



Aviation Human Factors Industry News

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Maintenance Brotherhood

In late July an aircraft maintenance technician at American Airlines in Dallas/Fort Worth died in a motorcycle crash. Steve Stevens **was loved by all** and I am told he was "one of the good guys" meaning that he was truly liked by everyone he met. **He was also a good mechanic.**

His remains were flown back to Columbus, OH. Steve was not married and he did not have any children. The aircraft left out of gate C8 and it was surrounded by a couple hundred AMTs, management, and secretaries. After the casket was loaded onto the aircraft by his friends, fellow mechanics then split up and formed two lines, and "walked" the aircraft off the gate.



As the engines started the two lines of AMTs stretched out to form a corridor all the way to the taxiway. The aircraft taxied away. As it did, the Captain opened his window and waved to everyone. By now all the passengers were all waving out the windows. As the aircraft reached the beginning of the taxiway there were two fire trucks waiting and they gave a water-cannon salute.



This was all done because Steve belonged to a **proud craft and profession** where regardless of the uniform you wear we are all the same: craftsmen.

US Airways Employee Dies In Airport Mishap

No Planes Involved In Ground Vehicle Collision, Airline Says

A US Airways employee was killed Tuesday afternoon at Philadelphia International Airport during a **ground service vehicle crash**, airline officials said. Police say a man driving one of the small tractors used to pull airplanes and baggage trucks **apparently lost control, and the vehicle flipped over.**



The incident occurred at about 3 p.m. near gate B-13, the airline reported.

The US Airways employee was treated at the scene and rushed to the Hospital of the University of Pennsylvania but later died of his injuries.

The crash did not involve any aircraft, authorities said.

SkyFox over the airport showed the crash occurred on the airfield side of the terminal. A US Airways van was also seen with investigators at the scene.

"We extend our deepest sympathies to his family. Our foremost concern at this point is for his family and his colleagues in Philadelphia," the airline said in a statement.

Court Rules Controller At Fault For Fatal Midair

Blaming an air traffic controller for the collision a U.S. District Judge early this month ordered the FAA to pay \$4.5 million to the family of a flight instructor killed in a midair involving a Robinson R44 and a Robinson R22 Beta II at Torrance Municipal Airport. The accident took place in 2003 and the judge's decision, handed down early this month, stated that the controller offered the R22's student pilot **confusing instructions** that caused him to crash the helicopter he was flying into the R44 flown by the instructor. The **NTSB found in 2007 probable cause** of the accident was "the failure of the pilot of the R22 [the student pilot] to comply with an ATC clearance." Both pilots were killed in the crash and a third person was seriously injured.



Multiple directions had been issued by the controller to the student pilot flying the R22 from a helipad north of Runway 29R to his parking area south of runway 29L.

The last one cited by the NTSB in its probable cause report directed the student pilot to make a turn and gave him clearance to land on Runway 29R. The R22 descended into the R44 as the R44 was departing Runway 29L on a touch and go.

Controller Directs Aircraft Via Cellphone Text Message

The pilot of a Piper Seneca with five aboard was last November instructed to land via text message. The report from the Air Accident Investigation Branch was published Aug. 6 detailing the complete electrical failure aboard the Seneca and the 39-year-old pilot's reaction to fly clear of clouds after departing Kerry airport for a flight to Jersey, in the U.K. The pilot attempted to contact Kerry airport and air traffic control in Cork via cellphone.



After making contact with Cork and then losing contact, he received a text message from a Cork controller advising him that air traffic control had him on radar and he was cleared to land at the airport. The aircraft landed safely at the airport after performing a fly-by to confirm wheels down. The report praised the efforts of the controller. "In this incident the positive and proactive initiative of the ATC controller, who, on realizing that mobile audio communication from the pilot was intermittent, quickly switched to texting his instructions instead," reported air accident investigator John Hughes.

