Emergency Department Workplace Injury Prevention Toolkit
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table of Contents</td>
<td>2</td>
</tr>
<tr>
<td>Acknowledgments</td>
<td>4</td>
</tr>
<tr>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td>Background</td>
<td>5</td>
</tr>
<tr>
<td>Quality and Safety Measures: Understanding Rules, Standards, and Regulatory Compliance</td>
<td>6</td>
</tr>
<tr>
<td>U.S. Department of Labor, Occupational Safety and Health Administration (OSHA)</td>
<td>6</td>
</tr>
<tr>
<td>The Joint Commission (TJC)</td>
<td>7</td>
</tr>
<tr>
<td>National Institute for Occupational Safety and Health (NIOSH)</td>
<td>7</td>
</tr>
<tr>
<td>American Nurses Association (ANA)</td>
<td>7</td>
</tr>
<tr>
<td>ANA Safe Patient Handling</td>
<td>7</td>
</tr>
<tr>
<td>ENA Position Statements</td>
<td>8</td>
</tr>
<tr>
<td>Healthy Work Environment</td>
<td>8</td>
</tr>
<tr>
<td>Needlestick and Sharps Injuries</td>
<td>9</td>
</tr>
<tr>
<td>Patient Safety</td>
<td>9</td>
</tr>
<tr>
<td>Staffing and Productivity</td>
<td>9</td>
</tr>
<tr>
<td>Introduction References</td>
<td>10</td>
</tr>
<tr>
<td>Abbreviations</td>
<td>11</td>
</tr>
<tr>
<td>Emergency Department Work-related Study</td>
<td>13</td>
</tr>
<tr>
<td>Perceived Factors Contributing to Work-related Injury Incidents</td>
<td>13</td>
</tr>
<tr>
<td>Methods and Results</td>
<td>13</td>
</tr>
<tr>
<td>Prevention Model</td>
<td>14</td>
</tr>
<tr>
<td>Understanding How to Use This Toolkit</td>
<td>15</td>
</tr>
<tr>
<td>Step 1: Define the Problem</td>
<td>16</td>
</tr>
<tr>
<td>Step 2: Identify Causative Factors</td>
<td>16</td>
</tr>
<tr>
<td>Step 3: Choose and Develop an Action Plan</td>
<td>16</td>
</tr>
<tr>
<td>Step 4: Implement Initiatives and Interventions</td>
<td>16</td>
</tr>
<tr>
<td>Step 5: Evaluate, Disseminate, and Sustain</td>
<td>16</td>
</tr>
<tr>
<td>Step 1: Define the Problem</td>
<td>17</td>
</tr>
<tr>
<td>Developing the Clinical Question and Defining the Problem</td>
<td>17</td>
</tr>
<tr>
<td>Building the Right Team</td>
<td>17</td>
</tr>
<tr>
<td>Examining the Data: Gathering the Evidence for Change</td>
<td>18</td>
</tr>
<tr>
<td>Environmental Scan and Readiness Assessments</td>
<td>19</td>
</tr>
<tr>
<td>Having problems identifying risks and protective factors?</td>
<td>19</td>
</tr>
<tr>
<td>Want to take on a bigger project?</td>
<td>19</td>
</tr>
<tr>
<td>Step 1: Tools and Resources</td>
<td>20</td>
</tr>
<tr>
<td>Step 1: References</td>
<td>21</td>
</tr>
<tr>
<td>Step 2: Identify Causative Factors</td>
<td>22</td>
</tr>
<tr>
<td>Analyze, Sort, and Target Problems</td>
<td>22</td>
</tr>
<tr>
<td>Identifying Causative Factors Using the Haddon Matrix</td>
<td>23</td>
</tr>
<tr>
<td>Prioritization</td>
<td>23</td>
</tr>
<tr>
<td>Establishing Project Goals and Objectives</td>
<td>23</td>
</tr>
<tr>
<td>Time-out!</td>
<td>24</td>
</tr>
<tr>
<td>Moving Forward</td>
<td>24</td>
</tr>
<tr>
<td>Step 2: Tools and Resources</td>
<td>25</td>
</tr>
<tr>
<td>Step 2: References</td>
<td>26</td>
</tr>
<tr>
<td>Step 3: Choose and Develop an Action Plan</td>
<td>27</td>
</tr>
<tr>
<td>Approaches to Safety</td>
<td>27</td>
</tr>
<tr>
<td>Emergency Department Workplace Injury Prevention Model</td>
<td>27</td>
</tr>
<tr>
<td>Three Pillars of Safety: Prevent, Respond, and Report</td>
<td>28</td>
</tr>
<tr>
<td>The Five E’s of Injury Prevention</td>
<td>28</td>
</tr>
<tr>
<td>Developing a Strategy</td>
<td>29</td>
</tr>
<tr>
<td>Implementing an Action Plan</td>
<td>29</td>
</tr>
<tr>
<td>The Action Plan</td>
<td>29</td>
</tr>
<tr>
<td>Communicating the Findings</td>
<td>30</td>
</tr>
<tr>
<td>Review</td>
<td>30</td>
</tr>
<tr>
<td>Step 3: Tools and Resources</td>
<td>31</td>
</tr>
<tr>
<td>Step 3: References</td>
<td>32</td>
</tr>
<tr>
<td>Step 4: Implement Initiatives and Interventions</td>
<td>33</td>
</tr>
<tr>
<td>Identify a Rollout or Go-Live Date</td>
<td>33</td>
</tr>
<tr>
<td>Recognizing Barriers and Overcoming Obstacles</td>
<td>33</td>
</tr>
<tr>
<td>Educate and Train Staff</td>
<td>34</td>
</tr>
<tr>
<td>Implementing Initiatives and Interventions</td>
<td>34</td>
</tr>
<tr>
<td>Step 4: Tools and Resources</td>
<td>39</td>
</tr>
<tr>
<td>Safe Patient Handling Tools and Resources</td>
<td>40</td>
</tr>
<tr>
<td>Musculoskeletal Injuries and Disorders Tools and Resources</td>
<td>41</td>
</tr>
<tr>
<td>Bloodborne Pathogens and Exposures Tools and Resources</td>
<td>41</td>
</tr>
<tr>
<td>Needlestick and Sharps Injuries Tools and Resources</td>
<td>42</td>
</tr>
</tbody>
</table>
This Emergency Department Workplace Injury Prevention (EDWIP) Toolkit is an evidence-based resource developed by nurses and other individuals with relevant subject matter expertise. Development of the toolkit began with the EDWIP Work Team and the ENA Institute for Emergency Nursing Research (IENR) in 2010. With support from Stryker®, ENA conducted a study in 2009 examining non–violence-related workplace injuries among emergency nurses working in U.S. emergency departments. As a result of the study, substantial evidence was obtained guiding the development of this toolkit.

