Behind Human Error

The Human Contribution is vital reading for all professionals in high-consequence environments and for managers of any complex system. The book draws its illustrative material from a wide variety of hazardous domains, with the emphasis on healthcare reflecting the author's focus on patient safety over the last decade. All students of human factors - however seasoned - will also find it an invaluable and thought-provoking read.

From the Nobel Prize-winning author of Thinking, Fast and Slow and the coauthor of Nudge, a revolutionary exploration of why people make bad judgments and how to make better ones—"a tour de force" (New York Times). Imagine that two doctors in the same city give different diagnoses to identical patients—or that two judges in the same courthouse give markedly different sentences to people who have committed the same crime. Suppose that different interviewers at the same firm make different decisions about indistinguishable job applicants—or that when a company is handling customer complaints, the resolution depends on who happens to answer the phone. Now imagine that the same doctor, the same judge, the same interviewer, or the same customer service agent makes different decisions depending on whether it is morning or afternoon, or Monday rather than Wednesday. These are examples of noise: variability in judgments that should be identical. In Noise, Daniel Kahneman, Olivier Sibony, and Cass R. Sunstein show the detrimental effects of noise in many fields, including medicine, law, economic forecasting, forensic science, bail, child protection, strategy, performance reviews, and personnel selection. Wherever there is judgment, there is noise. Yet, most of the time, individuals and organizations alike are unaware of it. They neglect noise. With a few simple remedies, people can reduce both noise and bias, and so make far better decisions. Packed with original ideas, and offering the same kinds of research-based insights that made Thinking, Fast and Slow and Nudge groundbreaking New York Times bestsellers, Noise explains how and why humans are so susceptible to noise in judgment—and what we can do about it.

The second edition of a bestseller, Safety Differently: Human Factors for a New Era is a complete update of Ten Questions About Human Error: A New View of Human Factors and System Safety. Today, the unrelenting pace of technology change and growth of complexity calls for a different kind of safety thinking. Automation and new technologies have resu

We forget our passwords. We pay too much to go to the gym. We think we'd be happier if we lived in California (we wouldn't), and we think we should stick with our first answer on tests (we shouldn't). Why do we make mistakes? And could we do a little better? We human beings have design flaws. Our eyes play tricks on us, our stories change in the retelling, and most of us are fairly sure we're way above average. In Why We Make Mistakes, journalist Joseph T. Hallinan sets out to explore the captivating science of human error—how we think, see, remember, and forget, and how this sets us up for wholly irresistible mistakes. In his quest to understand our imperfections, Hallinan delves into psychology, neuroscience, and economics, with forays into aviation, consumer behavior, geography, football, stock picking, and more. He discovers that some of the same qualities that make us efficient also make us error prone. We learn to move rapidly through the world, quickly recognizing patterns—but overlooking details. Which is why thirteen-year-old boys discover errors that NASA scientists miss—and why you can't find the beer in your refrigerator. Why We Make Mistakes is enlivened by real-life stories—of weathermen whose predictions are uncannily accurate and a witness who sent an innocent man to jail—and offers valuable advice, such as how to remember where you've hidden something important. You'll learn why multitasking is a bad idea, why men make errors women don't, and why most people think San Diego is west of Reno (it's not). Why We Make Mistakes will open your eyes to the reasons behind your mistakes—and have you vowing to do better the next time.

How We Look Without Seeing, Forget Things in Seconds, and Are All Pretty Sure We Are Way Above Average

Considerations Behind Human Error

The Human Factors Analysis and Classification System

Drift into Failure

Reducing Error and Influencing Behaviour

The Human Factor

A complete examination of issues and concepts relating to human factors in simulation, this book covers theory and application in space, ships, submarines, naval aviation, and commercial aviation. The authors examine issues of simulation and their effect on the validity and functionality of simulators as a training device. The chapters contain in d

This book is a collection of contemporary applications of psychological insights into practical human factors issues. The topics are arranged largely according to an information processing/energetic approach to human behavior. Consideration is also given to human-computer interaction and organizational design.