Fatigue Continues to Cause Accidents

NTSB Member Steven Chealander

Drowsy pilots, mechanics and air traffic controllers are involved in too many accidents, according to Member Steven Chealander of the National Transportation Safety Board (NTSB). Testifying 10 April 2008 before the Senate Commerce, Science and Transportation Aviation Subcommittee, he provided an excellent summary of the problem, but reflected the NTSB's pallid position that only a "fatigue countermeasures training program" is needed for air traffic controllers, despite ever changing shift schedules that guarantee fatigue. Nonetheless, Chealander's testimony reflects a good overview of the sleeplessness problem:



"The Safety Board has long been concerned about the issue of operator fatigue in transportation and has stressed its concerns in investigation reports issued throughout the 1970s and 1980s. In 1989, the Board issued three recommendations to the Secretary of Transportation calling for research, education, and revisions to existing regulations.

"These recommendations were added to the Board's 'Most Wanted' list in 1990, and the issue of fatigue has remained on the 'Most Wanted' list since then.

[In other words, the recommendations have not been acted upon for 18 years.] The Safety Board's 1999 safety study of DOT [Department of Transportation] efforts to address operator **fatigue** continued to show that this problem was widespread. Operating a vehicle without the operator's having adequate rest, in any mode of transportation, presents an unnecessary risk to the traveling public.

The laws, rules, and regulations governing this aspect of transportation safety are archaic ...

“Flight Crews

“In December 1995, the FAA [Federal Aviation Administration] issued an NPRM [Notice of Proposed Rulemaking] to update the flight and duty regulations for airline pilots; however, in the intervening 12 years, the regulations have not been revised. The FAA has attempted on three occasions to reach consensus with the industry on a proposed rule but has not succeeded.



“FAA's ARAC [Aviation Rulemaking Advisory Council] upon reviewing Part 135 regulations has recently made some recommendations to simplify and improve the duty time regulations for flight crews covered by Part 135 [on demand and commuter operations]. The FAA recently advised the Safety Board that it is developing an NPRM that incorporates the ARAC's recommendations; the NPRM will include a **fatigue risk management system** that provides an alternative to prescriptive limitations.

“The Safety Board recommended 14 years ago that the FAA close the loophole in the regulations regarding hours of duty for flight crews that allowed crews to be on duty flying for much longer periods of time than allowed under Part 121 [scheduled airlines] or Part 135. The 1995 NPRM proposed revisions that were responsive [to the Safety Board's recommendations], however, those revisions resulted in considerable controversy and the FAA withdrew the NPRM. The Safety Board's concern that flight crew **fatigue** is a significant aviation safety issue continues today, yet little or no action has been taken by the FAA and they have not indicated any firm plans to take the recommended action.

“Maintenance Personnel

“In 1999, the FAA issued a report entitled Study of **Fatigue** Factors Affecting Human Performance in Aviation Maintenance. The FAA completed the first phase of the expanded study and issued a report in April 2000 entitled Evaluation of Aviation Maintenance Working Environments, **Fatigue**, and Maintenance Errors/Accidents. The expanded study looked at multiple and combined environmental factors of temperature, noise, light, vibration, and sleep, which are known to accelerate fatigue onset, as well as the effects of lifestyle habits on **fatigue** and human performance ...



The data were intended for use in predicting situations that are conducive to **fatigue**, accidents, incidents and errors.

“The FAA’s findings suggest that **fatigue** is an issue in this work force. Data from ‘mini-logger monitors’ that recorded data from selected parameters of light, noise levels, and temperature; activity monitors that [captured] physical activity, sleep, and sleep quality; and he answers to background questions that employers were asked clearly indicate that sleep durations are inadequate ... For most aviation maintenance ... specialties, 30-40 percent of respondents reported sleep duration of **less than 6 hours**, and 25 percent of respondents reported feeling **fatigued** or exhausted.

“The FAA has consequently conducted education and training activities on fatigue management for aircraft maintenance personnel. The Safety Board reviewed Advisory Circular (AC) 120-72, ‘Maintenance Resource Management (MRM) Training,’ which seems to be the primary focus of the FAA’s education and training initiatives related to **fatigue** among aviation maintenance crews. We found little in AC 120-72 that provides guidance on human **fatigue** ... other than generalized warnings that attention to **fatigue** is important and should be considered in MRM Training. ...

“The Safety Board disagrees that regulating hours of service for aviation maintenance crews is not appropriate. In addition, the Board’s reviews of the FAA’s education activities related to reducing **fatigue** among maintenance crews shows them to be limited and of questionable value.