A review of the initial toolkit draft was conducted by an expert panel and reviewed by a team of emergency nurses. Based on their feedback and recommendations, the toolkit was modified and now includes material from the American Nurses Association’s newly published Safe Patient Handling and Mobility: Interprofessional National Standards.

ENA is truly grateful to and acknowledges the following individuals who provided invaluable research, experience and guidance in shaping this publication:

**EDWIP Work Team 2010–2012**

Vicki Keough, PhD, RN, ACNP, APRN-BC, FAAN  
Jeanne Fogarty, MBA, BSN, RN  
Nancy L. Hughes, MSN, RN  
Carol J. Kappelman, MSN, APRN, CEN, FNP-C  
Mary Scott, BSN, RN, CEN  
Jason Moretz, MHA, BSN, RN, CEN, CTRN

**ENA Staff Liaisons**

Catherine Olson, MSN, RN, Director, Institute for Quality, Safety and Injury Prevention (IQSIP)  
Monica Escalante, MSN, RN, Senior Associate, IQSIP  
Briana Quinn, MPH, BSN, RN, Senior Associate, IQSIP  
Cydne Perhats, MPH, Senior Associate, Institute for Emergency Nursing Research (IENR)

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**Disclaimer**

This Toolkit, including the information and recommendations set forth herein (i) reflects ENA’s current position with respect to the subject matter discussed herein based on current knowledge at the time of publication; (ii) is only current as of the publication date; (iii) is subject to change without notice as new information and advances emerge; and (iv) does not necessarily represent each individual member’s personal opinion. The positions, information and recommendations discussed herein are not codified into law or regulations. Variations in practice and a practitioner’s best nursing judgment may warrant an approach that differs from the recommendations herein. ENA does not approve or endorse any specific sources of information referenced. ENA assumes no liability for any injury and/or damage to persons or property arising from the use of this Toolkit.
Welcome to the ENA Emergency Department Workplace Injury Prevention (EDWIP) Toolkit, designed specifically for the ED manager, designated team leader, and/or emergency staff to develop and implement a comprehensive plan that addresses the needs related to preventing and managing the occurrence of workplace injuries in your ED. This toolkit was developed by a team of nursing colleagues to help you establish and accomplish your goals for safe practice and safe care in your ED. Workplace injuries are a serious issue, and ENA applauds your efforts to evaluate your own ED and develop measures to prevent workplace injuries and improve the safety of your staff and patients. In the development of this toolkit, your ENA nursing colleagues conducted a comprehensive review of the literature on non–violence-related workplace injuries in emergency care settings, studying the causes, effects, and needs of current EDs in relation to this critical problem.

Background
Emergency department workplace safety is primarily concerned with preventing injury and illness to employees, patients, visitors, and volunteers in the workplace. In order to develop a culture of safety, an organization, institution, or hospital must first acknowledge that potential hazards do exist.

According to the U.S. Department of Labor, Bureau of Labor Statistics, direct patient care providers ranked among one of the highest industries for workplace-related injuries like musculoskeletal disorders (MSDs). Hospitals are one of the most hazardous places to work. Musculoskeletal injuries and disorders, needlestick and sharps injuries, exposures, slips, trips, and falls, and psychosocial factors like fatigue and stress are among the most common nonviolent job hazards that healthcare workers encounter.

From a fiscal standpoint, there is a high price to pay as a result of work-related injuries, from both the employee and the employer perspective. When an employee is injured, there can be workers’ compensation claims costs, lost wages, medical costs, high temporary staffing expenses in some cases, increased overtime to cover the lack of staffing, decreased production, changes in department morale, higher turnover rates, and increased fatigue, all of which may affect patient and staff satisfaction.

In healthcare settings, the largest contributor to workers’ compensation claims and costs for injury is overexertion incidents that frequently lead to MSDs. Almost half the injuries sustained that require lost days of work are a result of overexertion from maneuvers that are primarily related to direct patient care and patient handling, such as straining, lifting, bending, or reaching.

The single greatest risk factor for MSDs among healthcare workers is manual moving and repositioning of patients. Among nurses, there are a number of risk factors that contribute to workplace injuries, including heavy workloads, aging of the nursing workforce, workplace environmental factors, obesity, and nonstandard work schedules. These factors impact nurses’ decisions regarding whether or not to return to their job or to stay in their field of practice, thereby exacerbating workforce shortages and hindering recruitment and retention efforts.

Most work-related injuries and illnesses can be prevented. Various studies have shown that successful safe patient handling programs and other work-related injury prevention programs can significantly reduce the number of injuries as well as lost days from work. Research shows that it costs approximately $27,000 to $103,000 to replace a nurse. Not only have workplace injury prevention programs decreased the number of absences, but they have also reduced the severity of injuries. Implementing workplace injury prevention initiatives also improves the quality of patient care. For example, safe patient handling programs can assist in reducing the number of falls, pressure ulcers, skin tears, and other injuries related to patient handling, which can cost institutions a significant amount of money and can lower Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores. Safe lift equipment, patient handling algorithms, and
mechanical lift equipment encourage proper patient mobility, easily reducing patients’ length of stay.9 While musculoskeletal injuries are the most common type of workplace injuries in the ED, other injuries are also of great concern, like slips, trips, and falls, needlestick and sharps injuries, exposures to chemicals or bloodborne pathogens, and psychosocial factors like stress and fatigue. Although it may appear daunting to implement change, there are rules, standards, and regulatory guidelines to assist with enforcing and implementing workplace injury prevention initiatives.

