

tail end port **140**. If it is desired to provide positive pressure to the interim of the pod **10** the ventilator **144** is attached to the head end port **142** to provide positive pressure. If it is desired to provide a negative pressure environment in the interior of the pod **10** the ventilator **144** is connected to the port **140** through which it draws air entering the head end port **142**. Thus, the interior of the pod **10** may be run either above ambient pressure or below ambient pressure. When run above ambient pressure the pod **10** is configured for use with a contaminated environment and a uncontaminated patient within the pod. When the pod **10** is run below atmospheric pressure air drawn out of the pod is filtered in the filters **148** and **144** before being released to the environment so that a contaminated patient may not spread contamination.

In order to obtain access to the patient sealed in the pod **10** a plurality of glove ports **200** are provided. The glove ports **200** are primarily arranged in pairs with a first pair of glove ports **200** on the front wall, a second pair of glove ports **202** on the front wall, two pairs of glove ports on the back and a single glove port **210** at the head end for access to the patient for incubating the patient when necessary. Each of the glove ports **200** of the glove port pairs includes a glove **220**, which may be a substantially unisex latex glove. The glove **220** is connected to a PVC sleeve **222** extending to a glove port opening **224**. In addition, the glove port openings **224** have zipper-type closures **226** associated therewith. The closure **226** has a first flap **228** and second flap **230** with a sealing line **232** similar to an overlapping interlock plastic seal formed thereon. The closure **226** prevents material from falling into the open glove arm during transportation or the like. The glove ports **220** may be used to manipulate the patient within the pod **10** without breaking the barrier and releasing contaminants from the pod **10** into the environment or allowing the contaminants from the environment to reach the patient.

A further embodiment of the present invention is shown in FIGS. **17-19** wherein a pod **300** includes a left transparent PVC pod half **302** and a right transparent PVC pod half **304** joined by a zipper **306** at a center line. The pod **300** includes a plurality of belts **308** for securing the patient to a relatively thick PVC base **310** and includes a plurality of ports **312** having clamps **314** associated therewith for admission of suction lines, defibrillator lines, infusion lines, IV lines, EKG lines and the like. A ventilator port **330** is provided at one end. The pod **300** includes handholds **340** formed in the base thereof. A plurality of stays **350** comprising substantially flat Lexon plastic strips are positioned in sleeves **352** for supporting the pod. The stays are arranged in the stay halves **354** and **356** which provide a tent-like structure.

The pod **300** works in substantially the same fashion as the pod **10**. It includes a plurality of glove box ports **370** for the admission of the hands and forearms of a doctor or a nurse treating the patient. The glove box ports **370** terminate in gloves **384** connected to PVC sleeves **386** which are attached to an opening **388**. Drain plugs **390** are provided for draining materials from within the pod **300**. A ventilator **400**, which is substantially identical to the ventilator **142** is positioned on a ventilator support **402** and connected to a check valve port **404** for ventilation of the interior of the pod **300**.

A further alternative pod **500** may be positioned on a stretcher **502** and includes a base **504** with an upper portion **506** and a right transparent half **510** and a left transparent half **512** joined by a zipper closure **514**. A plurality of glove box ports **520**, **522** and **524** are provided for treating the patient. Each of the glove box ports has an opening **530** with a PVC sleeve **532** attached thereto and a latex glove **534**. The pod **500** includes a plurality of internal supports or stays

550 comprising flattened ribs which are positioned in sleeves in the walls of the bag to support the bag above the patient. The system includes a head-end glove port **600** and an attachment **602** to which a ventilator **604** may be coupled. The pod may be secured to a stretcher by elastic cords **620** and may accommodate a patient **622** therein.

The present invention may also be incorporated into wraps for civilian use in scenarios involving a limited number of pods for contaminated patients such as might be present in a chemical incident or for persons who would need to have medical attention administered through the wrap. In addition, suits may be provided including a power respirator hood that creates negative pressure within the hood and including rib or other supports for supporting the suit in particular the hood away from the person when the suit is being run in a negative pressure mode to prevent the suit from collapsing around the person.

While there have been illustrated and described particular embodiments of the present invention, it will be appreciated that numerous changes and modifications will occur to those skilled in the art, and it is intended in the appended claims to cover all those changes and modifications which fall within the true spirit and scope of the present invention.

What is claimed is:

1. A collapsible personnel isolation apparatus adapted to be erected in the field from a collapsed compacted form into an expanded form for isolating, transporting and treating a person being transported, the apparatus comprising:

a lower flexible base that is expanded from its collapsed compacted form to allow a person to be laid on the lower flexible base;

an upper flexible cover having a flexible wall to be erected from a collapsed compacted form into an extended cover to be placed over the top of the person laid on the lower flexible base;

a substantially airtight closure device for joining the flexible base and the flexible cover to one another and to provide a substantially airtight interior region for the person therein;

the flexible base and cover defining a pod sized for use with or as a stretcher;

ports in the pod leading from the exterior of the pod into the interior regions to allow access to the patient for treatment from the exterior by a care giver; and

a ventilation port for transmission of air between the interior region and the exterior and for providing biochemical isolation between the interior region and the exterior.

2. A collapsible personnel isolation apparatus according to claim **1** wherein said flexible walls are made with flexible plastic material;

the lower flexible base and the upper flexible cover comprising upper and lower clam shell portions joined together by the closure device.

3. A collapsible personnel isolation apparatus according to claim **2** wherein said plastic material comprises a polyvinyl chloride flexible wall having a thickness of about 0.020 inches or less.

4. A collapsible personnel isolation apparatus according to claim **1** wherein the internal support is held in supporting compression with the flexible wall.

5. A collapsible personnel isolation apparatus according to claim **1** further comprising a second ventilation port; one of said ventilation ports being adapted to admit air to the interior, the other of said ventilation ports being adapted to exhaust air from the interior.

6. A collapsible personnel isolation apparatus according to claim **1** wherein the ports comprise a glove port terminating in a glove which is biochemically isolated from the interior but which can be used to manipulate objects within the interior.