“Air Traffic Controllers

“In 2007, the Safety Board issued recommendations to the FAA and the National Air Traffic Controllers Association regarding air traffic controller **fatigue**. The Safety Board had investigated four incidents that provided clear and compelling evidence that controllers are sometimes operating in a state of **fatigue** because of their work schedules and poorly managed utilization of rest periods between shifts and that **fatigue** has contributed to controller errors. Controller **fatigue** decreases aviation safety [but] the FAA has been slow to change controller-scheduling practices.



“The FAA has convened a working group to develop shift rotation and scheduling guidelines [note the word ‘guidelines’ as opposed to ‘regulations’], and it is our understanding that last month the National Air Traffic Controllers Association (NATCA) provided information on **fatigue** and scheduling practices. ... NATCA has informed the FAA and the Safety Board of ... its commitment to developing workable scheduling practices that minimize controller impairment due to **fatigue**.

“Action Remaining

“Issue regulations [emphasis added] that establish scientifically based duty time limitations for **air carrier maintenance personnel** and flight crews. [Note: the NTSB appears to be ignoring contract maintenance facilities, where ever more airlines are outsourcing the maintenance of their airplanes.]

“Develop a **fatigue** awareness and countermeasures training program [emphasis added] for controllers and those who schedule them for duty.”

What’s of interest here is the failure to recommend regulations for air traffic controllers – people employed by the FAA and over which the agency has the most control (not to mention the potential to set the example for limiting **fatigue**).

The action remaining could well be limited to a single sentence:

“Issue regulations that establish scientifically based duty time limitations for flight crews, **maintenance personnel** [both these employed by air carriers and those who work in independent maintenance facilities] and air traffic controllers.”

The virtue of such a recommendation is simplicity and treating the work schedules of all personnel in safety-critical positions the same.



Maintenance Mishap Summary

Our aircraft is a AH-1W and our **mishap** involved the ordnance work center. The ordnance Marines were checking station three for jettison prior to loading a rocket launcher (LAU-68). The team leader set the weapons control circuit breakers and emergency jettison to station three. The team leader then attached the test set (AWM-102) and pressed the jettison button. I know what you are thinking, station 3 fired when he hit the jettison button, but that is not the case. Station 4 fired. Station 4 fired because that is the way the jettison logic is set up in the electronics. It doesn't sound very logical to me.



You see, **if they had followed the check list**, the cartridge actuated device (CAD) would have been removed from station 4 and the **mishap** might not have occurred. In addition, if a Quality Assurance Safety Observer (QASO) **were with them** they would have ensured proper procedures were followed. Note to self, **USE YOUR CHECK LISTS AND SUPERVISE, SUPERVISE, SUPERVISE.** *"Success always occurs in private, and failure in full view."* –Anonymous

DoD Human Factors

Human factors are the most commonly cited cause for all **mishaps**, with more than 80 percent of all mishaps attributable to **human factors** failures at some level. The services have been collecting human-factors data using many different models, which results in a disparity in data and difficulty in creating joint approaches to **mitigating the human factors** hazards present in a large majority of mishaps. The Joint Services Safety Chiefs (JSSC) directed that the services modify and adopt a version of the Human Factors Analysis and Classification System (HFACS). The Human Factors Working Group (HFWG) of the Aviation Safety Improvements Task Force and JSSC were charged to develop and field a joint guide for analyzing human factors.



The Army will lead the development of a training program for use by all the services. Each service will develop a service-specific implementation plan with the goal of implementation two years after signature of this **MOA**.



The newly adopted DOD HFACS expands on and replaces the current systems used to collect and evaluate **human factors information** in all military mishaps. During the next two years, the DOD HFACS guide will be incorporated into data collection for all services.

The document is a living document for all services and will reside at this web address and will be updated periodically by the Human Factors Working Group of the JSSC. Please contact the Human Factors representative from your services Safety Center / Readiness Center for recommended changes to the document.