Quality and Safety Measures: Understanding Rules, Standards, and Regulatory Compliance
The primary goal of this toolkit is to help you construct workplace injury prevention initiatives that have a direct and positive effect on the safety of your ED. Applying standards of care, national guidelines, and governmental regulations will help to ensure the safety of patients, staff, and visitors. It is important to become familiar with the standards and regulations set forth by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA), The Joint Commission (TJC), the National Institute for Occupational Safety and Health (NIOSH), and other regulatory agencies. Also, tethering your institution’s initiatives to exemplary programs such as the ENA Lantern Award, Magnet, or other national recognition programs can help your hospital achieve and maintain status as an institution of excellence in the community.

The following is a brief review of regulatory agencies that you should become familiar with before you start working on your workplace injury prevention program.

U.S. Department of Labor, Occupational Safety and Health Administration (OSHA)
The Occupational Safety and Health Act of 1970 passed by Congress created an agency dedicated to the safety and health of workers, setting forth standards through outreach, education, training, and assistance.10 The act covers most private and public sectors and certain territories under federal authority.10 OSHA specifically recognizes that healthcare workers encounter various serious safety and health hazards including bloodborne pathogens, chemical or drug exposures, biological hazards, respiratory hazards, and ergonomic hazards from lifting and repetitive tasks. In fact, according to OSHA, the healthcare industry has one of the highest rates of work-related injuries and illnesses.11 Among these injuries, healthcare workers have the highest rate of musculoskeletal disorders of all occupations. Recent statistics show that U.S. hospitals reported 253,700 work-related injuries and illnesses (rate of 6.8 per 100).12 This alarming rate is double that of the private industry as a whole. So what does OSHA do for healthcare workers? OSHA establishes rules that define methods employers are legally mandated to follow to protect their employees from hazards.13 Some examples of OSHA standards include requirements to provide fall protection, standards for prevention of exposure to pathogens, and training for safety equipment, to name a few. OSHA also provides resources and tools to assist hospitals in assessing workplace safety, implementing health management systems, and improving safe patient handling programs, which will be discussed later. As a champion of change, you will need to become familiar with OSHA rules, standards, and regulations. At first it may seem overwhelming but utilize your resources, schedule an appointment with your human resources (HR) representative, and soon you will notice that understanding quality and safety rules and regulations is manageable.
The Joint Commission (TJC)
The Joint Commission (TJC) is a nonprofit organization that accredits and certifies thousands of healthcare facilities, programs and organizations throughout the world. The accreditation and certification is recognized internationally as a symbol of quality that reflects commitment to a higher performance standard. The mission and vision of TJC is to improve healthcare and ensure the safest, best-value, and highest-quality health experience through evaluating and inspiring excellence. TJC standards are the foundation of an impartial evaluation process that assists healthcare organizations in assessing, measuring, and improving performance. Their standards focus on the individual or patient and the organizational response to providing quality and safe care.

According to TJC, standards are developed with contributions from various healthcare professionals including physicians, nurses, experts, and government agencies, as well as consumers. In order to assess safety and quality care, TJC has established national patient safety goals, which are revised annually. These national patient safety goals are a series of specific targets that accredited organizations are required to meet and strive for in order to prevent errors and injuries such as miscommunication among healthcare workers and falls. It is essential that you become familiar with TJC standards because they are considered the gold seal of approval for safety and quality.

National Institute for Occupational Safety and Health (NIOSH)
The National Institute for Occupational Safety and Health (NIOSH) is the U.S. federal agency that performs research and, as a result, makes recommendations in order to prevent worker injury and illness. Their research is fundamental to protecting the health and safety of millions of workers. Using scientific evidence, NIOSH offers practical solutions to reducing the risk of injuries and illnesses. Through partnerships, NIOSH is able to study, support, and train occupational health and safety professionals. Become familiar with the NIOSH website because there is a large amount of valuable information, publications, data, guidelines, news, events, webinars, and training made easily available.

American Nurses Association (ANA)
The ANA is a professional organization representing the interests of over three million registered nurses. ANA improves nursing by promoting high standards of nursing practice, lobbying Congress and other regulatory agencies on issues involving nursing, and advocating for the rights of nurses in the workplace. This influential association has also established scope and standards of nursing practice, codes of ethics, position statements, and principles for nursing practice, and is a leader in nursing education and advocacy.

ANA is considered to be a large contributor of policy initiatives and has political and legislative programs dedicated to a variety of issues like safer needle devices and safe work environments. Among the many current issues ANA is advocating for, nurse fatigue and safe patient handling are the most relevant to workplace injury prevention initiatives.

ANA Safe Patient Handling
A supportive legal framework does exist for safe patient handling. The “General Duty Clause” of the U.S. Occupational Safety and Health Act, 29 U.S.C. § 654, 5 (a) 1 clearly states: “Each employer shall furnish to each of his employees, employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employee.” Some states have already imposed similar laws requiring employers to mitigate hazards and potential risks. Since the initiation of the ANA Handle with Care Campaign that began in 2003, a total of 11 states have enacted safe patient handling laws, rules, or regulations. These states are California, Illinois, Maryland, Minnesota, Missouri, New Jersey,
New York, Ohio, Rhode Island, Texas, and Washington, and Hawaii has proposed a resolution.\(^{20}\) Of these 11 states, all but Ohio require comprehensive programs with policies, procedures, and guidelines for safeguarding suitable equipment and training, collection of data, and evaluation.\(^{20}\)

Another supportive legislation is the Nurse and Health Care Worker Protection Act of 2013 (H.R. 2480), crafted by ANA and sponsored by Congressman John Conyers (D-MI), which incorporates data from “Safe Patient Handling and Mobility: Interprofessional National Standards,” recently published by ANA.\(^{21}\) If passed, the bill would require that OSHA develop and enforce safe patient handling and mobility standards, eliminating manual lifting of patients by nurses and other healthcare workers.\(^{21}\) Other directives would be to require the development of guidelines for purchase, use, maintenance, training, surveillance, and monitoring of safe patient handling and mobility.\(^{21}\) Familiarize yourself with ANA’s website, use resources and educational material available, read past initiatives, and become knowledgeable about ANA’s “Safe Patient Handling and Mobility: Interprofessional National Standards.”

