13	14	15	16	18	19	20	21	23	24	25	26	28	29	30	31	33	34	35	36
6'4"	193.0	11	12	13	15	16	17	18	19	21	22	23	24	26	27	28	29	30	32	33	34	35
6'5"	195.5	11	12	13	14	15	17	18	19	20	21	23	24	25	26	27	28	30	31	32	33	34
6'6"	198.1	10	12	13	14	15	16	17	18	20	21	22	23	24	25	27	28	29	30	31	32	34
6'7"	200.6	10	11	12	14	15	16	17	18	19	20	21	23	24	25	26	27	28	29	30	32	33
6'8"	203.2	10	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	27	29	30	31	32
6'9"	205.7	10	11	12	13	14	15	16	17	18	19	20	21	23	24	25	26	27	28	29	30	31
6'10"	208.2	9	10	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
6'11"	210.8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	25	26	27	28	29	30



Lung Saskatchewan  
 2308 Arlington Avenue  
 Saskatoon, SK S7J 3L3  
 P: 306-667-3012 F: 306-343-7007  
 oxygentest@lungsask.ca

## REFERRAL FOR RURAL HOME OXYGEN ASSESSMENT

Please complete and fax this requisition to 306-343-7007.  
 This form will be forwarded to the local SHA oxygen tester.

Patient Name:	Patient Phone #:
HSN:	DOB: <span style="float: right;">(Day / Month / Year)</span>
Physician:	Funding:    NIHB <input type="checkbox"/> SAIL <input type="checkbox"/>
Fax # (for results):	Current Oxygen Provider:   Careica <input type="checkbox"/> Medigas <input type="checkbox"/> <span style="float: right;">Prairie Oxygen/Vitalaire <input type="checkbox"/></span>
Town of Residence:	Physician signature:

### PLEASE INDICATE THE APPROPRIATE TEST:

	<b>Initial home oxygen assessment</b> If client does not qualify for CONTINUOUS, will do EXERTIONAL and NOCTURNAL. May include ABG if required.	This will be completed as per SAIL Policy and/or local policy.  Does this patient have cor pulmonale or polycythemia?  <div style="text-align: center;">           Yes <input type="checkbox"/>                  No <input type="checkbox"/> </div>
	<b>Home oxygen renewal</b> Client will be tested for continuous, exertional, and nocturnal unless requested otherwise.	<b>CURRENT FUNDING:</b>  <div style="text-align: center;">           Continuous <input type="checkbox"/>                  Exertional <input type="checkbox"/>             Nocturnal <input type="checkbox"/>                      Palliative <input type="checkbox"/> </div>
	<b>Arterial Blood Gas</b> i.e. for NIHB funding or those who have borderline saturations.  <b>* Please forward to a local site that does ABG testing</b>	<b>PLEASE INDICATE RATIONALE:</b>
	<b>Nocturnal Oximetry Study</b> 1-night room air & 1 night with O2, if required  Oximeters will be distributed for take-home use by the local SHA Home Oxygen Tester and results downloaded by Lung Sask or local tester.  <b>*This test is not a diagnostic tool for sleep apnea. Consider referral to a sleep physician or other sleep studies.</b>	<b>SPECIFIC INSTRUCTIONS/ORDERS &amp; DIAGNOSES:</b> i.e. use CPAP/APAP/BiPAP, oxygen test only, LPM etc.



## **SAIL & NIHB Oxygen Testing Criteria Comparison Chart (Adults)**

The following chart provides assistance in comparing the Saskatchewan Aids to Independent Living (SAIL) Home Oxygen program and the Non-Insured Health Benefits (NIHB) Home Oxygen Program criteria for adults. Equipment coverage is not included here as they can be quite different in each program. This is not an all-inclusive chart; please see links below for in-depth understanding of the program's details.

### **Detailed instructions on oxygen testing and program contact information:**

#### **NIHB:**

[NIHB Home Oxygen Policy](#)

[Prior Approval Form](#)

[NIHB Oximetry Instructions](#)

SK NIHB Contact: 1-866-885-3933

[sasknihbmedicalsuppliesandequipment@sac-isc.gc.ca](mailto:sasknihbmedicalsuppliesandequipment@sac-isc.gc.ca)

#### **SAIL:**

[SAIL Home Oxygen Policy](#)

[Home Oxygen Tester Handbook](#)

SAIL Contact: 1-888-787-8996

[ehb@health.gov.sk.ca](mailto:ehb@health.gov.sk.ca)