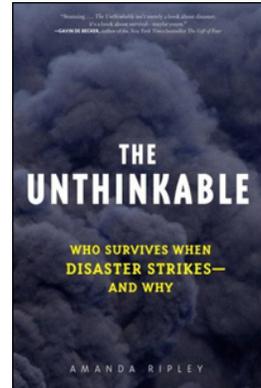
[Download the DoD Human Factors Guide](#)



Identifying Who Survives Disasters — And Why

[Listen: Amanda Ripley Reads from 'The Unthinkable'](#)

[24 min 4 sec] [add to playlist](#) | [download](#)



Amanda Ripley's new book, *The Unthinkable: Who Survives When Disaster Strikes — And Why*, is the thinking person's manual for getting out alive.

In moments of total disaster — plane crashes or terrorist attacks — something happens in our brains that affects the way we think. We behave differently, often irrationally. Consider the World Trade Center workers who, on Sept. 11, dithered at their desks, calling relatives, turning off computers and pondering which mementos to rescue from their desks even as the doomed jets burned above their heads.

In *The Unthinkable*, Ripley cites a National Institute of Standards and Technology study that showed that those who made it out of the WTC **waited an average of six minutes** after the plane hit their building before heading for the exit and walking slowly — not running — down the stairs.

Ripley searches for patterns in **human behavior** by interviewing hundreds of people who lived through catastrophes. Quick-witted survivors are surprisingly anomalous.

One fellow who made it through a horrific aircraft disaster in 1977 happened to be sitting on the runway reading an in-flight safety instruction card when another plane crashed into his. He grabbed his wife, leapt through a hole in the fuselage, and turned to see his fellow passengers remaining docilely in their seats, immobile. Most of them died within minutes as fire swept through the wreckage.

The author concludes that all of us undergo a three-stage process when we find ourselves in mortal peril: **denial, deliberation and the "decisive moment,"** during which the survivor buckles down and acts. The trick, she says, may be to understand our instincts, which, in a crisis, may betray us.

Some people run toward infernos, not away, and even in the face of obvious impending disaster, some people just won't move. Ripley muses that this may be an old ingrained biological response — a version of "playing dead."

[Dr. Todd Curtis on the Discovery Channel](#)

This show features a segment from the the Discovery Channel series "**Survive This!**" That segment featured the 21 September 2005 landing gear event involving a jetBlue A320 near Los Angeles. During the clip, Dr. Todd Curtis explains some of the factors that led to a dramatic, but safe end of the flight. The series "Survive This!" ran for one year during the 2007 season.



For audio and video versions of this podcasts, use the links below:

Audio: [MP3](#)

Video: [YouTube](#) | [Google Video](#)

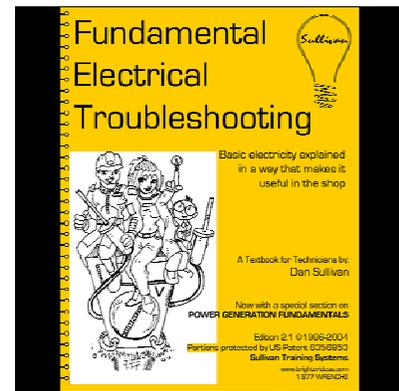
The transcript of this podcast is available at <http://www.airsafe.com/podcasts/show60.htm>



[SHOPBOOK - FUNDAMENTAL ELECTRICAL TROUBLESHOOTING](#)

FET - The Shopbook - \$39.95 + S&H - This is the first book of its kind. It's a 100+-page how-to manual for **technicians and mechanics** that describes electrical theory and practice together so that it can be used in the shop.

Written by a mechanic for mechanics, the examples and intelligent but easy-to-use; the language is precise but in terms we use. Covers such topics as Relays and Solenoids, Schematic Reading, Diodes, Transistors and Multiplexing, and more. A must for the technician and mechanic who wants to know more so he can do more.



<http://prostores2.carrierzone.com/servlet/brighterideascom/Detail?no=4>



[ERAU Online Aviation Courses Open To All](#)

If you'd like to learn more about aviation but don't necessarily want to go back to school, Embry-Riddle Aeronautical University has a **new online program** that can fill that need. The school is offering **23 new aviation courses online**, and no enrollment in the university is required.



Just sign up online, pay your \$99 per course, and start learning.