"How to Win Friends and Influence People" is one of the first best-selling self-help books ever published. It can enable you to make friends quickly and easily, help you to win people to your way of thinking, increase your influence, your prestige, your ability to get things done, as well as enable you to win new clients, new customers._x000D_ Twelve Things This Book Will Do For You:_x000D_ Get you out of a mental rut, give you new thoughts, new visions, new ambitions._x000D_ Enable you to make friends quickly and easily._x000D_ Increase your popularity._x000D_ Help you to win people to your way of thinking._x000D_ Increase your influence, your prestige, your ability to get things done._x000D_ Enable you to win new clients, new customers._x000D_ Increase your earning power._x000D_ Make you a better salesman, a better executive._x000D_ Help you to handle complaints, avoid arguments, keep your human contacts smooth and pleasant._x000D_ Make you a better speaker, a more entertaining conversationalist._x000D_ Make the principles of psychology easy for you to apply in your daily contacts._x000D_ Help you to arouse enthusiasm among your associates._x000D_ Dale Carnegie (1888-1955) was an American writer and lecturer and the developer of famous courses in self-improvement, salesmanship, corporate training, public speaking, and interpersonal skills. Born into poverty on a farm in Missouri, he was the author of How to Win Friends and Influence People (1936), a massive bestseller that remains popular today._x000D_

Human error is implicated in nearly all aviation accidents, yet most investigation and prevention programs are not designed around any theoretical framework of human error. Appropriate for all levels of expertise, the book provides the knowledge and tools required to conduct a human error analysis of accidents, regardless of operational setting (i.e. military, commercial, or general aviation). The book contains a complete description of the Human Factors Analysis and Classification System (HFACS), which incorporates James Reason's model of latent and active failures as a foundation. Widely disseminated among military and civilian organizations, HFACS encompasses all aspects of human error, including the conditions of operators and elements of supervisory and organizational failure. It attracts a very broad readership. Specifically, the book serves as the main textbook for a course in aviation accident investigation taught by one of the authors at the University of Illinois. This book will also be used in courses designed for military safety officers and flight surgeons in the U.S. Navy, Army and the Canadian Defense Force, who currently utilize the HFACS system during aviation accident investigations. Additionally, the book has been incorporated into the popular workshop on accident analysis and prevention provided by the authors at several professional conferences world-wide. The book is also targeted for students attending Embry-Riddle Aeronautical University which has satellite campuses throughout the world and offers a course in human factors accident investigation for many of its majors. In addition, the book will be incorporated into courses offered by Transportation Safety International and the Southern California Safety Institute. Finally, this book serves as an excellent reference guide for many safety professionals and investigators already in the field.

Why We Make Mistakes

Variability in Human Performance

A Century of Understanding Accidents and Disasters

Handbook of Human Factors and Ergonomics in Health Care and Patient Safety, Second Edition

Noise

Improving System Performance and Human Well-Being in the Real World

Human error is so often cited as a cause of accidents. There is perception of a 'human error problem'. Solutions are thought to lie in changing the people or their role. The label 'human error', however, is prejudicial and hides more than it reveals about how a system malfunctions.This book takes you behind the label. It explains how human error results from social and psychological judgments by the system's stakeholders that focus only on one facet of a set of interacting contributors.

While many organizations see the value of creating a just culture they struggle when it comes to developing it. In this Second Edition, Dekker expands his views, additionally tackling the key issue of how justice is created inside organizations. Dekker also introduces new material on ethics and on caring for the' second victim' (the professional at the centre of the incident). Consequently, we have a natural evolution of the author's ideas.

Following on from 2005's Rail Human Factors: Supporting the Integrated Railway, this book brings together an even broader range of academics and practitioners from around the world to share their expertise and experience on rail human factors. The content is both comprehensive and cutting-edge, featuring more than 55 chapters addressing the following topics: ¢ Passengers and public ¢ Driver performance and workload ¢ Driving and cognition ¢ Train cab and interfaces: simulation and design ¢ Routes, signage, signals and drivability ¢ Signalling and control of the railway ¢ Planning for the railway ¢ Engineering work and maintenance ¢ Level crossings ¢ Accidents and safety ¢ Human error and human reliability ¢ SPADs: signals passed at danger ¢ Human factors integration and standards ¢ Impairments to performance ¢ Staff competencies and training. People and Rail Systems: Human Factors at the Heart of the Railway will be invaluable for all those concerned with making railways safer, more reliable, of higher quality and more efficient. It will be essential reading for policy-makers, researchers and industry around the world.