**ENA Position Statements**

Position statements are developed following extensive literature reviews, evidence-based practice examination, and discussions with content experts. While position statements are not codified in law or regulations, they are recommendations that reflect ENA’s standpoint on issues of great importance to safe practice, safe care, and optimal patient outcomes. Among these significant issues are healthy work environments, needlestick injuries, patient safety, and staffing and productivity.

**Healthy Work Environment**

A healthy work environment impacts staff, patients, families, and visitors both directly and indirectly. Current research has shown that a healthy work environment is associated with increased nurse retention and job satisfaction, and has proven to decrease psychosocial factors like fatigue, burnout, and stress, subsequently leading to safe practice and safe care.\(^{22-25}\) Moreover, a healthy work environment is productive and promotes collaboration and empowerment. An environment free of physical and psychosocial harm maximizes the ability to practice safe practice and safe care. Conversely, unhealthy and unsafe working environments are discouraging, dissatisfying, and are correlated with nursing shortages, low productivity, and unsafe patient care.\(^{26}\) Achieving a healthy work environment requires a multidisciplinary approach with positive communication and team effort.\(^{27}\) It is the position of the Emergency Nurses Association that leadership and staff share a mutual responsibility to create a collaborative, just culture using communication-centered values that support both personal accountability and a healthy work environment.\(^{28}\) Additionally, ENA believes management and leadership are obligated to implement physically safe measures to safeguard against injuries and identify policies, education, training, and equipment.
necessary to assure safe patient handling and prevent injuries. Furthermore, ENA believes leadership should report, investigate, and provide reasonable solutions to address unsafe conditions. Ultimately, building a culture of safety is a shared responsibility.

Needlestick and Sharps Injuries
As it is a shared responsibility to promote and build a culture of safety, so too must all employees and healthcare staff assume accountability for preventing injuries to themselves and others. A culture of safety can be achieved through preventative measures to reduce the risk of exposure to sharps and needlestick injuries. Percutaneous injuries are preventable, but when they do occur, it is vital that an individual have immediate access to post-exposure evaluation, treatment, and support. It is the position of the Emergency Nurses Association that institutions, hospitals, and organizations provide hepatitis B vaccination for staff who have direct contact with blood, blood-contaminated body fluids, and other body fluids or sharps, and during post-exposure evaluation after experiencing an exposure event. Moreover, ENA believes that needlestick injuries and other sharps-related injuries can be reduced by incorporating improved engineering controls with comprehensive programs and U.S. Food and Drug Administration (FDA) recommendations. It is essential that employers create a nonpunitive environment and culture of safety that advocates for all healthcare workers to report needlestick and sharps injuries without fear of retribution. If a sharps or needlestick injury does occur, ENA believes that staff must have immediate access to post-exposure evaluation, treatment, support, appropriate follow-up care, and that employers follow mandates of the OSHA Bloodborne Pathogen Standard and expert recommendations from the CDC.

Patient Safety
Although the focus of this toolkit is on ED staff injury prevention, patient safety is always a high concern that can also benefit from a workplace injury prevention program. Patient safety is the freedom from injury, accident, or other preventable occurrences caused by healthcare services. Emergency nurses and staff alike are in a unique position and have an opportunity to assess for risk of patient injury and prevent these events from happening. System improvements that incorporate a multidisciplinary team approach to address potential hazards to staff and patients are an essential component of building a culture of safety. Advocating for a culture of safety that incorporates a nonpunitive, timely, and respectful response to admission and error reporting, leadership, and management must foster and actively support emergency nurses and staff in the delivery of safe patient care. Additionally, emergency nurses and staff must be accountable and participate in 100% reporting, patient safety research, and education in order to participate and assist in identifying, preventing, and mitigating errors and near misses.

Staffing and Productivity
Optimal staffing is essential in ensuring safe practice and safe care. Appropriate staffing levels help safeguard efficient throughput in the ED. Research has shown that optimal staffing results in better patient outcomes. Staffing that is determined exclusively on nurse-to-patient ratios or even based on patient visits and nursing hours per patient can be inadequate in that this type of practice does not reflect variables that may affect various nursing resources. Ideally, the “ENA Guidelines for Emergency Department Nurse Staffing” is a more realistic and effective staffing guideline to assist with optimizing staffing. Optimal staffing is critical and necessary for a culture of safety. It is the position of the Emergency Nurses Association that both staffing and productivity must be examined frequently to ensure staffing levels meet requirements of state accreditation and organizational or institutional guidelines and to safeguard the delivery of effective, safe practice and safe care. Several factors must be included in the evaluation of staffing and productivity to support safe practices and care in order to assist in reducing the risk of workplace injuries.
Introduction References


