



# Lifecan One

## Emergency Ventilator

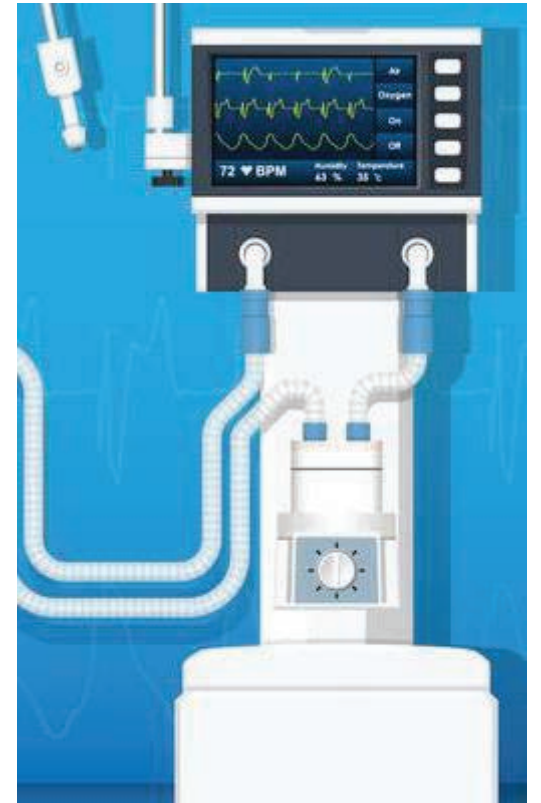
# The Problem

- Shortage of automated ventilators is the critical bottleneck for ERs dealing with the COVID-19 outbreak.
- High cost and high maintenance of traditional ventilators.
- Not enough trained physicians to active sophisticated ventilators.



# The Problem

The Coronavirus pandemic has exposed an acute global shortage of ventilators, highlighting the need for large-scale accessibility and deployment of ventilation devices in times of crisis. Hospital ventilator machines are **expensive** and must be reserved for the most critically ill patients. In emergency situations or mass casualty events with a vast number of people in need, medical/paramedical teams may not have the resources to provide crucial initial-stage respiration care.



# The Problem

**"My neurosurgeon friends have no knowledge of human respiration. But now they are being trained.**

We are supposed to be prepared for about 180 respirators. We are currently mentoring teams that routinely do not deal with these things. We have seen in **Italy orthopedists and ophthalmologists who have suddenly become intensive care unit physicians** who deal with patients' resuscitation. **My neurosurgeon friends have not the slightest knowledge of this."**

Dr. Hoshen, Haaretz, April 2020

Respirator devices will not suffice. Complete intensive care units, with skilled medical staff. It's not that you can put it on an autopilot, connect the patient to a machine, and everything works out. These are patients who need supervision, dynamic patients, need care, intensive care in all parameters. And that's **due to Achilles at the moment - there are not enough skilled teams.**

The decision to get people into intensive care or not, is a daily decision, because of the load. **Every day there are extremely difficult decisions regarding people who have their place in intensive care but have no place. Then there is the production of hybrids, augmented care units, in which anesthetized and respiratory patients are hospitalized.**

Prof. Raphael Walden, Haaretz, April 2020



# The Solution

Simplified device – easy to use by “low level staff”.



# The Solution



- The LifeCan device provides solutions to two of the main global problems caused By The COVID-19 Pandemic:
  - Ventilators deficit
  - Lack of trained medical personnel who know how to operate sophisticated mechanical ventilators

# The Solution



# The Solution

- LifeCan Medical has developed a BVM-based automatic respirator device, that **converts a standard manual BVM respirator into an automatic ventilator.**
- The device was developed in combination with engineers, doctors, and quality and regulation personnel.
- LifeCan-One provides ventilation solution low cost and easy to use.