Human error is cited over and over as a cause of incidents and accidents. The result is a widespread perception of a 'human error problem', and solutions are thought to lie in changing the people or their role in the system. For example, we should reduce the human role with more automation, or regiment human behavior by stricter monitoring, rules or procedures. But in practice, things have proved not to be this simple. The label 'human error' is prejudicial and hides much more than it reveals about how a system functions or malfunctions. This book takes you behind the human error label. Divided into five parts, it begins by summarising the most significant research results. Part 2 explores how systems thinking has radically changed our understanding of how accidents occur. Part 3 explains the role of cognitive system factors - bringing knowledge to bear, changing mindset as situations and priorities change, and managing goal conflicts - in operating safely at the sharp end of systems. Part 4 studies how the clumsy use of computer technology can increase the potential for erroneous actions and assessments in many different fields of practice. And Part 5 tells how the hindsight bias always enters into attributions of error, so that what we label human error actually is the result of a social and psychological judgment process by stakeholders in the system in question to focus on only a facet of a set of interacting contributors. If you think you have a human error problem, recognize that the label itself is no explanation and no guide to countermeasures. The potential for constructive change, for progress on safety, lies behind the human error label.

Resilience Engineering

Balancing Safety and Accountability

A Flaw in Human Judgment

A Strategy for the FAA's Aircraft Certification Service

Human Factors in Healthcare

Beyond Blame

This edited book concerns the real practice of human factors and ergonomics (HF/E), conveying the perspectives and experiences of practitioners and other stakeholders in a variety of industrial sectors, organisational settings and working contexts. The book blends literature on the nature of practice with diverse and eclectic reflections from experience in a range of contexts, from healthcare to agriculture. It explores what helps and what hinders the achievement of the core goals of HF/E: improved system performance and human wellbeing. The book should be of interest to current HF/E practitioners, future HF/E practitioners, allied practitioners, HF/E advocates and ambassadors, researchers, policy makers and regulators, and clients of HF/E services and products.

Practical Human Factors for Pilots bridges the divide between human factors research and one of the key industries that this research is meant to benefit—civil aviation. Human factors are now recognized as being at the core of aviation safety and the training syllabus that flight crew trainees have to follow reflects that. This book will help student pilots pass exams in human performance and limitations, successfully undergo multi-crew cooperation training and crew resource management (CRM) training, and prepare them for assessment in non-technical skills during operator and license proficiency checks in the simulator, and during line checks when operating flights. Each chapter begins with an explanation of the relevant science behind that particular subject, along with mini-case studies that demonstrate its relevance to commercial flight operations. Of particular focus are practical tools and techniques that students can learn in order to improve their performance as well as "training tips" for the instructor. Provides practical, evidence-based guidance on issues often at the root of aircraft accidents Uses international regulatory material Includes concepts and theories that have practical relevance to flight operations Covers relevant topics in a step-by-step manner, describing how they apply to flight operations Demonstrates how human decision-making has been implicated in air accidents and equips the reader with tools to mitigate these risks Gives instructors a reliable knowledge base on which to design and deliver effective training Summarizes the current state of human factors, training, and assessment

This publication is aimed at managers in all industries. It explains why human factors are important in health and safety and how they need to be assessed and managed in the same way as other risk factors. It gives practical advice on how to develop systems designed to take account of human capabilities and fallibilities.

WHAT COMMON FACTORS CONNECT THE DEATH OF MARY SANDERS DURING A SIMPLE SURGICAL INTERVENTION, CHERNOBYL NUCLEAR DISASTER, AND THE COSTA CONCORDIA SHIPWRECK? WAS IT A FATAL MINDSET, DEFECTIVE EQUIPMENT, AN ACT OF DESTINY OR...' IT IS THE HUMAN ERROR THE THREAD THAT BINDS THESE (AND MANY OTHER) TRAGIC EVENTS. HOW TO BEST PREVENT, MANAGE AND MITIGATE ITS EFFECTS AND CONSEQUENCES IS THE SUBJECT OF STUDY BY CPT. FERDINANDO RESTINA.