Abbreviations

ACEP | American College of Emergency Physicians
ANA | American Nurses Association
CDC | Centers for Disease Control and Prevention
CUSB | Comprehensive Unit-based Safety Program
DOT | U.S. Department of Transportation
EDWIP | Emergency Department Workplace Injury Prevention
EMS | Emergency medical services
ENA | Emergency Nurses Association
EVD | Ebola Virus Disease
FAA | Federal Aviation Administration
HBV | Hepatitis B virus
HCV | Hepatitis C virus
HEMS | Helicopter Emergency Medical Services
HIV | Human immunodeficiency virus
MERS-CoV | Middle East respiratory syndrome coronavirus
MSD | Musculoskeletal disorder
NFPA | National Fire Protection Association
NIOSH | National Institute for Occupational Safety and Health
OSHA | U.S. Department of Labor, Occupational Safety and Health Administration
PICOT | Population, intervention, comparison, outcome, and time-bound
PPE | Personal protective equipment
SMART | Specific, measurable, attainable, relevant, and timely
SPHM | Safe patient handling and mobility
STF | Slips, trips, and falls
SWOT | Strengths, weaknesses, opportunities, and threats
TB | Tuberculosis
TJC | The Joint Commission
VA | U.S. Department of Veterans Affairs
VRE | Vancomycin-resistant enterococcus
WHO | World Health Organization
In 2009, the Emergency Nurses Association (ENA) conducted an online member survey of non–violence-related workplace injuries among emergency nurses working in U.S. EDs. Specific study objectives were to: 1) identify non–violence-related workplace injuries that have the highest incidence among emergency nurses; 2) identify the risk factors that contribute to those injuries; and 3) focus attention on the occurrence of those injuries among emergency nurses, specifically in regard to recruitment and retention.1

**Methods and Results**

An Internet survey was designed and distributed to 26,810 ENA members. Survey participants were asked to report on their personal experience with non–violence-related injuries incurred while working in a U.S. ED during the previous 12-month period, beginning July 1, 2008, and ending June 30, 2009.

Of the 2,294 nurses who responded to the survey (9% response rate), 19% (n=440) reported that they experienced a non–violence-related injury while working in the ED during the previous year. Almost three-quarters (72%) of the reported injuries occurred during activities related to patient handling and movement. The top three mechanisms of injury were bodily reaction/overexertion (e.g., pushing, pulling, bending, reaching) (42.2%), contact with objects or equipment (17.3%), and slips, trips, or falls (13.6%). These injuries were most often caused by moving/transporting patients (22.8%), walking/running to get somewhere (15.7%), and lifting patients (13.4%).

Multivariate logistic regression analyses were performed using a number of factors that have been empirically associated with work-related injury, including perceptions of the ED workplace environment and administration’s commitment to workplace injury prevention, existence of policies/procedures and training programs for workplace injury prevention, nurses’ attendance in training programs, quality of environmental control measures, management initiatives for workplace injury prevention, and availability of a policy in place for reporting workplace injury incidents. Three factors were found to be significantly related to the experience of non–violence-related workplace injuries: (1) the hospital having a training program for emergency nurses on safe patient handling (OR = 1.58; \( p < 0.05 \)); (2) nurses’ access to decontamination and post-exposure treatments (OR = 1.25; \( p < 0.05 \)); and (3) nurses’ perception of staffing levels in their ED (OR = 0.803; \( p < 0.05 \)). Nurses who reported being injured also were less likely to have attended safety training programs (\( p < 0.000 \)).

The study’s significant findings indicated that:

- Nurses were less likely to experience non–violence-related injuries in hospitals that had a safe patient handling policy (\( p = .005 \)) if they had received training in safe patient handling (\( p = .000 \)) and safe handling of hazardous materials (\( p = .000 \)).
- Injury occurrence was mildly associated with poorer perceptions of commitment to, and implementation of, prevention and safety measures by hospital managers and administrators (\( r = -.181 \)).
**Prevention Model**

Emergency nurses deliver patient care in a work environment where they regularly encounter safety hazards that place them at risk for injury. The unpredictable, urgent, and life-threatening situations that define emergency care present unique challenges for workplace safety initiatives. With roughly one in every five nurses (20%) who responded to the ENA survey reporting that they experienced a non–violence-related workplace injury, this study emphasizes the importance of adopting best practices for workplace safety that are tailored to the distinct demands of the ED workplace.

While the results of this cross-sectional survey provide only a preliminary understanding of workplace injuries among emergency nurses, they can form the basis of a fundamental model for prevention of workplace injuries. Access to equipment and controls, optimal staffing levels, and integration of safety policies, programs, and training into daily practice is foundational to establishing a culture of ED workplace safety. These three components, along with administrative support for workplace safety initiatives, have been shown to play a role in reducing injury frequency and improving compliance with recommended safety practices, nurse retention, and job satisfaction. The following figure depicts the resulting **Model for Emergency Department Workplace Injury Prevention (EDWIP)** that is used as a basis for the ENA EDWIP Toolkit.

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**Model for Emergency Department Workplace Injury Prevention (EDWIP)**

![Model Diagram]

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Five-Step Model for Change

The five-stage implementation process describes means for establishing a site-specific project plan for your emergency department (ED). This toolkit guides you through each of the five steps by providing you with the tools and resources you need. Developed by ENA leadership and your peers, you will find practical solutions at each stage that are derived from best practice recommendations for the prevention and management of workplace injuries.

As you initiate your project, let us first briefly outline the steps you will take to develop and implement a comprehensive plan for your ED. The Five-Step Project Plan depicts the process for creating and implementing your project plan.
Step 1: Define the Problem
Getting started on any new project can often be intimidating, especially when you are trying to integrate it into all the other tasks that occur during the course of your day. In order to assist you, this toolkit includes shortcuts and summaries on ED injury rates, risk factors, and mitigation strategies. To effectively assess your department's situation and develop a realistic plan, as project leader you must become educated, share your knowledge with staff members and decision makers, and build on what you learn. Step 1 provides you with the basic information you need to develop site-specific goals that are consistent with the priority issues and needs in your ED.

Reviewing the toolkit and familiarizing yourself with the toolkit resources are important first steps in helping you defend the scope and magnitude of workplace injuries in your own ED. These resources will help you punctuate the need for a proactive program that can effectively address injury incidents in your hospital. Take time during this initial phase to also define your role, perhaps as the project leader, and the roles of colleagues who will be part of your safety team.

