Since December 2007, 35 people have died in nine EMS helicopter accidents. The industry is under scrutiny by regulatory agencies, the public and the service providers themselves. As a result, health care providers are examining their potential liabilities, how these exposures may or may not be covered by their insurance programs and risk mitigation techniques.

Emergency medical services (EMS) air transport is ailing. The demand for fast, possibly life-saving transport of critically ill and injured patients to health care facilities continues to rise; so, unfortunately, does the number of fatal crashes involving EMS aircraft.

Helicopter EMS (HEMS) transports close to 400,000 patients each year. More than 750 medical helicopters are in service, double the number 10 years ago. Many researchers wonder if the risks associated with air transport are worth the return. The service is expensive with many operating at a loss, and in anticipation of expected increases in safety and insurance costs, many providers are reevaluating continuing the service. A flight now can cost up to 10 times more than a ground ambulance. Research has shown that in many cases helicopter transport may not have been necessary. Susan Baker of the Johns Hopkins Bloomberg School of Public Health recently noted that 40% of the patients aboard the 5,000 helicopter EMS flights inside Maryland each year are discharged from hospitals in fewer than 24 hours.
Still, stories abound of stroke and heart attack victims saved by the speedy arrival of a rescue helicopter, and demand has taken off accordingly. The proliferation of transport services has increased competition, resulting in consolidation within the industry. Fuel and maintenance costs are up, net income is down and HEMS providers compete with the Pentagon for access to safety equipment, such as night vision goggles (NVG). The downturn in the economy may challenge the viability of many programs. Yet for now, safety concerns top the worry list.

No single factor accounts for the HEMS crashes. Crash circumstances vary broadly because of the variety of aircraft, settings, topographies, skill sets and other human factors influencing the tragic accidents.

![U.S. Helicopter EMS Causal Factors and Accident Locations](image)

**U.S. HELICOPTER EMS CAUSAL FACTORS**
- **Pilot:** 49%
- **Unknown:** 6%
- **Weather:** 12%
- **Engine - AW:** 2%
- **Non-Engine AW:** 1%
- **Maintenance:** 1%
- **Other/FOD:** 3%

**U.S. HELICOPTER EMS ACCIDENT LOCATIONS**
- **Pilot Site:** 26%
- **Hospital:** 23%
- **Pickup Site:** 20%
- **En Route:** 14%
- **Airport:** 14%

**AW = AIRWORTHINESS ISSUE**
**FOD = FOREIGN OBJECT DAMAGE**

**NOTE:** Based on 120 accidents involving U.S.-registered civil emergency medical helicopters, Jan 1, 1998–June 30, 2008

**SOURCE:** International Helicopter Safety Team, via Roy G. Fox, Bell Helicopter

**RESPONSE**

In the past six months, the industry and the government have responded. In July, a group representing HEMS pilots, nurses, medics, communications experts, physicians, program directors, manufacturers, operators, regulatory agencies, insurance providers and legal consultants met in Dallas for a round table safety summit or, as some called it, safety boot camp. Topics included training, safety management systems, air medical resource management, communications, competition, human factors and standard operating procedures.

The National Transport Safety Board (NTSB) has made numerous recommendations for improving safety, but the Federal Aviation Administration (FAA) has the power to make regulations mandatory. The need for developing and implementing appropriate risk reduction tools, a culture of safety, improved procedures, and better technology and equipment is paramount to addressing the crisis. The FAA said, after the June 2008 crash in Arizona, that its immediate focus would be in areas that required no new rule making. These included:
Encouraging risk management training to help flight crews make preflight risk assessments and improve decision making surrounding whether to begin a mission

Encouraging improved training for night operations and flights in bad weather

Providing airline industry-like oversight of HEMS operators

Promoting the use of technology, including night vision goggles (less than one-third of all pilots have them), terrain awareness, warning systems and radio altimeters

Recent draft versions of the rules would not make many of the safety enhancements mandatory on aircraft acquired prior to the date the rules are enacted. Thus their impact might not be felt for many years. The NTSB has scheduled a public hearing on the safety of helicopter emergency medical services operations for three days, starting February 3, 2009 at its headquarters in Washington, D.C.

Congress is getting involved as well. This past July, the Air Medical Service Safety Improvement Act of 2008 was introduced. The act mirrors NTSB recommendations. Some have expressed hope that with the coming changes in governmental leadership, the bill will receive more attention.

**INSURANCE CONSIDERATIONS**

The two most common insurance purchases by hospitals for HEMS exposures are Non-Owned Aircraft and Heliport coverage. The exposures hospitals face vary widely, depending on the hospital’s role in EMS operations and contractual obligations the hospital assumes with a service.

