

**GOVERNMENT OF NAGALAND
DIRECTORATE OF HEALTH AND FAMILY WELFARE
NAGALAND : KOHIMA**

Dated Kohima, the 07 Aug, 2020

**GUIDANCE ON USE OF OXYGEN CONCENTRATOR FOR OXYGEN THERAPY IN
COVID-19 PATIENTS IN FACILITY SETTINGS**

NO. DHFW/COVID-19/2019-20/ 5216-22 :: Oxygen therapy is one of the main clinical management protocol for COVID-19 with compromised oxygen saturation level. To increase demand of oxygen with evolving COVID-19 pandemic situation, oxygen concentrators are provided to various public health facilities. The device are designed to provide relative pure oxygen (90-95%) by selectively removing nitrogen from air thus making it oxygen rich.

In order to facilitate use of oxygen concentrators by the end users in the field, this Guidance note on use of oxygen concentrators for oxygen therapy in COVID-19 patients in health facility setting (enclosed herein) is issued for strict compliance.

A demonstration video developed by MoHFW on how to operate this machine can be accessed at link mentioned herein: https://www.youtube.com/watch?v=JyVYF_YeFuA&t=11s.

All concerned are requested to widely disseminate the video among end users at health facilities to facilitate optimum use of Oxygen Concentrators.


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Principal Director
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Nagaland : Kohima

NO. DHFW/COVID-19/2019-20/ 5216-22

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Copy to:

1. The Addl Chief Secretary to Chief Minister, Nagaland, Kohima for kind information.
2. The Senior PS to the Hon'ble Minister for Health and Family Welfare, Nagaland, Kohima for kind information
3. The Deputy Secretary to Chief Secretary, Nagaland Kohima for kind information
4. The Principal Secretary, Home Department, Nagaland Kohima for kind information
5. The Commissioner & Secretary, Health and Family Welfare Department , Nagaland Kohima for kind information
6. The Mission Director (NHM)/ Director (H)/ Director (FW)/ PD (NSACS)/ PD (NHP)/ MD (NHAK)/ Jr Director (Store), Nagaland Kohima for kind information and necessary action
7. The Deputy Commissioner & Chairman DFT/ Chief Medical Officer/ Medical Superintendent of all districts for information and necessary action.
8. Guard file/ Office copy.


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Dated the 20th July, 2020

Ministry of Health & Family Welfare
Directorate General of Health Services
(EMR Division)

Guidance on use of oxygen concentrators for oxygen therapy in COVID-19 patients in facility settings

Background

Oxygen concentrators are devices which are designed to provide relatively pure (90-95%) oxygen by selectively removing nitrogen from air thus making it oxygen rich. Typically an oxygen concentrator would deliver 1-5 litres/ minute of continuous oxygen flow. These devices need a continuous electricity supply, an internal battery, or external battery pack for power outage. However, oxygen concentrators are safer (no risk of leaks), less expensive and more convenient alternative to pressurize oxygen cylinder or liquid oxygen, and especially useful in remote parts of the country where logistical constraints prevent continuous supply of oxygen cylinders.

Guidelines on use of Oxygen concentrators for managing COVID-19 patients

1. Oxygen concentrators are most useful for moderate cases of COVID 19 who require low oxygen (1-5 litres/ minute).
2. Moderate cases (90-94% SPO₂) to be managed with continuous monitoring of response to therapy. If the patient still is unable to maintain SPO₂ ≥95% (within a few minutes after putting on oxygen concentrator), he/she should be switched to alternative oxygen source (with higher purity of oxygen through non rebreathing mask and higher flow rates with high flow nasal oxygen therapy through pressurize oxygen cylinder etc.)
3. Oxygen concentrators should not be used for managing severe COVID 19 patients with type one respiratory failure who require more than 5 litres/min of oxygen, or for patients on high flow devices or non-rebreathing mask.

Additionally

1. One oxygen concentrator per bed should be used.
2. Sufficient supply of disposable oxygen tubing and nasal cannulas. One new one will be needed for each admitted patient.
3. A compressed-oxygen cylinder type B or type D and regulator should always be available in case of a power or machine failure.
4. Regular upkeep of oxygen concentrators includes twice weekly air filter cleaning and Zeolite replacement as required and periodic checking of machines by oxygen analyzers.