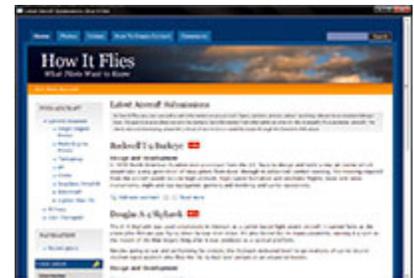
The courses cover topics such as meteorology, high-altitude flying, cold-weather operations, North Atlantic procedures, and many more operational and performance-related topics. "The technology of aircraft navigation, cockpit automation, and aircraft systems requires continued training," said Thorsten Hisam, director of the Office of Professional Education at ERAU.

"We're looking to meet the needs of the industry by **offering high-quality, affordable courses** with the added convenience of online delivery." For more info or to sign up, [click here](#).



[New Online -- A "Wikipedia" For Aviation](#)

Pilots want to know about airplanes -- and share what they know -- and a new Web site that was unveiled this week aims to provide a space for that to happen. "It's kind of like the Wikipedia for aviation," [HowItFlies.com](#) webmaster Keith West told *AVweb*, here at EAA AirVenture. Pilots can share information, opinions, photos, videos, specs, and history. "The goal is to give pilots not only the numbers, but information from other pilots on what it's like to actually fly a particular aircraft," says the site. Pages are provided for general aviation aircraft of all kinds, as well as military and commercial aircraft.



"Whether researching an airplane or hangar flying on a rainy day, it's a fun resource for pilots **and enthusiasts alike**," said West. The site is free for users and doesn't require registration. Pilots, manufacturers, distributors and others all are welcome to contribute information.

Eat breakfast like a king, lunch like a queen, and dinner like a pauper

We know that what we eat is important for weight gain. We know less about the importance of how we eat. Traditionally, it's been thought that larger meals earlier in the day will lead to less weight gain, but this has typically come from the "Grandma's knowledge" school of good health.



Research carried out at the University of Texas has tended to support Grandma by showing that  people who **eat a large breakfast, tend to eat less over the remainder of the day.** Dr JM de Castro used diet diaries over seven days for a group of males and females recruited for another study on diet.

The total and meal intakes of food energy, the amounts of the macronutrients ingested and the density of intake occurring during five 4-hour periods were identified and related to overall and meal intakes during the entire day.

De Castro found that there was a reciprocal relationship between the amount of food eaten in the morning and the total amount eaten during the day, and a positive correlation between the amount eaten late in the evening and the total intake. There was a **positive association**, on the other hand, between the energy density of foods eaten at any time of the day and total intake.

In other words, low energy-dense foods (e.g. low GI breakfast cereals, low GI toast, fruit etc) eaten in the morning appears to be **particularly satiating** and reduces the total amount of food eaten later in the day. Late night snacks on the other hand lack satiating value and tend to result in greater overall intake and hence a greater risk of weight gain.

Why do doctors kill more people than airline pilots?

Each year thousands of hospital patients die as a result of **human error**. In a new Radio 4 program GP Phil Hammond -who exposed the Bristol babies heart scandal in the 1990s - examines whether enough is being done to protect us.

Dr. Phil Hammond: **Questions who is to blame when patients die**

The late Dr Tom Chalmers, a distinguished medical researcher, once asked why doctors kill more people than airline pilots.

The odds of dying in hospital as a result of **human error** are **33,000 times greater than the risk of dying in an air crash** - an extraordinary figure, especially as most people are more scared of flying.



Dr Chalmers came up with a number of reasons for this apparent discrepancy - such as the requirement that pilots take time off for sleep, undergo random breath-testing and that their skills are tested every six months.

But he saved his harshest comment until last: **'If doctors died with their patients, they'd take a great deal more care.'**

Most doctors bristle at the suggestion that they don't take patient safety seriously enough. After all, medicine is more complicated than aviation and it's impossible always to get it right. **Even the best doctors make mistakes.**

Errors happen either because we do the wrong thing (make the wrong diagnosis or give the wrong drug) or we do the right thing wrong.

Often, we blame 'the system' for causing errors - the lack of manpower that leaves exhausted and inexperienced staff without supervision - but errors can happen in ideal circumstances.

Take the story of Elaine Bromiley. Elaine was 37 when she was booked in for routine sinus surgery under general anesthetic. Her anesthetist had been a consultant for 16 years, her ENT surgeon had 30 years under his belt.

The theatre was well equipped and there were no emergencies elsewhere.