If a hospital does not directly own, maintain or operate an EMS helicopter it may seem unlikely that liability can be assigned to the hospital. However, injured parties will often seek to do so. A Non-Owned policy, in addition to limits, can provide defense over and above the policy limits. This by itself may be argument enough to buy the coverage.
Another source of exposure is the aircraft itself. If the helicopter is parked on the hospital’s helipad, and the hospital’s security is in charge, a plaintiff could easily argue that the hospital had “care, custody or control” of the helicopter. If vandals damage the helicopter and no contract is in place indicating otherwise, the hospital will probably be held responsible. The hospital’s coverage of the helipad may not respond unless the helipad policy covers hangarkeeper’s liability.

Limits carried by EMS operators vary widely depending on the size and scope of operation, equipment operated and safety record. Per-seat sub-limits and other restrictions may also apply. Most Aviation policies have medical malpractice exclusions, depending on who is handling the patient. Operation and use of a helipad is usually excluded from a Commercial General Liability policy. Hospital heliport policies normally cover bodily injury and physical damage only when arising from the use, ownership or operation of a helipad, such as bodily injury to bystanders and property damage to the property of others. Non-Owned Aircraft policies are therefore the missing piece, covering bodily injury and property damage caused by an accident involving a non-owned helicopter.

Despite the much publicized losses, the current market for liability insurance for a health care provider’s air transport exposures remains somewhat soft whereas the operators are facing a hardening market. The marketplace is small for these coverages and potentially could change quickly.

Hospitals need to be prepared for losses that could impact their Non-Owned and/or Heliport policies. If the primary aircraft limits (on the policies of the helicopter owners) are adequate, and the hospitals are being added as insureds on policies, it is less likely that the Non-Owned coverage will be called on to respond. The same is true for the Helipad coverage. Both of these coverages, usually sold as a package, are relatively inexpensive. Few losses have triggered these contingent policies. If and when that changes, it is highly likely that capacity will shrink and premiums will rise.

The best way for a hospital to address these exposures are for risk managers to discuss safety initiatives with their operators while also confirming appropriate internal and external insurance coverages are in place.

The life-and-death demands placed on those involved in EMS helicopter operations expose these dedicated professionals to many challenges and risks. There is no single answer to improving the safety of HEMS operations, but commitment to a strong safety culture is imperative. HEMS providers should always ask, and find reliable ways to answer, the essential question: Can we safely get there and back?

### ADDITIONAL QUESTIONS FOR HOSPITALS WITH HEMS EXPOSURES

- Have you checked to see if your operator’s policy includes Passenger Voluntary Settlements coverage?
- Have you purchased life insurance for employees involved in flights? Most personal policies exclude flight activities.
Have you reviewed internal policies and procedures for approving employees to be passengers in the helicopter? (Will you allow anyone to go along for a ride?)

Have you discussed with your vendor their plans for implementing the safety recommendations of the NTSB, FAA or other flight professional organizations?

Does your patient safety/environmental rounds checklist cover assessment of aircraft contents, including checking medical supplies and medications for expiration dates, recalls and compliance with infection-control practices?

Have you undertaken any drills or simulations involving air operations – beyond fire safety? Examples are a simulation of a crash into an occupied portion of a building, or unauthorized access to the cockpit.

If construction is going on in the helipad area, do you check that cranes are lit and/or flagged?

Is the helipad area clear, well-lit and secure?

MRIs can impact aircraft instrumentation – has this been evaluated?

Hospitals should include services provided by air medical services vendors under their standard utilization review, quality assurance, patient safety and risk management activities. Do you?

HEMS should not be excluded from FMEA (failure-mode effect analysis) or root cause analysis. Have you educated your flight staff in these techniques?

RESOURCES & REFERENCES

6. Willis Global Aviation specialists.

Information in this article does not address all potential exposures or insurance needs.

CONTACTS

For further information, please contact any of the following.

Kevin J. Downs
Co Practice Leader
Chicago, IL
312 621 4812
kevin.downs@willis.com

Mary S. Botkin
Co-Practice Leader
Houston, TX
281 584 1646
mary.botkin@willis.com

Deana Allen
Atlanta, GA
404 302 3807
deana.allen@willis.com

Jacqueline Bezaire
Los Angeles, CA
213 607 6343
jacqueline.bezaire@willis.com

Frank Castro
Los Angeles, CA
213 607 6304
frank.castro@willis.com

Ken Felton
Hartford, CT
860 756 7338
kenneth.felton@willis.com

Pamela Haughawout
Lombard, IL
630 324 2798
pam.haughawout@willis.com

Sandy Berkowitz
Malvern, PA
610 651 7704
sandy.berkowitz@willis.com

Paul A. Greve, Jr.
Nashville, TN
615 872 3320
paul.greve@willis.com