Step 2: Identify Causative Factors
In order to develop a focused plan, you and your team should complete a thorough physical, cultural, and educational assessment of the current status of your ED in an attempt to identify the areas that require the most attention and could respond the best to safety improvement measures. Figure out what areas need to be improved and then direct your plan to those items that either need the most attention or are easiest to achieve. Achieving early success will help build support for your safety plan. You will find a variety of tools and summary forms in this section of the toolkit to help you develop a snapshot of the major issues in your ED and lead you to the areas of improvement you would like to focus on in your action plan. Use these tools as they are or modify them to serve the assessment needs of your department, taking into account the work and community cultures in your setting.

Step 3: Choose and Develop an Action Plan
Taking time to define exactly where you want to go is an essential step in successfully getting there. Outcomes help us describe exactly what we hope to accomplish and are derived from the physical, cultural, and educational assessment performed in the previous step. When you develop your plan, be practical. Outcomes should be defined by SMART objectives — that is, Specific, Measurable, Achievable, Realistic, and Time-bound — so that you have a frame of reference for evaluating your progress. In this section, you will find worksheets for drafting a customized outcomes list for your ED.

Step 4: Implement Initiatives and Interventions
Action items are practical interventions and tasks that your department can execute to help you achieve the SMART objectives you defined in your site-specific plan. SMART objectives are broken down into smaller tasks, or action items, that are necessary to achieve each objective. In this step, you and your team will use the chosen action items developed in the previous step to begin implementing initiatives and interventions necessary to build a culture of safety. A clearly articulated plan helps gain the support of staff and administration alike. In this section, you and your team will continue to use the worksheets from Step 3 to further define your action plan. There are many tools and resources in Step 4 to assist with implementing initiatives and interventions, including, causal position statements, worksheets, checklists, and even presentations.

Step 5: Evaluate, Disseminate, and Sustain
After implementing your action plan items over a specified period of time, it is important to take a close look at whether progress has been made and to what extent your outcomes have been met. In this important step, you will identify areas of your plan that need adjustment and make necessary modifications. This important step turns your plan into an ongoing cycle of improvement and allows you to extend the scope of your interventions. This toolkit will help you to use uniform assessment tools and evaluation templates to summarize the results of your ED's injury prevention project so you can share the findings with administration and staff, or, in other words, disseminate the information. When evaluating your progress, it is important to be able to quantify what is occurring in your department before and after you apply your action plan. While this is the last step, it is a continuous process of constantly evaluating progress, sharing the results, and devising a plan to keep the momentum going. Just as important as it is to implement initiatives, so too is it important to keep the initiatives going by sustaining your team's plan.
Step 1: Define the Problem

Having a clear understanding and a well-defined problem is critical in implementing a solution. Simply being aware of and concerned about a safety issue, whether it is a policy, procedure, or practice in your ED, is the first step in making a practice change. At this point, it will be evident that there is an opportunity for improvement. But how do you implement change? Do your homework. Begin by investigating the literature and identifying common issues, and soon you will start to define your clinical question.1

As you begin to develop your clinical question, be cognizant that time and resources play significant roles in determining how detailed and extensive workplace injury prevention initiatives and interventions can be. If time and resources are abundant, a more in-depth clinical question and safety program can be undertaken and with limited time or limited access to resources, it is still possible to simplify a program. However, the scope of the problem might have to be scaled down.

In Step 1, the goal is to begin forming your clinical question and defining the problem, building the appropriate team, examining the data, and performing an environmental scan. Many of these objectives may already be in place or may have already been completed in your institution and may only require little, if any, adjustments. Others might require some tools and some will need to work through each goal and objective step-by-step. Wherever you present on the spectrum, use the tools provided to navigate toward becoming a culture of safety environment.

Goals and Objectives:
- Develop a clinical question and define the problem
- Build the right team
- Begin examining the data
- Conduct an environmental scan

Developing the Clinical Question and Defining the Problem
Just as finding an answer to a problem can be difficult, so too is developing a question. A refined clinical question is a brief statement that communicates the intention.1 Developing the clinical question and defining the problem can assist in future aspects of the workplace injury prevention program including directing research, statistical analysis, funding, and resources. While many methods are useful in defining a problem and refining a clinical question, one of the most common frameworks is the PICOT format.2 PICOT stands for population, intervention, comparison, outcomes, and time, and is useful in forming an organized statement. Use the PICOT Work-Injury Sample as an example as you develop your own clinical question. Use the PICOT Template to define your site-specific injury problem. For more information on developing clinical questions and defining the problem, visit the “Tools and Resources” section at the end of this step.

Building the Right Team
This process will help define your key practice champions and create your overall goals and expected outcomes. Choose appropriate team members that represent a variety of disciplines, demonstrate open communication, are willing to contribute to a team, and are committed to the culture-of-safety cause.3 Take the time to understand your target population or audience. Understanding who will benefit from the workplace injury prevention initiatives and interventions might dictate who your key players could be, which will make building the right team much easier.

Working in teams can be challenging and many personalities may conflict, sometimes obstructing objectives and goals. However, research has shown that team structures with common goals and the perception of a larger team culture are related to quality improvement, safety, and overall patient satisfaction.4 A well-structured team creates accountability and assists in determining the quality of the work-injury initiatives and interventions as well as the rate at which tasks are completed. Organization is an essential aspect of teamwork and is beneficial for all members of the team to immediately establish deadlines with specific timelines,
create roles, construct participation expectations, and agree upon commitment guidelines at the beginning of this planning phase. Quite often the question is asked, how many people should be on this team? The answer is not always clear-cut, however. In fact, the number of people and their varying degrees of experience, along with the individual contributions and assets each person can add, will not only determine the size of the team but will also vary depending on the amount of resources available for the workplace injury program. The proposed duration and scope of the program will also determine how many members are needed for it to be sustainable. As you begin building your team, keep in mind the intricacies of teamwork.

