

# ISO-POD™

## Safe Isolation and Transportation of Infectious or Contaminated Patients

### Problem

#### **INFECTIOUS DISEASES**

The public, hospital staff and first responders can be at risk when contagious patients are being transported to designated containment areas

#### **DICE - DELIBERATE INDIVIDUAL CHEMICAL EXPOSURE**

Incidents are increasing worldwide and deadly off-gassing from the contaminated patient presents a real danger



### Solution

#### **INFECTIOUS DISEASES**

The ISOPOD protects medical staff from infection and contamination without compromising treatment.

The Isolation POD is a negative pressure environment which prevents contaminants being able to escape

**DICE** - A safe means to isolate, shield and transport contaminated patients from one location to another. "Off gassing" is mitigated and neutralised

### Also Available – CONTAMINATED HUMAN REMAINS POUCH

The victim can be placed individually, or remain inside ISOPOD™ and inserted into the CHRP for completely protected and shielded transport of the contaminated remains

# Overview

- ◆ The ISO-POD™ consists of 2 primary components: the isolation module and the filtration blower system. The theory of operation is that the ISO-POD™ draws in ambient air through 2 particulate filters. This purified air is drawn across the patient providing a cooling effect and negative pressure prevents contaminants being able to escape that could affect the medical staff working on that patient. The air is then drawn through a cartridge where it is filtered for particulates, organic vapours and acid gases.
- ◆ The system can also be used in a positive pressure application for immune compromised patients as well as burns victims



- ◆ The ISO-POD™ has a full length zip which prevents contaminants from escaping during a negative pressure application
- ◆ Inside the isolation chamber there is ribbing to support the structure which is lightweight and easily removable. Everything is quick-connect
- ◆ The ribbing creates 5 flexible arches along the length support the vinyl above patient allowing voluminous work/ patient space
- ◆ Constructed from 510g Reinforced white PVC and 16 gauge clear vinyl material, the unit is heavy duty and puncture resistant
- ◆ The system is very lightweight with all components totalling just 17lbs
- ◆ The system is compact and portable and it packs into a carry bag that measures just under 1ft x 2ft x 3ft
- ◆ The 10.2 m<sup>3</sup>p/h blower system incorporates a lithium ion battery that provides up to 8 hours of operation. It also includes a battery charger that, within 4-6 hours, provides full charge of the ISO-POD™ blower battery and indicates to the operator when that charging cycle is complete



- ◆ 100mm wide gloved access points allow easy, multiple access points to your patient
- ◆ 50mm wide nylon belt system with 4 hand grips on each side enable staff to transport and safely manoeuvre patient in Isolation-POD
- ◆ Restraint Straps for securing to a gurney during transportation
- ◆ Clear View Windows to observe and calm the patient
- ◆ 21 Air Exchanged per hour nominal
- ◆ Some models include pass through ports to allow objects to enter to the Isolation-POD
- ◆ Service ports to allow IV, Oxygen lines to enter and exit the Isolation-POD
- ◆ Waste transfer Bag on some models
- ◆ Isolation-POD can be decontaminated
- ◆ Some models Include Restraint Straps System inside to help maintain the patient



## Economy Model (PODECO)



### Feature

Windows	1 per side
Nitrile Gloves	2 pairs
Snorkel	1
2-HEPA (In)/ 1-OVAG(Out)	Yes
Rechargeable Batteries 4.5V, Li Ion, 4 hour Battery& Charger	1

A smaller, paediatric version is also available (PODPED)



The Upgraded models have the following additional features:

- ◆ Additional snorkels and pass thru for medical equipment in and out of the chamber
- ◆ Additional glove ports to enable more personnel to work with the patient
- ◆ Transport Bag
- ◆ Internal Restraint System

### Choice Model (PODCHC)

#### Feature

Windows	3 per side
Nitrile Gloves	4 pairs
Snorkel	1
Pass Through ports	1
Internal Restraint System	Yes
2-HEPA (In)/ 1-OVAG(Out)	Yes
Rechargeable Batteries 4.5V, Li Ion, 4 hour Battery& Charger	1
Transport Bag	1



## Advantage Plus Model (PODADV)



### Feature

Windows	4 per side
Nitrile Gloves	7 pairs
Snorkel	2
Pass Through ports	1
Waste Bags	Yes
Internal Resistant System	yes
2-HEPA (In)/ 1-OVAG(Out)	yes
Rechargeable Batteries 4.5V, Li Ion, 4 hour Battery& Charger	1
Backboard pocket	1
Hand holds	6
Transport Bag	1



# Operation

◆ Remove all of the contents from the bag which includes:

Cartridge



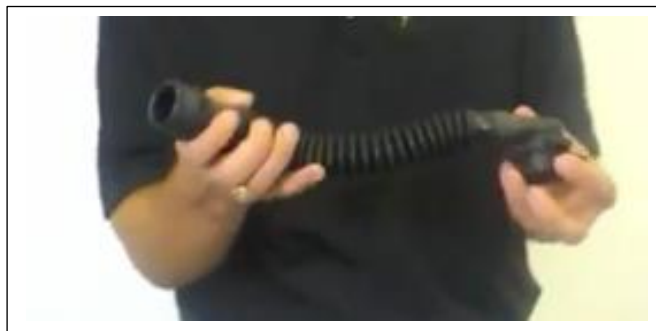
2 Particulate Hepa Filters



ISOPOD Blower & battery Charger



Breathing Tube Assembly

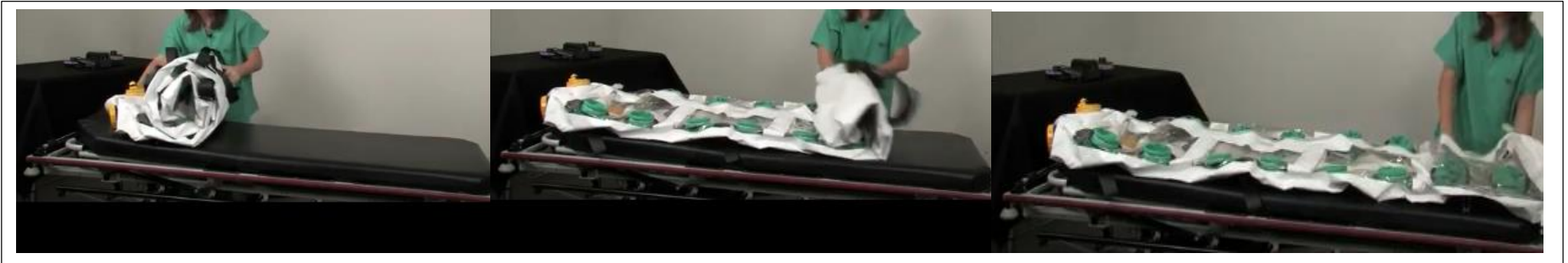


4 spines





◆ Remove isolation module from the bag and unroll fully



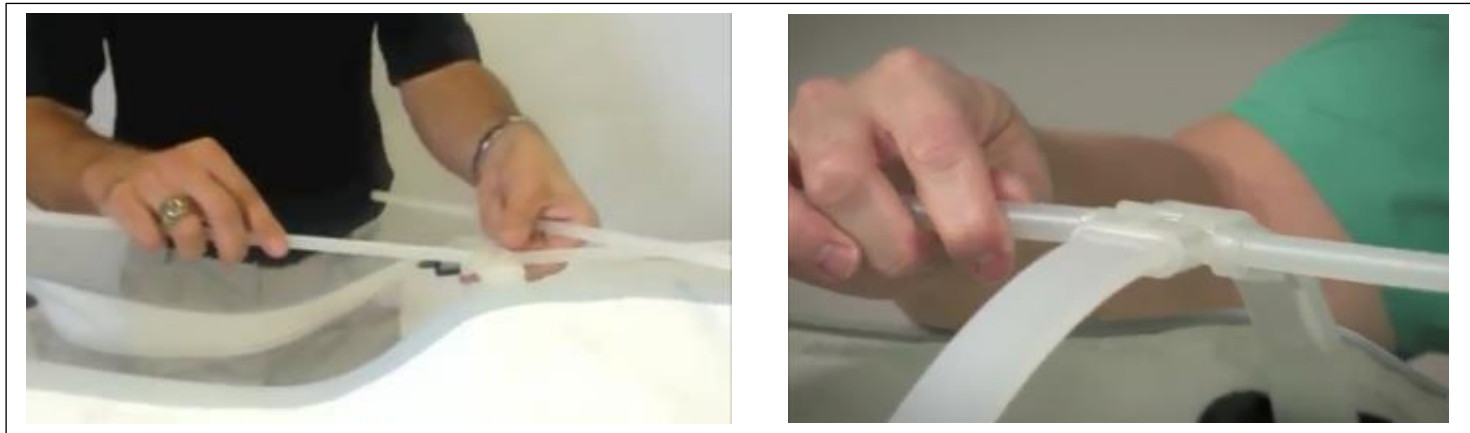
◆ The ISO-POD™ can be secured to a gurney or trolley



- ◆ The assembly process is very simple. There are 5 embedded ribs that extend across the ISO-POD™. Simply clip together the male and female clasps. Repeat for all 5 ribs



- ◆ Once complete, install the 4 spines. Insert into the female receptacle that is highest on the rib. Repeat for all 4 ribs