Safety Differently

The Field Guide to Human Error Investigations

Cognitive Systems, Computers, and Hindsight

Level One

Unsafe Acts, Accidents and Heroic Recoveries

Human Error by Raymond F. Jones Excerpt During its three years' existence, the first Wheel was probably the subject of more amateur astronomical observations than any other single object in the heavens. Over three hundred reports came in when a call was issued for witnesses to the accident that destroyed the space station. We are delighted to publish this classic book as part of our extensive Classic Library collection. Many of the books in our collection have been out of print for decades, and therefore have not been accessible to the general public. The aim of our publishing program is to facilitate rapid access to this vast reservoir of literature, and our view is that this is a significant literary work, which deserves to be brought back into print after many decades. The contents of the vast majority of titles in the Classic Library have been scanned from the original works. To ensure a high quality product, each title has been meticulously hand curated by our staff. Our philosophy has been guided by a desire to provide the reader with a book that is as close as possible to ownership of the original work. We hope that you will enjoy this wonderful classic work, and that for you it becomes an enriching experience.

What links the frustrations of daily life, like VCR clocks and voicemail systems, to airplane crashes and a staggering "hidden epidemic" of medical error? Kim Vicente is a professor of human factors engineering at the University of Toronto and a consultant to NASA, Microsoft, Nortel Networks and many other organizations; he might also be described as a "technological anthropologist." He spends his time in emergency rooms, airplane cockpits and nuclear power station control rooms--as well as in kitchens, garages and bathrooms--observing how people interact with technology. Kim Vicente sets out the disturbing pattern he's observed: from daily life to life-or-death situations, people are using technology that doesn' t take the human factor into account. Technologies as diverse as stove tops, hospital work schedules and airline cockpit controls lead to 'human error' because they neglect what people are like physically, psychologically, and in more complex ways. The results range from inconvenience to tragic loss of life. Our civilization is at a crossroads: we have to change our relationship with technology to bring an end to technology-induced death and destruction, and start to improve the lives of everyone on the planet. The Human Factor sets out the ways we can regain control of our lives.

What does the collapse of sub-prime lending have in common with a broken jackscrew in an airliner's tailplane? Or the oil spill disaster in the Gulf of Mexico with the burn-up of Space Shuttle Columbia? These were systems that drifted into failure. While pursuing success in a dynamic, complex environment with limited resources and multiple goal conflicts, a succession of small, everyday decisions eventually produced breakdowns on a massive scale. We have trouble grasping the complexity and normality that gives rise to such large events. We hunt for broken parts, fixable properties, people we can hold accountable. Our analyses of complex system breakdowns remain depressingly linear, depressingly componential - imprisoned in the space of ideas once defined by Newton and Descartes. The growth of complexity in society has outpaced our understanding of how complex systems work and fail. Our technologies have gotten ahead of our theories. We are able to build things - deep-sea oil rigs, jackscrews, collateralized debt obligations - whose properties we understand in isolation. But in competitive, regulated societies, their connections proliferate, their interactions and interdependencies multiply, their complexities mushroom. This book explores complexity theory and systems thinking to understand better how complex systems drift into failure. It studies sensitive dependence on initial conditions, unruly technology, tipping points, diversity - and finds that failure emerges opportunistically, non-randomly, from the very webs of relationships that breed success and that are supposed to protect organizations from disaster. It develops a vocabulary that allows us to harness complexity and find new ways of managing drift.

"[W]onderful, enlightened, and convincing beyond any reasonable expectations of what a science fiction novel should be." —Greg Bear Compugen has become a giant player in the tech field overnight by making genetically altered viruses into "biochips" that are replacing silicon chips as the brains of computers. Toby Bridgeman and Adrian Storey are an odd-couple of scientists—Toby, the programmer, and Adrian, the sloppy genius and genetic artist, have formed an enduring friendship and produced Epicell, a biochip so powerful that it will make all others on the market obsolete and save Compugen from financial disaster—if it can be rushed out fast enough. But Epicell, elemental living virus, is so awesome in its capabilities that tests have not yet established any limits to its multiplication or its computing sophistication. Adrian wants more testing—he believes that Epicell is potentially dangerous. Instead, it is rushed to market to save the failing company. Then those in contact with Epicell begin to come down with bad colds—the virus has spread outside computers, living and growing in the human body. Adrian, and perhaps the human race, are doomed unless Toby can reprogram the Epicell inside Adrian—and inside himself.

