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# INTERNATIONAL LIFE SAVING FEDERATION

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## **ILS POLICY STATEMENT N° 1.**

### **STATEMENT ON THE USE OF ABDOMINAL THRUSTS IN NEAR DROWNING**

During near drowning victims usually swallow large quantities of water and air. Their stomachs often also contain food and drink consumed just prior to entering the water. Since drowning is a process of asphyxiation, the victim is frequently profoundly hypoxic. This combination of hypoxia and a full stomach is the cause of the vomiting that is very familiar to lifeguards and is an almost inevitable accompaniment of near drowning. This has been well documented in the literature.

The Medical Commission of the International Life Saving Federation has carefully considered the management of near drowning, and in particular the use of upper abdominal thrusts (Heimlich Manoeuvre) to relieve airway obstruction. Because of the risk of precipitating gastro-oesophageal regurgitation and subsequent inhalation of stomach contents into the lungs, the Commission regards near drowning as an absolute contraindication to the use of upper abdominal thrusts unless a solid foreign body (not water) is present in the upper airway and cannot be dislodged by other means.

Policy Statement approved by the ILS Board of Directors on 13/05/1996

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### **ADDITIONAL STATEMENTS ON THE USE OF ABDOMINAL THRUSTS IN NEAR DROWNING**

#### **BACKGROUND**

In January 1996 the Medical Commission of the International Life Saving Federation issued a statement on the use of abdominal thrusts in near drowning that was approved by the ILS Board in May 1996.

At a meeting of the Medical Commission in San Diego in September 1997 the Statement was again discussed in the light of several papers presented at the preceding International Medical/Rescue Conference.

The Commission decided to endorse the previous statement but with expanded explanation and list of references.

## STATEMENT

Near drowning victims present unique and challenging problems in airway management because of the nature of the episode. Since drowning is a process of asphyxiation, the victims are usually profoundly hypoxic. They have often swallowed large quantities of water and air; their stomachs frequently contain food and drink consumed just prior to entering the water.

This combination of hypoxia and a full stomach is the cause of the regurgitation that is very familiar to lifeguards and is an almost inevitable accompaniment of near drowning. This has been well documented in the literature (1, 2).

Submersion victims may aspirate some fluid into their lungs but there is no evidence that this can or need be removed by any technique.

The priority for rescuers is to implement resuscitation at the earliest possible opportunity. In doing this, the maintenance of a clear airway and prevention of aspiration are of paramount importance.

The Medical Commission of the International Life Saving Federation has carefully considered the particular problems of upper airway management in near drowning. Techniques, which have poor efficacy and purely anecdotal support, are strongly discouraged. Abdominal thrusts (Heimlich Manoeuvre) to relieve airway obstruction have been carefully considered and the following conclusions drawn:

- In near drowning upper abdominal thrusts pose a great risk of precipitating gastro-oesophageal regurgitation and subsequent inhalation of stomach contents into the lungs.
- There is no clear medical rationale for its use and in particular it seems clear that the manoeuvre cannot expel sufficient water from the lower portions of the respiratory tree to aid in resuscitation.
- There are no well-controlled blind studies to validate its value in near drowning.
- The use of abdominal thrusts as a first manoeuvre will merely serve to delay the institution of appropriate cardiopulmonary resuscitation which has been well proven to save life in this condition

Therefore the Medical Commission of the International Life Saving Federation strongly recommends that in cases of near drowning the use of upper abdominal thrusts is contraindicated unless a solid foreign body (not water) is present in the upper airway and cannot be dislodged by other means. This would be demonstrated by inability to obtain adequate ventilation of the lungs in the course of basic resuscitation measures.

## References

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