As her husband Martin observed: **'This was a dream scenario for safety; a senior surgical team working undisturbed in state-of-the-art surroundings.'**

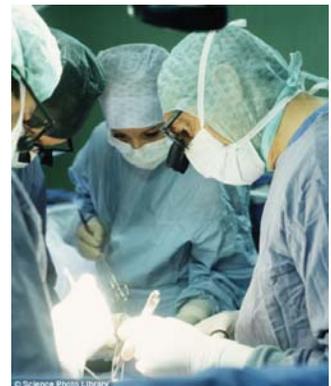
And yet Elaine's anesthetic went tragically wrong and repeated attempts to ventilate or to intubate - pass a tube into her airway - failed.

'Can't intubate, can't ventilate' is a rare but recognized emergency, which requires an emergency tracheotomy, cutting a hole in the throat to pass the tube through.

However, the consultants decided to keep attempting to intubate, finally abandoning the procedure hoping that Elaine would wake up. She never regained consciousness and died 13 days later.

Martin Bromiley was initially told that his wife's death was **bad luck**. But as a pilot, used to analyzing critical incidents, he wanted to hear the results of the ensuing inquiry.

Bromiley insisted on an independent review which concluded that, given the experience of the surgeons, it should have been possible to follow the emergency protocol and perform a tracheotomy. So why didn't it happen?



Surgery safety: Deaths can occur during routine operations due to **human error**

Errors happen not just because of lack of skill or knowledge but for **behavioral reasons**. Put someone in an **extremely stressful situation** and even the most senior clinicians can lose the plot.

The role of these **human factors** in error is well recognized in aviation and Bromiley recently founded a charity to help health professionals make better decisions under pressure.

What is needed is a **team culture** where even the most junior member of staff can raise concerns.

Bromiley's inspirational approach -wanting us to learn from his wife's death - contrasts with my aggressive exposure of medical scandals.

In 1992, I published confidential audit figures from Bristol Royal Infirmary showing that its results for complex heart surgery on children were very poor.

The Department of Health knew about the results in 1988 but didn't step in until 1995.

I thought my articles would at least spark an investigation, but the surgeons carried on for another three years until the death toll was too high to ignore.

A subsequent public inquiry concluded that, between 1991 and 1995, as many as 35 children under the age of one died who would not have done if they'd been treated elsewhere.

The surgeons were **enraged at having their audit figures published**. They didn't stop and reflect. They adopted a siege mentality and carried on regardless.

Defensiveness was **culturally ingrained**. I trained during the days when junior doctors clocked up **120 hours some weeks**. The NHS paid lip service to safety and junior surgeons were often left to perform complex operations for the first time alone.

Mistakes were buried - along with the patients - and you muddled along doing your best. There were huge variations in quality and thousands of avoidable errors across the whole of the NHS.

It took the Bristol Inquiry to force politicians and the medical establishment to take safety seriously. This sparked a sea change in accountability, including the setting up of the National Patient Safety Agency to monitor and **learn from errors**.

But has all this made the NHS safer? In parts, yes. Bristol has become one of the safest places to have heart surgery. And the publication of outcomes for heart surgery across the NHS has coincided with a reduction in death rates.

But doctors in other specialties have been slow to open themselves up to scrutiny. As a result, patients aren't as safe as they should be.

How can it be made safer? During the making of the Radio 4 documentary, all the NHS staff I spoke to were passionate about patient safety, but said **a culture of blame and exposure was its enemy.**

Errors will inevitably occur, but what staff need to prevent these happening again is **time and support to understand and learn from them.**

[Learn from near misses](#)

This approach doesn't excuse negligence - but often disasters happen because of a chain of contributory factors, rather than the single action of one person.

One of the pioneers of a more open approach is the surgeon (and Health Minister) Lord Darzi.

Ten years ago, Darzi decided to introduce a **black box** in his operating theatre at St Mary's Hospital, London.

This recorded the patients' vital signs, the anesthetic procedures and, contentiously, the surgical team, on video, as it went about its business.

Initially, he too struggled against the **defensive culture**: within 24 hours, someone had put bin liners over his cameras. But the black box remains.

His colleagues now realize that the recorded information allows them to learn from near misses so tragedies are avoided.

