

Protocol For SA-CI Standby-Stabilization-Transport

If the recommended minimum funding is available for a client, Suspended Animation (SA) endeavors to deploy a standby team consisting of 6 people including:

1. The **team leader**
2. A **medical professional** to establish airway access and place an intravenous line
3. An **additional team member** to perform and assist in other stabilization tasks
4. A **surgeon** trained to establish access to the circulatory system for blood substitution
5. A **perfusionist** trained to operate an air transportable perfusion unit for blood substitution
6. A **scribe** to document all procedures

In certain cases, depending on logistical factors, two of these separate roles may be combined in one person.

If SA accepts a case for less than the minimum funding required for a client, SA may deploy fewer people and modify protocol to reflect these circumstances.

Prior to legal death, if sufficient warning has been received and other circumstances permit, Suspended Animation will deploy the team leader, the medical professional, the additional team member, and the scribe to the patient's bedside, where they shall set up equipment necessary to perform the tasks described below. During the waiting period, at least two team members shall be awake and ready to act at all times, while the remaining team members shall be at a nearby location from which they can be summoned promptly.

When legal death is pronounced and the team has obtained access to the patient, the following interventions are initiated *immediately* and, where possible, *simultaneously*:

- **Cardiopulmonary support** using a mechanical device and ventilations through a patent and secure airway, enhanced by the use of a respiratory impedance valve. If the team is unable to provide cardiopulmonary support within a short time after cardiac arrest, ventilation of the lungs may be omitted.
- **Induction of hypothermia** by packing the patient in ice inside a portable ice bath and active ice water circulation by a submersible pump. Additional measures, such as cold liquid lavage, may be used if this is considered advantageous.
- **Pharmacologic support** to modulate blood clotting, restore blood volume and blood pressure, prevent edema, and protect the brain from ischemic injury.

From the start of stabilization procedures and onwards, all pertinent details of events are noted on preprinted scribe sheets, and the following data are collected and documented:

- **Temperature** (at least two body locations)
- **End tidal carbon dioxide**
- **Oxygen saturations**

- **Blood gases and electrolytes** (optional)

If **blood substitution** of the patient is recommended, the patient's blood is washed out and substituted with the organ preservation solution MHP-2 in either the transport vehicle or a cooperating funeral home (or other suitable location).

Surgical access to the circulatory system and cannulation of the vessels is performed by a standby team member skilled in surgical procedures using sterile technique. The patient's blood is washed out and replaced with sterile MHP-2 using a sterile air transportable perfusion circuit. The patient is further cooled by running ice cold water through the heat exchanger of the perfusion circuit.

During blood substitution the following data are collected and documented:

- **Temperature** (two body locations and the arterial and venous side of the circuit)
- **Pump speed**
- **Pressure** (circuit and/or the patient)
- **Blood gases, electrolytes and perfusate** (optional)

After a target temperature ~ 5 degrees Celsius has been achieved, the patient is packed in ice and placed in an insulated shipping container. They are then shipped via the fastest and most reliable method to the patient's cryonics organization for cryoprotective perfusion and long term care. During transport, one temperature data logger records the temperature of the patient.

During all procedures a dedicated scribe takes notes, voice recordings are made and the case is documented using photography and video (optional).

Practical and medical circumstances may prevent Suspended Animation from performing all procedures as outlined.