

# Emergency Medical Kit for Commercial Airlines: An Update

CLAUDE THIBEAULT AND THE AIR TRANSPORT MEDICINE COMMITTEE, AEROSPACE MEDICAL ASSOCIATION

THIBEAULT C, AIR TRANSPORT MEDICINE COMMITTEE, AEROSPACE MEDICAL ASSOCIATION. *Special Committee Report. Emergency medical kit for commercial airlines: an update. Aviat Space Environ Med* 2002; 73:612-3.

As expected, the issue of medical kits for commercial airlines continues to attract attention, especially in light of the recent United States regulation on the subject. As promised in its first recommendation in 1998, the Air Transport Medicine (ATM) Committee has continued to monitor medical kit usage as well as pharmaceutical scientific developments and wishes to propose an update to its 1998 recommendation. Lists of contents are provided for emergency medical kits of two types: 1) those without defibrillator/monitor or monitor; and 2) those with defibrillator/monitor or monitor alone. Follow up and updates on this issue will be an ongoing task of the ATM Committee.

IN 1998, the Air Transport Medicine (ATM) Committee proposed its first recommendation for the contents of an Emergency Medical Kit for commercial airlines (1). As promised in that publication, the ATM Committee has continued to monitor the evolution of the much discussed topic, as well as the pharmaceutical scientific developments, and wishes to propose the following update to its 1998 recommendation (Table I).

The committee has adopted the same approach in presenting two versions of the kit; however, the committee wishes to be more specific: 1) kit without defibrillator/monitor or monitor, 2) kit with defibrillator/monitor or monitor alone. This approach recognizes the specific existence of defibrillator without monitor, which would match version one of the proposal.

As will be noted in Table I, the first version of the kit has not changed significantly. It already had the medications recently added to the U.S. airlines enhanced medical kit by the new Federal Aviation Administration (FAA) rule except for oral antihistaminics and non-narcotic analgesics. Although the committee agrees with the addition of the latter two drugs, it leaves the decision to the individual carriers (other than in the U.S.) to include them in their enhanced medical kit or in another more easily accessible medication kit. Furthermore, we deliberately have not discussed first aid kits since they have been legislated for a long time in most countries. These kits normally include the necessary dressings, bandages, pocket mask, and the like. Some countries also store the over-the-counter drugs in the first aid kit.

Antispasmodic tablets have been removed from the

TABLE I. EMERGENCY MEDICAL KIT.

Medication	Equipment
<b>1. Without defibrillator/monitor or monitor</b>	
Epinephrine 1:1000	Stethoscope
Antihistaminic inj.	Sphygmomanometer (electronic preferred)
Dextrose 50% inj. 50ml	Airways, oropharyngeal (3 sizes)
Nitroglycerin tab. or spray	Syringes (appropriate range of sizes)
Major analgesic inj.	Needles (appropriate range of sizes)
Moderate analgesic p.o.	IV catheters (appropriate range of sizes)
Sedative anticonvulsant inj.	Antiseptic wipes
Anti-emetic inj.	Gloves (disposable)
Bronchial dilator inhaler	Needle disposal box
Atropine inj.	Urinary catheter
Adrenocortical steroid inj.	IV admin. set
Diuretic inj.	Venous tourniquet
Oxytocin inj.	Sponge gauze (4 × 4)
Sodium chloride 0.9%	Tape adhesive
ASA p.o.	Surgical mask
	Flashlight and batteries
	Blood glucose test strip
	Emergency tracheal catheter (or large gauge IV cannula)
	Cord clamp
	BLS cards
	Bag-valve mask
	A list of contents
<b>2. With defibrillator/monitor or monitor alone</b>	
Same list 1, adding:	ACLS cards
Lidocaine	
Epinephrine 1:10,000	

list. All experts consulted agreed that they did not belong in an airline emergency medical kit. This is a good example of the philosophy we believe should drive airline medical kit. Commercial airlines are taxis, not flying emergency rooms. In that role, aircraft have many physical limitations. The acceptable emergency

From the Air Transport Medicine Committee, Aerospace Medical Association, Alexandria, VA.

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Address reprint requests to: The Aerospace Medical Association, 320 S. Henry St. Alexandria, VA 22314; www.asma.org. Claude Thibault, M.D., is Senior Director, Occupational Health Services, Air Canada, Dorval, Quebec, Canada.

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medical kit should be relatively small, with a limited number of drugs able to deal with the most common life-threatening emergencies and/or very severe pain until access to more definitive treatment on the ground.

One drug left on the list that challenges this concept is oxytocin. So far, it certainly has been used extremely infrequently, if ever. However, discussions with a number of ob-gyn specialists has convinced us to leave it on the list for the time being, since it can definitively save a life in a specific situation. This decision will be reevaluated again in the next revision.

Only lidocaine remains from the second version of the proposal. All emergency specialists consulted supported this approach based on the above-mentioned philosophy. Bretylium and sodium bicarbonate are not used anymore in our particular setting and we discov-

ered that diltiazem is quite temperature sensitive and, therefore, likely to deteriorate when stored aboard an airplane. We have added epinephrine 1 in 10,000 as recommended by recent ACLS guidelines.

Finally, the caveat mentioned in 1998 still applies: this recommendation does not supersede any law and it may be impractical for some countries to obtain and/or include some items of the kit.

The ATM committee acknowledges the need for more industry-wide data collection so that the next revision is supported by more objective data.

#### REFERENCE

1. Thibeault C, Air Transport Medicine Committee, Aerospace Medical Association. Emergency medical kit for commercial airlines. Special Committee Report. *Aviat Space Environ Med* 1998; 69:1112-3.

### Erratum

Regarding the article "Acute Mountain Sickness in Jade Mountain Climbers of Taiwan" (Kao WF, Kuo CC, Hsu TF, Chang HH, Sung YY, Yen DHT, Wu JK, Lee CH. *Aviat Space Environ Med* 2002; 73:359-62.) there were several errors.

1. On page 359, in the abstract, lines 14 and 20: 27% should be 28%.
2. On page 360, left column, first paragraph, line 17: "Information was not collected . . ." should be "Information was collected . . ."
3. On page 360, right column, first paragraph, line 1: 27% should be 28%.
4. On page 360, right column, second paragraph, line 1: 27 should be 25, and 54% should be 52%.
5. On page 360, right column, second paragraph, line 2: 29% should be 28%.
6. On page 360, right column, third paragraph, line 9: 27% should be 28%.
7. On page 361, right column, second paragraph, line 4: 27% should be 28%.