	NIHB	SAIL
<b>Testers</b>	SAIL Home Oxygen Testers, Respiratory Therapy Departments, and home oxygen companies can test as long as they are RRT/RN/RPN/LPN Physician ABG's will also be accepted.	SAIL Home Oxygen Testers and Respiratory Therapy Departments can test as long as they are Saskatchewan Health Authority employees Physician ABG's are also accepted
<b>Continuous Testing</b>	<p>a PaO<sub>2</sub> ≤ 55 mmHg</p> <p>a PaO<sub>2</sub> between 56-59 mmHg with hypoxia on exertion (SpO<sub>2</sub> less than 89% for 2 continuous minutes</p> <p>a PaO<sub>2</sub> of ≤ 60 mmHg with dx of cor pulmonale, pulmonary hypertension and/or polycythemia</p> <p>oximetry at rest: SpO<sub>2</sub> ≤ 88% for 2 continuous minutes</p> <p>oximetry at rest with Stage IV Heart Disease (severe CHF) – SpO<sub>2</sub> less than 89% for 2 continuous minutes (need documentation from MD/NP)</p> <p><b>Client must meet one of the above. Home oxygen may be considered for coverage once the client's condition is stabilized and treatment optimized</b></p>	<p>a PaO<sub>2</sub> ≤ 55 mmHg</p> <p>a PaO<sub>2</sub> of ≤ 59 mmHg with dx of cor pulmonale and/or polycythemia</p> <p>oximetry at rest: ≤ 87% for 2 continuous minutes</p> <p>oximetry at rest with a dx of cor pulmonale or polycythemia: ≤ 90% for 2 continuous minutes</p> <p><b>Client must meet one of the above. If client is in hospital, testing must be completed within 48 hours of discharge</b></p>
<b>Exertional Testing</b>	<p>Room air testing at rest (oximetry or ABG): SpO<sub>2</sub> greater than 90%, <b>OR</b> PaO<sub>2</sub> greater than 60 mmHg</p> <p>Exercise testing on room air: SpO<sub>2</sub> ≤ 88% for 2 continuous minutes</p> <p>If exercise testing on room air demonstrates a SpO<sub>2</sub> &lt; 80% with good pulse tracking regardless of dyspnea or distance walked, the applicant meets eligibility criteria, and no further testing is required for the requested funding period</p> <p>Exercise testing with supplemental oxygen: testing must be performed with the requested equipment</p>	<p>Must not meet criteria for continuous oxygen</p> <p>Exercise testing on room air: SpO<sub>2</sub> ≤ 87% for a minimum of 20 continuous seconds</p> <p>Exercise testing with supplemental oxygen: Improved exercise capacity – Must have a documented improvement in exercise capacity of 20% while maintaining SpO<sub>2</sub> 90-92%</p> <p><b>Client must meet A, B, &amp; C and has not been hospitalized, had an exacerbation or change of treatment in the past 30 days for a cardiorespiratory event</b></p>

	<p>improved breathlessness - BORG scale increase of at least one unit at the end of the exercise</p> <p>improved exercise capacity - improved walking distance by at least 25% and at least 30 meters OR time traveled increased by at least 25% and at least 2 minutes</p> <p><b>Client must meet A, B, &amp; C</b></p>	
<p><b>Nocturnal Testing</b></p>	<p>room air testing demonstrating nocturnal desaturation <math>SpO_2 \leq 88\%</math> for 30% of the night</p> <p>sleep-disordered breathing must be ruled out</p> <p><b>Client must meet A &amp; B</b></p>	<p>must not meet criteria for continuous oxygen</p> <p>one night of room air testing: <math>SpO_2 \leq 87\%</math> for 30% of the night</p> <p>one night of testing with oxygen that shows evidence of significant improvements</p> <p><b>Client must meet A, B, &amp; C and has not been hospitalized for a cardiorespiratory event or had an exacerbation or change of treatment in the past 30 days</b></p>
<p><b>Palliative Care</b></p>	<p>PaO<sub>2</sub> of 60 mmHg or less</p> <p><b>OR</b></p> <p>oximetry that demonstrates sustained desaturation (<math>SpO_2 \leq 91\%</math> for 2 continuous minutes)</p> <p>Dyspnea that cannot be improved with medication and/or comfort analgesia must be supported by documentation from physician, nurse practitioner or palliative care team member (for example, Registered Nurse).</p> <p><b>Client must meet one of the above.</b></p> <p><b>Regular testing will be required for ongoing therapy after 6 months of palliative care oxygen therapy.</b></p>	<p>The following parameters shall be used to help determine whether a terminally ill individual is in the end stage of the palliative process:</p> <p>The timeframe for the end stage may be measured in terms of days or weeks of active dying. Time frames are difficult to determine, however, and in some cases, this end stage may be longer than a few weeks or as short as a couple of days.</p> <p>There are typically day-to-day changes with deterioration proceeding at a dramatic pace. There is usually a sudden drop in the Palliative Performance Rating according to the Palliative Performance Scale developed by the Victoria Hospice Society and the Capital Regional District Home Nursing Care in British Columbia.</p> <p>The end stage may be characterized by increasing intensity of need: increased assistance required for physical or</p>

		<p>psychological need, family exhaustion, usually a requirement for social work, pastoral care and therapies.</p> <p>There is documented clinical progression of disease which may include a combination of symptoms such as dyspnea, crescendo pain, profound weakness, being essentially bed bound, increased nausea or drowsy for extended periods.</p> <p>The terminally ill individual is assessed a Palliative Performance Rating of 30% according to the Palliative Performance Scale developed by the Victoria Hospice Society and the Capital Regional District Home Nursing Care in British Columbia.</p>
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