Darzi has also developed a simulated operating theatre that teaches his team to manage **common distractions** (e.g. constant interruptions during surgery) and rare, life-threatening emergencies.

Pilots are legally obliged to spend 16 hours a year in a simulator, proving their competence, but for surgeons and anesthetists, it is still optional.

Darzi is also helping to pioneer a **surgical checklist** with the World Health Organization to ensure patients are given the appropriate drugs and that everyone is prepared for what might go wrong.

This also encourages staff to speak up. However, for the NHS to embrace safety requires the political recognition that it's not about waiting lists and how quickly you get treated that matters, but how safely.

Safe staff report more errors

One in ten patients admitted to an NHS hospital is accidentally harmed - and for one in 300 patients, medical error results in death - yet still not everyone accepts change.

Some doctors think checklists reduce them to factory workers, others have a tantrum if someone reminds them to wash their hands. Safe hospitals tend to be calm ones, where everyone accepts feedback and works in a team.

Safe staff also tend to report more errors. The hospital that admits to nothing generally has the most to hide.

So can patients do anything? In America, the error rate is lower than in the UK. Doctors, ever wary of litigation, take safety seriously and patients join in.

There, patients are encouraged to ask about a surgeon's training and success rates, query medication, insist on hand washing and ensure the nurse has read their ID bracelet.

In the UK, we lie back and take it. It's far easier to trust professionals. I've never met anyone who knocks on the cockpit and asks the pilot how often he's landed the plane - you assume he's competent, because he's still alive.

If Darzi gets his way, one day we may be able to take safety in the NHS as a given. But not yet. So keep your eyes peeled and keep asking questions.

Hands-free devices don't help when driving

A recent study by Carnegie Mellon University scientist's shows why drivers need to keep their brains focused on the road instead of trying to multitask with a cell phone.

Brain imaging used for the study showed that listening alone reduces the brain activity associated with driving by 37

percent, according to a news release. It causes drivers to commit some of the same types of driving errors that can occur under the influence of alcohol.



It doesn't matter if a driver is using a hand-held cell phone or a hands-free device.

"The best your brain can do is **compromise**," said Marcel Just, director of the Center for Cognitive Brain Imaging at the university. "Both of them suffer."

The results of the study didn't surprise Wayne Harper, director of the Center for Traffic Safety. Studies are starting to show more conclusively the **dangers** of using a cell phone while driving.

A 2005 Insurance Institute for Highway Safety study in Western Australia showed cell phone users were **four times as likely to get into crashes serious enough to injure themselves**, according to the institute's July 1 status report.

So it's best the driver **pull over** to hold a conversation on the cell phone, Harper said.

Just said he has testified before a state House committee that is considering whether to ban hand-held cell phones. Legislating their use while driving could help.

"I think it's extremely likely it may save lives," he said.

AUDIO SAFETY TALKS!

LEARN FROM CLOSE CALLS

Sure, no one wants to have a close call. But you and your workers should learn to appreciate them. A close call is **an opportunity** to set things right before they go tragically wrong. Present this talk to your co-workers and ask them whether they've had any close calls lately. You might learn about an unsafe condition that you didn't even know existed.

- [**To listen to the talk, click this link**](#)



REPORT CLOSE CALLS: IT'S YOUR RESPONSIBILITY

It is estimated that for every reportable injury there may be **up to 600 close calls**. Think about that for a minute and consider how many possible injuries are already being evaded. But not all are. And your workers owe it to you and to themselves to report those close calls so that they, or someone else, won't suffer the consequences of **failing to correct unsafe conditions**.

A worker spotted his partner side-grinding without wearing a face shield and reminded him that grinding wheels can disintegrate.

About three minutes later, that's exactly what happened. Thankfully, the worker had followed his co-worker's advice and donned a face shield. He wasn't hurt.

Such incidents are typical examples of thousands of close calls occurring in workplaces around the world every day. It's been estimated that for every serious injury, there may be 600 close calls.

Letting unsafe situations **slide** without reporting them to your supervisor is like telling your co-workers: "I escaped with eight of my nine lives intact. Let's see if you can do the same." Imagine the guilt you would feel if a serious injury or fatality took place because the victim wasn't told of a potential hazard that you were fortunate enough to survive without getting hurt.