Each team member’s qualifications are important especially when delegating tasks, meeting deadlines, creating roles, and completing goals. Ideally, team members should have cultural competence training so that respectful and effective communication can be achieved. Examples of evidence-based programs that promote cultural competence and effective communication techniques are TeamSTEPPS and the Comprehensive Unit-based Safety Program (CUSP). For more information on programs, visit the “Tools and Resources” section at the end of the chapter for links. For help in building the right team, use the Team Building Worksheet to narrow down your selection.

Team members who may positively contribute to the EDWIP program include:

- Emergency medical services (EMS)
- Environmental services or housekeeping
- Facility engineers/maintenance
- HR and risk management
- Nursing leadership and administrators (educators, managers, directors, chief nursing officer, and medical director)
- Public safety officers
- Representatives from your target population
- Staff members and ancillary staff involved in both direct and indirect patient care
- Students and volunteers

Examining the Data: Gathering the Evidence for Change

After you have built your team, established goals and deadlines, and agreed upon responsibilities, it is time to begin examining the data. In order to help guide you with this task, you can use the EDWIP Needs Assessment Worksheet to help steer you in the right direction in collecting the valuable information you will need.

Collect data on the occurrence of workplace injury incidents in your facility, including the three focus areas of prevention, reporting, and response. To obtain the most complete information as possible, it is important
for both management and staff to participate in this assessment process, and you may need to contact the HR department or even risk management to help. As part of this process, you will review the data that you collect, summarize the findings, and begin to identify those areas where you have successes along with those that present opportunities for improvement. Together with your team, compile the information you have collected and draw conclusions regarding areas of deficiency, staff perceptions, administrative policies/procedures, and HR initiatives and constraints. Remember to draw conclusions based on facts and not assumptions or conjecture.

**Environmental Scan and Readiness Assessments**

Being well informed of the scope of ED workplace injuries will ease the process of assessing the current status of your ED’s safety policies and programs, including occurrences, reporting, and response to workplace injuries. Begin to define your own workplace injury project first by finding out how your department, including your staff, your physical environment, and workplace policies compare to national data by performing an environmental scan or readiness assessment.

An environmental scan is a systematic survey that assists in gathering relevant evidence about the internal and external surroundings. Performing an environmental scan can assist in identifying risks and priority initiatives that will guide workplace injury prevention planning, promotion, and implementation. Environmental scans help in recognizing strengths, weaknesses, opportunities, threats, and data regarding both internal and external forces, which may influence organizational trends. Both risks and protective factors that prevent injuries are also scrutinized during an environmental scan. The process of conducting an environmental scan consists of several steps, including gathering information about the organization, the manner in which it operates, financial aspects, governmental issues (laws, regulations, and standards), demographic factors, and internal characteristics collected from staff interviews or surveys.

Some environmental scans also include a readiness assessment. For a project to be effective, useful, and impactful, it must be tailored to the prioritized problems and specific needs of your ED but more importantly, your institution must be ready for change. Consensus throughout your organization is essential to ensure your quality improvement initiatives will be successful. Use the ED Manager Injury Risk Assessment and the ED Staff Injury Risk Assessment Survey tools to conduct your facility’s readiness assessment. After the evidence and data have been collected, the final step is to dissect the information with your team and analyze the data to identify risks and protective factors. Understanding these will help direct your department’s needs for improving a culture of safety and guide your workplace injury prevention initiatives and interventions.

**Having problems identifying risks and protective factors?**

Risks and protective factors can also be discovered by examining the three components of the epidemiological triad. The three components of the epidemiological triad are the agent, host, and environment. This traditional model is typically used to show infectious disease causation but can also be used in determining potential interventions to reduce injuries and disease and promote particular behaviors. As you and your team decide on which positive protective factors to include in your program, you can start devising a creative and comprehensive workplace injury prevention program. For further information on the epidemiological triad, visit the “Tools and Resources” at the end of this section.

**Epidemiologic Triad of Disease Causation**

Want to take on a bigger project?

If you have the time and resources, you would gain valuable information by conducting a retrospective review of employee injury reports. Nurse educators, nurse researchers, or even graduate students can be enlisted to compile data. For assistance in recruiting graduate students’ help, use the Tips for Negotiating Graduate Student Partnerships tool.

It would be helpful to gain access to employee workplace injury reports that have been filed over time to evaluate the types of occurrences that are prevalent in your ED. Sometimes a simple retrospective review can reveal significant areas for improvement, especially when reviewed by an interdisciplinary team that includes different levels of management and staff.
Step 1: Tools and Resources

**Tools**
- ED Manager Injury Risk Assessment Tool
- ED Staff Injury Risk Assessment Survey
- EDWIP Needs Assessment Worksheet
- PICOT Template
- PICOT Work-Injury Sample
- Team Building Worksheet
- Tips for Negotiating Graduate Student Partnerships

**Resources**
- Developing Your Clinical Question: The Key to Successful Research
- Culture of Safety
  - Culture of Safety PowerPoint Presentation
- Team Building
  - http://hrweb.berkeley.edu/guides/managing-hr/interaction/team-building/_steps
  - http://hrweb.mit.edu/learning-development/learning-topics/teams/articles/new-team
- TeamSTEPPS
  - http://www.teamsteppsportal.org/
- The Comprehensive Unit-based Safety Program (CUSP)
- Epidemiological Triangle or Triad
- The Joint Commission
  - Improving patient and worker safety
- U.S. Department of Labor, Occupational Safety and Health Administration (OSHA)
  - https://www.osha.gov/hazfinder/
- World Health Organization
  - http://www.who.int/occupational_health/5_keys_EN_web.pdf?ua=1
References


Now that you have identified the site-specific workplace injury problem(s), it is time to begin identifying causative factors including pinpointing risks and protective factors. After completing an environmental scan and readiness assessments, you and your team will have a better understanding of the workplace injury issues in your department and staff awareness of these issues. In this step, your goals and objectives are to identify causative factors and establish project goals and purposes. Reviewing national guidelines, conducting a literature review, and utilizing the tools provided in this section will help to develop and prioritize the outcomes that define what you and your team hope to accomplish when your plan is fully implemented.