- ◆ Once the spine and ribs are installed, you have the complete ISO-POD™ frame structure

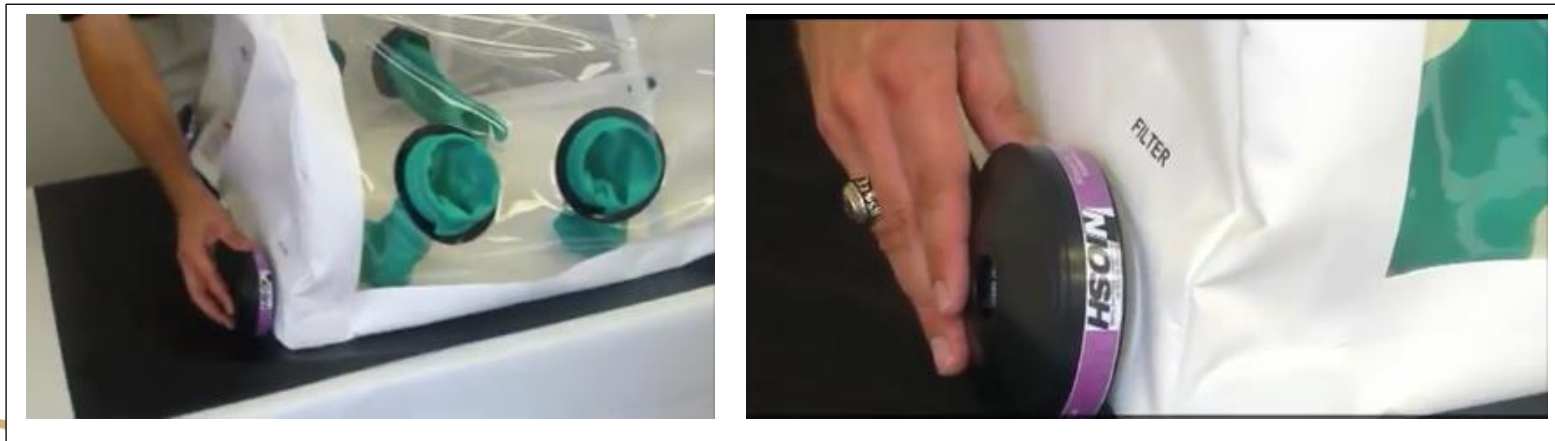


## Install the filtration system:

- ◆ Locate the 2 filter ports at the head-end of the pod

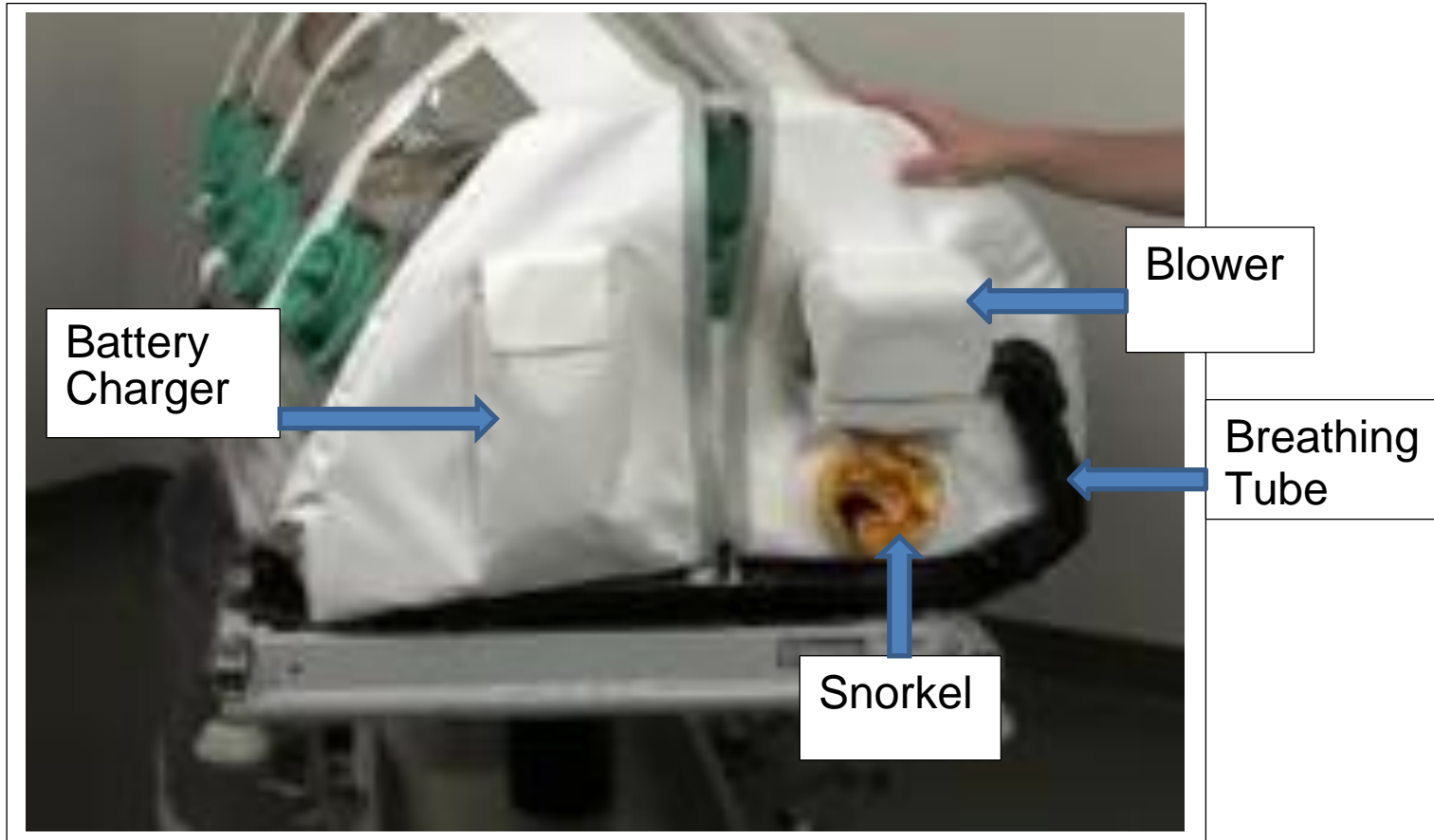


- ◆ Insert the hepa filters into the filter ports on the external side of the pod at the head end. There is a threaded connection – turn the filter clockwise until it is tightened. Repeat the process with the 2nd filter



- ◆ Install the cartridge. Locate the inside port at the foot end, on the opposite end to the hepa filters. Insert the threaded connection into the port and turn clockwise until it is snug





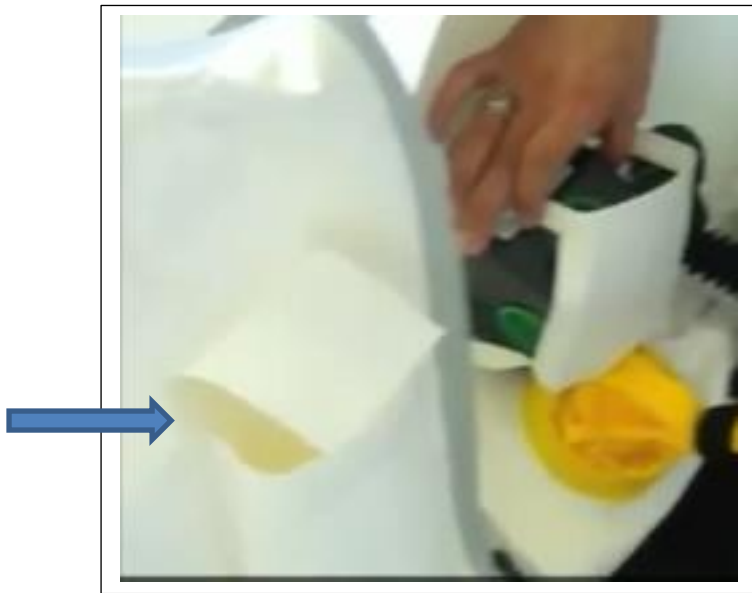
- ◆ The blower is housed in a pouch at the foot-end of the pod. For negative pressure applications, take the cross-shaped end of the breathing tube assembly and thread it into the blower port



- ◆ You can now turn on the blower and seal the full length zip

## Charging the Blower Battery

- ◆ The charger is stored in a pouch next to the blower. In 4-6 hours it can fully recharge the battery and indicates by way of a colour-changing light when the charging process is complete.



## Accessing the Patient

- ◆ The various ISO-POD™ models all contain at least 1 snorkel port. This can be used to feed in oxygen lines, intravenous lines, etc. The items can then be handled and manipulated by using the gloves access ports







Some models also contain an access port or through port. The access port is a clear compartment with zippers.



Step 1: Undo the outer zip



Step 2: Insert item and close the outer zip



Step 3: Open the secondary zip from inside the pod to retrieve the item



**Further details about Global Resilience Services Limited can be found:**

**Web: [www.grs-uk.com](http://www.grs-uk.com)**

**Tel: +44 (0)1928 575307**

**Email: [info@grs-uk.com](mailto:info@grs-uk.com)**



[www.grs-uk.com](http://www.grs-uk.com) | +44(0)1928 575307 | [info@grs-uk.com](mailto:info@grs-uk.com)