Close calls can be caused by a number of situations, some working in tandem. Here are a few examples:

- **Poor machinery or tool maintenance.**
- **Failure to wear personal protective equipment.**
- **Inadequate machine guarding.**
- **Falling, tripping or slipping as a result of poor workplace housekeeping.**
- **Ineffective training and supervision.**

Perhaps you experienced a close call or "near miss" today or this week without even realizing it. Did you step over a spill in the coffee room? **Slips and falls are the third leading cause** of disabling injuries in North America. Have you opened a door in your work area lately, only to discover someone else coming right at you? What if that person were carrying boxes or you didn't look up in time?

While it is the supervisor's responsibility to look at immediate and underlying causes for the incident and develop an action plan for prevention, **it's your responsibility to report close calls.** Working with your supervisor will ensure close call incidents are eliminated.

Does a spill in the coffee room have to be reported? Maybe not, but it would only take you 30 seconds to wipe up that spill.

If there are strict regulations in your workplace when it comes to such duties or if you are not sure what the spill is, then yes - it is your responsibility to report this spill - no matter how small - to your supervisor. How about bumping into someone like in our second example? Perhaps your supervisor is unaware of this hazard. It needs to be brought to his or her attention to see if something can be done about it. **Nothing can get done if it isn't reported.**

After experiencing a close call the usual response is to dust yourself off, consider yourself lucky and go on with your work without reporting the incident. **Safety has nothing to do with luck.** A close call is a **red flag warning** you that something is wrong. Report all unsafe work practices to your supervisor.

5 questions can help pinpoint depression

Although depression is by no means a silent disease, it is seriously under diagnosed. Experts estimate that **only 34% of people** with depression seek help.

When people do reach out for help, doctors typically diagnose depression by asking about feelings and experiences. They may also use screening tools and look for possible medical causes by performing a physical exam and sometimes ordering lab tests.

A physical exam and medical history may offer clues that point to depression caused by medication or an underlying illness. In these cases, blood tests or x-rays may confirm the problem. Often, when people are unable or unwilling to recognize their own depression, their initial complaints are medical. Headaches, stomach problems, sexual difficulties, and lack of energy are among the more common medical complaints.

If your symptoms suggest depression and medical causes seem unlikely, your doctor will be interested in hearing whether you've had any feelings of sadness or hopelessness and whether you've noticed any changes in your appetite, sex drive, or sleep patterns. He or she may also ask these questions:

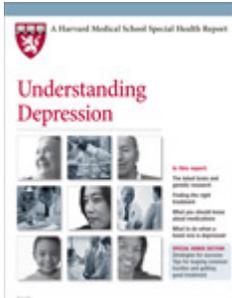
1. **Have you or anyone in your family ever suffered from depression or another mental disorder? If so, how was it treated?**
2. **Do you get satisfaction and pleasure from your life?**
3. **Do you ever have thoughts about suicide or have you attempted suicide?**
4. **Do you drink alcohol? If so, how often and how much?**
5. **Do you use any drugs such as marijuana, cocaine, crack, or heroin to get high or relax? If so, which drugs and how often?**

Your caregiver might ask you to complete a checklist that may pick up some symptoms or subtle mood changes that otherwise might not be identified. Alternatively, the clinician may complete a similar scale based on his or her observations; such scales are slightly better at detecting depression than self-reports.

Because you may **minimize symptoms** or may not even be aware of them, your doctor or therapist may want to speak to someone close to you. Where a child or teen is concerned, the doctor may interview parents and, when possible, teachers or a guidance counselor.



**** Get your copy of Understanding Depression**



Depression can sap your emotional resources and steal the joy of time shared with loved ones. While depression can't simply be willed away, there are many effective treatments. *Understanding Depression* may help improve your life — or the life of someone close to you! [Click here to read more or buy online.](#)



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PICTURE THIS!

Speaking of the environment now might be a good time to remind you that the environment is a home we share with all manner of other critters. This picture has made its way around through various inboxes with a number of explanations, most of them wrong. The driver of this vehicle did not hit the animal; it actually [jumped from an overpass](#). Since no one can anticipate animals falling from the sky, all we can do as drivers is [be fully alert, aware of our environment](#) and ready to handle emergencies.