Building a Safer Health System

A Panorama of Our Glitches, from Pointless Bones to Broken Genes

How To Win Friends And Influence People

Human Factors and Ergonomics in Practice

The Human Contribution

Human Error

This latest edition of The Field Guide to Understanding 'Human Error' will help you understand how to move beyond 'human error'; how to understand accidents; how to do better investigations; how to understand and improve your safety work. You will be invited to think creatively and differently about the safety issues you and your organization face. In each, you will find possibilities for a new language, for different concepts, and for new leverage points to influence your own thinking and practice, as well as that of your colleagues and organization.

Failure is inevitable and a postmortem analysis, conducted in an open, blameless way, is the best way for IT techs and managers to learn from outages and near-misses. But when the "root cause" is determined to be "human error" (or worse, particular humans), the real causes and conditions are lost. In this insightful book, IT veteran Dave Zwieback shows you an approach for making postmortems blameless, so you can focus instead on addressing areas of fragility within systems and organizations. If you're involved with assessing why something goes wrong on a project or at your company—as a system administrator, developer, team manager, or executive—the concrete steps in this guide will help you find a real solution that works. Recognize and mitigate the effects of stress during outages Learn how to communicate effectively in a charged, high-stakes postmortem conversation Collect the necessary data before the postmortem begins Focus on determining the actual causes and conditions of an outage Learn techniques for writing up a postmortem for either internal or external use

This 1991 book is a major theoretical integration of several previously isolated literatures looking at human error in major accidents.

Human Factors in Healthcare educates the reader about what human factors actually entail, providing an insight into the processes of self-awareness, communication, leadership in a crisis, decision making, co-ordination and situational awareness, as well as how they currently function in these areas and ways they might improve.

Learning From Failure and Success

Human Errors

From Hunting Broken Components to Understanding Complex Systems

Just Culture

A Human Error Approach to Aviation Accident Analysis

To Err Is Human

How are today's 'hearts and minds' programs linked to a late-19th century definition of human factors as people's moral and mental deficits? What do Heinrich's 'unsafe acts' from the 1930's have in common with the Swiss cheese model of the early 1990's? Why was the reinvention of human factors in the 1940's such an important event in the development of safety thinking? What makes many of our current systems so complex and impervious to Tayloristic safety interventions? 'Foundations of Safety Science' covers the origins of major schools of safety thinking, and traces the heritage and interlinkages of the ideas that make up safety science today. Features Offers a comprehensive overview of the theoretical foundations of safety science Provides balanced treatment of approaches since the early 20th century, showing interlinkages and cross-connections Includes an overview and key points at the beginning of each chapter and study questions at the end to support teaching use Uses an accessible style, using technical language where necessary Concentrates on the philosophical and historical traditions and assumptions that underlie all safety approaches

For Resilience Engineering, 'failure' is the result of the adaptations necessary to cope with the complexity of the real world, rather than a breakdown or malfunction. The performance of individuals and organizations must continually adjust to current conditions and, because resources and time are finite, such adjustments are always approximate. This definitive new book explores this groundbreaking new development in safety and risk management, where 'success' is based on the ability of organizations, groups and individuals to anticipate the changing shape of risk before failures and harm occur. Featuring contributions from many of the worlds leading figures in the fields of human factors and safety, Resilience Engineering provides thought-provoking insights into system safety as an aggregate of its various components, subsystems, software, organizations, human behaviours, and the way in which they interact. The book provides an introduction to Resilience Engineering of systems, covering both the theoretical and practical aspects. It is written for those responsible for system safety on managerial or operational levels alike, including safety managers and engineers (line and maintenance), security experts, risk and safety consultants, human factors professionals and accident investigators.

The first edition of Handbook of Human Factors and Ergonomics in Health Care and Patient Safety took the medical and ergonomics communities by storm with in-depth coverage of human factors and ergonomics research, concepts, theories, models, methods, and interventions and how they can be applied in health care. Other books focus on particular human factors and ergonomics issues such as human error or design of medical devices or a specific application such as emergency medicine. This book draws on both areas to provide a compendium of human factors and ergonomics issues relevant to health care and patient safety. The second edition takes a more practical approach with coverage of methods, interventions, and applications and a greater range of domains such as medication safety, surgery, anesthesia, and infection prevention. New topics include: work schedules error recovery telemedicine workflow analysis simulation health information technology development and design patient safety management Reflecting developments and advances in the five years since the first edition, the book explores medical technology and telemedicine and puts a special emphasis on the contributions of human factors and ergonomics to the improvement of patient safety and quality of care. In order to take patient safety to the next level, collaboration between human factors professionals and health care providers must occur. This book brings both groups closer to achieving that goal.

