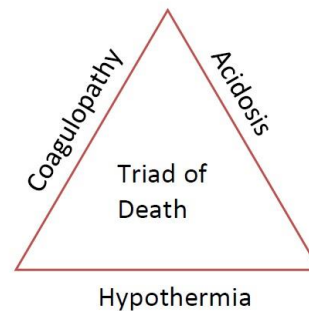


It is important to keep the injured Person warm.

In recent years, medical experts have through studies become aware of that even mild hypothermia has an influence on Patient's chance for survival.

Hypothermia is where the patient's body temperature drops the normal temperature of 37 degrees to below 35 degrees. If the temperature drops further to 32 degrees or below, the patient becomes increasingly unconscious and is eventually without movement or pulse.



Following studies shows.

Trauma patients are in the high-risk group for hypothermia. Blood loss and decreased blood circulation due to muscle and nerve damage are causes of mortality along with the low outdoor temperature.

Hypothermia reduces the blood's ability to coagulate. This increases the bleeding and the patient is at greater risk of dying due to internal bleeding.

US research results have shown, that if patients during surgery are exposed to mild hypothermia between 34-36 degrees, the bleeding will be increased by 16% for each degree the temperature drops.

Swedish studies show, among other things that 98% of trauma patients were below 36 degrees regardless of the season, that children and elderly in particular had difficulty regulating the temperature.

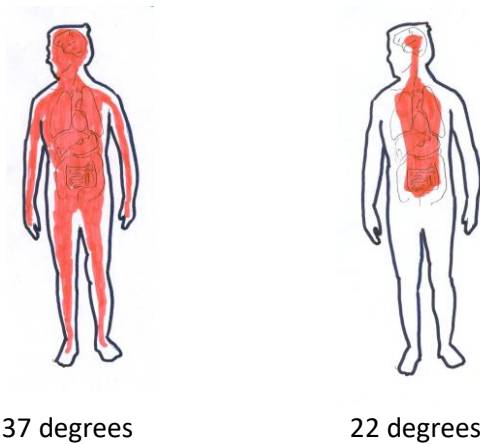
Likewise hypothermia has been shown to affect the patient's condition and many of the body systems. These complications are leading to diseases or injuries, and causes longer hospital stays and increased costs.

In the United States, about 150.000 people dies from trauma each year. Of these 700 deaths are due to hypothermia. Worldwide approximately 5.8 million people dies from injuries. Today all trauma centers are aware of the problem of problem from reduced temperature. Therfor it is important for rescue personal to keep patients warm and minimize cooling.

Hypothermia is seen especially within alcoholics, recreational, drowned, sick trauma accidents and burn damaged patients.

Clinical division by Hypothermia.

- The mild hypothermia patient has a body temperature of 35 degrees. Here is the patient awake, but has coagulation problems with bleeding, which increases with further cooling.
- The moderate hypothermia is where the patient is unconscious with pulse and with a temperature below 32 degrees.
- The severe hypothermia is where the patient is without pulse, and with a temperature below 32 degrees.



Thorax is important to protect.

The body's defense against hypothermia is to secure the vital organs. Arms and legs have no significance use in case of severe hypothermia.

The medical and surgical treatment, is hot fluid in the body cavities, hot inhaled air and heating of the blood. To avoid further harm to the patient, doctors only heat where there is circulation. The risk is that the warmest blood flows out to the less important organs, such as arms and legs. It means, there is a risk of, that parts of the body have no circulation, and it will increase oxygen consumption. Without oxygen reaching the right area, it will lead to cell death.

Today there are many great opportunities within the rescue service to help these patients. In practice the rescue crew forgets to carry out a good efficient cold wrapping of the Patient. In practice, the wrapping of the patient is done with an ordinary blanket or a thin foil blanket. This can sometimes be difficult to handle under extreme weather condition. Therefore it can be difficult for a paramedic to perform an effective treatment due to working with loose blankets, which cannot be fastened around the patient.

Unconscious patients in particular difficult to wrap.

Why does the rescue crew forget to perform a good wrapping:

- Packing is sometimes difficult.
- Takes a lot of time.
- Difficult treatment of the patient.
- Observation time deteriorates.
- It is too time consuming in stressful situation.

Therm-Aid has following requirements for proper wrapping:

- The product must be fast and effective.
- Must be durable.
- Must be able to be attached to the patient, in case of bad weather condition.
- Must be easy to loosen and reattach during further treatment.
- Must be better to hold body heat.
- Must be ready to use.
- Must be available in different sizes.
- Must be made as disposable material.
- Must be attached on the patient, when moving.
- Must be able to have more time to paramedic treatment.
- Must be able to provide a greater chance of survival for the patient.



Thorax Thermal Blanket.

Thorax Thermal Blanket has really good heat and insulation properties, compared to a thin foil blanket. The design of the wrapping method is innovative and provides a greater assurance of fast correct treatment method. Thorax Thermal Blanket is preprepared with slits in the blanket which fits around the patients thorax, groin and face. The blanket is more durable and specially designed for wrapping of trauma patient. The head is not completely protected by the blanket. This is done so that free airways can be created for ventilation and intubation.

Paramedics may deliver shock to a patient, who suffers from cardiac problems. The breast should be exposed. Staff and paramedics must keep a distance from the blanket when delivering shocks. Shock delivery occurs with DC. The DC will go from electrode to electrode. If the patient is wet, the patient must be wiped, before the electrodes are applied.

The blanket has been fitted velcro straps for reclosing and fastening for further treatment. The advantage of the blanket are that paramedics do not have to spend much time on the wrapping method, but are freed up for several relevant tasks, such as observation and treatment of the patient. By burn patients, there may be cut a hole in the blanket around the affected area, so that the area can be cooled with water, and at the same time keep the patient warm.

The blanket is in advanced prepared for children, juniors and adult patients. In a case where injured patients who are not in a critical condition at the accident site can be warmed up by the blanket against hypothermia. Hospital staff can now quickly move trauma patients directly to the CT-Scanner, without exposing them to additional risk of hypothermia. The Blanket has been tested in a CT-Scanner. To protect the patient and the staff from poor hygiene and sources infections, the blanket is distributed as hospital waste. It is also possible to put a cap of the same material on the patient.

The use of Thorax Thermal Blanket, provides quality and savings for the hospital.

Aalborg University in Denmark, has performed a cost-effectiveness analysis of the Thorax Thermal Blanket for treatment of mild hypothermia among trauma patients in the ambulance service. The cost-effektiveness analysis is ti determinate if it can implement Thorax Thermal Blanket as treatment for hypothermic patients, compared to the conventional treatment of Hypothermic trauma patients. According to this analysis, it can be concluded that such an implementation will lead to savings.

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Thorax Thermal Blanket sizes S – M – L.