# The Solution

## Lifecan Provides a New Approach That Can Be Used In:

- Hospitals emergency preparedness programs for large-scale public health emergencies
- Pre-hospital medicine (military, emergency and rescue services)
- Transfer of ventilated patients between departments in hospitals
- Least Developed Countries (LDCs) that lack of automatic respirators



# The Product



# The Product

LifeCan Medical has developed a BVM-based automatic respirator device, that converts a standard manual BVM respirator into an automatic ventilator.

The LifeCan One has an intuitive operation interface making it easy for use for anyone

Pre-set ventilation modes



# Performance Data

Ventilation Modes	A/C-VC, CPAP
Age	Adult
Tidal Volume	350-600cc
Breath Rate	14-26 BPM
Peak Inspiratory Pressure	50cmH2O
PEEP	0-20 (PEEP valve)
O2	21%-100%
Power	Corded and Battery
Battery Length	2-4 hours (depending on operation mode)
Alarms	High pressure, low pressure

# Key Product Facts

- Preset rate/ tidal volume
- Peep Valve
- Battery powered and electrical connection capability
- Expiratory flow can be filtered
- Intuitive use
- Pressure limit and alarms
- Quick and easy operation
- Suitable for emergency use in and out of hospital
- Suitable for use for by inexperienced users
- Approved for emergency use by the Israeli Ministry of Health
- Compatible for use, connection and integration into standard ventilation tubing and oxygen humidifiers
- Designed for easy stockpiling and storage



# Key Product Facts

- Low cost
- Easy to use
- Suitable for hospital services and pre-hospital services (EMR, military etc.)
- Portable and lightweight - suitable for stockpiling.
- FDA-510K/Class 2 Part 868.5925
- Picked by the Israeli MoD and MoH as the most suitable solution for emergency ventilation. MoD directly involved in moving to production.
- Production at Elbit System (an Israel-based international defense electronics company).

# Current Status

- Mass production phase (50-100 per day)
- Thousands were ordered and are in production process
- LifeCan's breakthrough development was chosen by the Israeli Ministry of Health and Ministry of Defense, as a solution to the current ventilator deficit in hospitals due to COVID-19, and won the Israeli Ministry of Health tender to supply 3000 of units to the Israeli health care system.









# The New York Times

## ***10 African Countries Have No Ventilators. That's Only Part of the Problem.***

Basic supplies like oxygen and soap are needed first to slow the spread of the coronavirus.

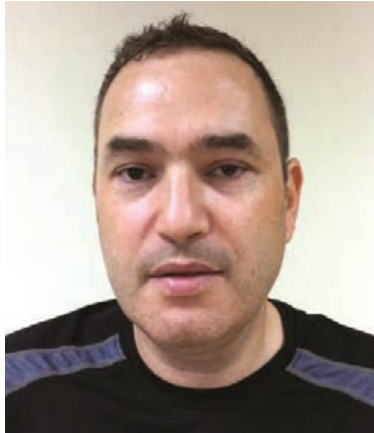
Published April 18, 2020 Updated May 17, 2020

Source: New York Times reporting; International Rescue Committee; Norwegian Refugee Council; The CIA World Factbook.

Country	Ventilators	Persons per ventilator
Somalia	0	-
DR Congo	5	20,356,053
Mali	3	6,517,799
Madagascar	6	4,492,623
South Sudan	4	2,640,311
Central African Republic	3	1,996,952
Burkina Faso	11	1,894,127
Nigeria	169	1,266,440
Malawi	17	1,246,861
Niger	20	1,138,618
Burundi	12	988,818
Zimbabwe	16	909,145
Mozambique	34	885,241
Senegal	20	786,818
Uganda	55	786,418
Liberia	7	724,757
Sudan	80	569,519
Sierra Leone	13	509,610
Namibia	10	263,007
Kenya	259	206,672
Ethiopia	557	194,099
Ghana	200	146,701
Libya	350	19,687

# The Management team

*Experienced Medical Device Experts With Real-life Emergency Medicine Experience*



Arik Klein  
Member of the board  
at LifeCan  
Businessman and  
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