Understanding the conditions under which variability in performance may arise, and the processes related to its emergence, gives us insight into the development of techniques for improving the quality of performance. Variability in Human Performance details the scientific and the practical implications of human performance variability by providing a broad perspective on how and why such variability occurs across a number of disciplinary domains. The text takes an approach that rests upon the idea of context, or design, specificity in performance, namely that variability in performance is closely referenced to design factors in the environment in which performance is occurring. An exploration of the link between variability and related processes, the book introduces a comprehensive framework for understanding human performance variability, presented in terms of how human control of behavior is closely tied to design factors in the performance environment. The authors introduce empirical evidence, as well as practical examples and application areas, in support of this framework. The book begins with coverage of neurobiological and biomechanical basis of movement variability, then examines rich and extensive empirical evidence available for context specificity in cognitive performance and learning, as a basis for cognitive performance variability. The book then reviews the evidence for context specificity in: Student learning Displaced feedback conditions Human error behavior Affective performance Social and team performance The authors also explore work performance as influenced by complex sociotechnical systems and as a basis for performance variability, applying control systems concepts to an interpretation of the nature and basis of performance variability in all of these domains. They conclude by taking an evolutionary perspective on the origins and behavioral significance of human performance variability. The book then provides strategies on how individuals, groups, and organizations can significantly reduce variability in human performance that often leads to systems failures.

Human Factors at the Heart of the Railway

Modelling Complex Socio-technical Systems

Improving the Continued Airworthiness of Civil Aircraft

Concepts and Precepts

Investigating Human Error: Incidents, Accidents, and Complex Systems

Handbook of Aviation Human Factors

There has not yet been a comprehensive method that goes behind 'human error' and beyond the failure concept, and various complicated accidents have accentuated the need for it. The Functional Resonance Analysis Method (FRAM) fulfils that need. This book presents a detailed and tested method that can be used to model how complex and dynamic socio-technical systems work, and understand both why things sometimes go wrong but also why they normally succeed.

Behind Human ErrorAshgate Publishing Company

In this book the author applies contemporary error theory to the needs of investigators and of anyone attempting to understand why someone made a critical error, how that error led to an incident or accident, and how to prevent such errors in the future. Students and investigators of human error will gain an appreciation of the literature on error, with numerous references to both scientific research and investigative reports in a wide variety of applications, from airplane accidents, to bus accidents, to bonfire disasters. Features include: - an easy to follow step by step approach to conducting error investigations that even those new to the field can readily apply. - summaries of recent transportation accidents and human factors literature and relates them to the cause of human error in accidents. - an approach to investigating human error that will be of interest to both human factors psychology and industrial engineering students and instructors, as well as investigators of accidents in aviation, mass transportation, nuclear power, or any industry that is to the adverse effects of error. Based on the author's over 18 years of experience as an accident investigator and instructor of both aircraft accident investigation techniques and human factors psychology, it reviews recent human factors literature, summarizes major transportation accidents, and shows how to investigate the types of errors that typically occur in high risk industries. It presents a model of human error causation influenced largely by James Reason and Neville Moray, and relates it to error investigations with step by step guidelines for data collection and analysis that investigators can readily apply as needed.

As part of the national effort to improve aviation safety, the Federal Aviation Administration (FAA) chartered the National Research Council to examine and recommend improvements in the aircraft certification process currently used by the FAA, manufacturers, and operators.

Practical Human Factors for Pilots

People and Rail Systems

Human Factors for a New Era, Second Edition

FRAM, the Functional Resonance Analysis Method

Foundations of Safety Science

Human Factors Psychology

Accidents happen because of the reduction in adaptable capabilities or because inadaptability takes over. Inadaptability is the failure to adapt according to changed circumstances, settings or time. The occurrence of human errors in manual assembly lines can be affected by factors, such as workplace condition, work environment, equipment and demographics factors. Another topic explored in this book is forensic science which is concerned with the application of scientific knowledge to legal problem resolution. It is a vital tool in any legal proceeding, because it helps the judge and the jury to understand scientific truth. Also, human error in medicine is a major threat to patient safety. Therefore, it is vital to reveal factors that cause performance deficits in medical work environments. On the basis of the human error sources identified, human factors training programs can be designed as one possible approach to preventing accidents and increasing safety. Human error has been cited as a common cause in disasters and accidents in diverse high-risk industries and in healthcare. This book focuses on organizational, social and individual causes for the development of conditions behind human errors.

This title was first published in 2002: This field guide assesses two views of human error - the old view, in which human error becomes the cause of an incident or accident, or the new view, in which human error is merely a symptom of deeper trouble within the system. The two parts of this guide concentrate on each view, leading towards an appreciation of the new view, in which human error is the starting point of an investigation, rather than its conclusion. The second part of this guide focuses on the circumstances which unfold around people, which causes their assessments and actions to change accordingly. It shows how to "reverse engineer" human error, which, like any other componant, needs to be put back together in a mishap investigation.

Experts estimate that as many as 98,000 people die in any given year from medical errors that occur in hospitals. That's more than die from motor vehicle accidents, breast cancer, or AIDS--three causes that receive far more public attention. Indeed, more people die annually from medication errors than from workplace injuries. Add the financial cost to the human tragedy, and medical error easily rises to the top ranks of urgent, widespread public problems. To Err Is Human breaks the silence that has surrounded medical errors and their consequence--but not by pointing fingers at caring health care professionals who make honest mistakes. After all, to err is human. Instead, this book sets forth a national agenda--with state and local implications--for reducing medical errors and improving patient safety through the design of a safer health system. This volume reveals the often startling statistics of medical error and the disparity between the incidence of error and public perception of it, given many patients' expectations that the medical profession always performs perfectly. A careful examination is made of how the surrounding forces of legislation, regulation, and market activity influence the quality of care provided by health care organizations and then looks at their handling of medical mistakes. Using a detailed case study, the book reviews the current understanding of why these mistakes happen. A key theme is that legitimate liability concerns discourage reporting of errors--which begs the question, "How can we learn from our mistakes?" Balancing regulatory versus market-based initiatives and public versus private efforts, the Institute of Medicine presents wide-ranging recommendations for improving patient safety, in the areas of leadership, improved data collection and analysis, and development of effective systems at the level of direct patient care. To Err Is Human asserts that the problem is not bad people in health care--it is that good people are working in bad systems that need to be made safer. Comprehensive and straightforward, this book offers a clear prescription for raising the level of patient safety in American health care. It also explains how patients themselves can influence the quality of care that they receive once they check into the hospital. This book will be vitally important to federal, state, and local health policy makers and regulators, health professional licensing officials, hospital administrators, medical educators and students, health caregivers, health journalists, patient advocates--as well as patients themselves. First in a series of publications from the Quality of Health Care in America, a project initiated by the Institute of Medicine

Human error is so often cited as a cause of accidents. There is perception of a 'human error problem'. Solutions are thought to lie in changing the people or their role. The label 'human error', however, is prejudicial and hides more than it reveals about how a system malfunctions. This book takes you behind the label. It explains how human error results from social and psychological judgments by the system's stakeholders that focus only on one facet of a set of interacting contributors.

The Field Guide to Understanding 'Human Error'

Revolutionizing the Way We Live with Technology

Preventive Measures, Analysis and Improvement Strategies

Behind Human Error

Behind Human Error: Cognitive Systems, Computers and Hindsight; State of the Art Report

A biology professor ' s illuminating tour of the physical imperfections—from faulty knees to junk DNA—that make us human. ¶ " A funny, fascinating catalog of our collective shortcomings that ' s tough to put down. " —Discover ¶ We humans like to think of ourselves as highly evolved creatures. But if we are supposedly evolution ' s greatest creation, why do we have such bad knees? Why do we catch head colds so often—two hundred times more often than a dog does? How come our wrists have so many useless bones? Why is the vast majority of our genetic code pointless? And are we really supposed to swallow and breathe through the same narrow tube? Surely there ' s been some kind of mistake? As professor of biology Nathan H. Lents explains in Human Errors, our evolutionary history is indeed nothing if not a litany of mistakes, each more entertaining and enlightening than the last. The human body is one big pile of compromises. But that is also a testament to our greatness: as Lents shows, humans have so many design flaws precisely because we are very, very good at getting around them. A rollicking, deeply informative tour of humans ' four-billion-year-and-counting evolutionary saga, Human Errors both celebrates our imperfections and offers an unconventional accounting of the cost of our success.