Work with your team to review the summary information obtained from Step 1, and enumerate and prioritize goals as well as outcome objectives of your proposed workplace injury mitigation program. Using those findings with your team, you will create a list of possible improvement goals and metrics that will address the issues and problems uncovered during your assessment. As you begin to identify causative factors, you and your team should begin to sort, prioritize, and select those that are the most important to staff members and other stakeholders.

**Goals and Objectives:**
- Identify causative factors
- Establish project goals and objectives
- Evaluate progress

Gathering the information gained from Step 1 and moving toward understanding the correlation between risks, protective factors, and causative factors allows for the development of effective interventions that lead to a culture of safety. Whether you have recognized increased musculoskeletal injuries, needlestick incidents, bloodborne pathogen exposures, or slips, trips, and falls, your goals and objectives are to determine causative factors leading to the identified events.

To gain a more in-depth understanding and comparison of your site-specific injury or injuries, review national guidelines and conduct a literature review through sources such as the Cochrane Collaboration, PubMed, and other evidence-based databases. These can assist in discovering current workplace injury prevention strategies for the site-specific injuries that have been selected as focal points for your intervention efforts. Use the Literature Review tool as a way to organize your articles. For more information or links to evidence-based databases, visit the “Tools and Resources” at the end of this section.

**Analyze, Sort, and Target Problems**

Numbers and statistics can be daunting, but those data can be extremely useful in targeting priorities, establishing quality improvement metrics, and measuring progress. The task now is to investigate and analyze the current status of workplace safety initiatives in your ED. Keep in mind that national data like the Web-based Injury Statistics Query and Reporting System (WISQARS) or the U.S. Department of Labor, Bureau of Labor Statistics, Illnesses, Injuries, and Fatalities can serve as benchmarks to help assess similarities and differences in rates of injury occurrence among staff in your ED.

Once you have collected your data, the evidence needs to be put into a format that easily identifies your successes and opportunities for improvement. There are many ways to conceptualize, collate, and represent your findings, using a variety of formats like graphs or tables. However you decide to summarize your results, keep in mind that the purpose is to highlight what is being done successfully, identify areas for improvement, and establish priority of the goals and objectives for your site-specific action plan.
Identifying Causative Factors Using the Haddon Matrix

The Haddon Matrix is a conceptualized framework that allows for analysis and recognition of identifiable causes commonly used in injury prevention.\(^1\) Utilizing the Haddon Matrix will help to distinguish risk factors resulting in workplace injury events. Moreover, the Haddon Matrix will assist in identifying factors contributing to workplace injuries and the necessity to put measures in place to prevent them. Designed by William Haddon in 1970, the Haddon Matrix is a two-dimensional framework used commonly in injury prevention research.\(^2\) The first dimension of the matrix includes factors that are based upon epidemiological elements (host, agent/vector, and environment) and the second dimension is divided into phases: primary (pre-event), secondary (event), and tertiary (post-event).\(^1,3\) The conceptualized framework allows for analysis and recognition of identifiable causes and opportunities for intervention to prevent injury and reduce harm. Review the Haddon Matrix Example and use the Haddon Matrix Template to determine cause or why the identified workplace injury is occurring in your department. For more information on developing your own Haddon Matrix and to see an example, visit “Tools and Resources” at the end of this section.

Prioritization

While the matrix is very useful in identifying causative factors, it does not prioritize the identified risk factors. Prioritization involves various elements such as staff input, patient satisfaction data, stakeholder priorities, community feedback, organizational needs, and even organizational financial goals.\(^4\) Utilizing a delineated prioritization method can provide an objective and structured process for ranking issues and easing decision making, while simultaneously gathering input from staff and taking into account all aspects of workplace injury prevention issues. Depending on time and resources, there are several methods that can be used to assist in the prioritization of workplace injury issues. Some prioritization methods include organizational voting, using strategy grids, implementing the nominal group technique or the Hanlon Method, or devising your own prioritization matrix.\(^4\) When attempting to determine which specific workplace injury prevention issue(s) should be addressed in your facility, always work with your team and continuously ask the following questions so your program does not end up a LOSER:

L Are there current laws that interfere with or support our issues?
O Will our department be open to these changes?
S Is our program suitable for the organization?
E What are the economic consequences and does this make financial sense?
R Do we have the available resources to address our issues?

Prioritizing your goals may be difficult, especially when working with various team members. In order to develop a culture of safety and promote the importance of recognizing and mitigating hazards before injuries occur, it is imperative to ensure you and your team are setting accurate project goals and objectives. For more information on different methods for prioritization and to use the Workplace Injury Prevention Prioritization Tool, visit “Tools and Resources” at the end of this section.

Establishing Project Goals and Objectives

It is critical to define reasonable, achievable, and measurable outcomes so that an action plan can be developed with these goals and objectives in mind. Establishing project goals and objectives defines how you and your team will respond to the information uncovered by your assessments and identification of causative factors. Essentially, establishing project goals and objectives also entails built-in deliverables.\(^5\) By creating specific deliverables, you and your team are building your initial implementation plan, setting the foundation for your overall strategy, and helping to develop a sustainable practice change that will have positive effects for your staff, hospital, and community.

Project goals and objectives assist in maintaining the focus of the workplace injury prevention initiatives, support communication, and are essential to evaluating the effectiveness and success of the interventions.\(^6\) Project objectives define what the workplace injury prevention interventions are designed to do and for which target population. The project goals and objectives must be clear, achievable, easily understood, and agreed upon by everyone working on the project as well as key
In fact, workplace injury prevention goals and objectives must be SMART: specific, measurable, attainable, relevant, and time-bound in order to be successful. Use the SMART Goals Worksheet to begin defining project goals and objectives. For more information on writing SMART goals and objectives, visit “Tools and Resources” at the end of this section.

If you and your team are having some difficulties or trouble getting started, try a different approach and use the SWOT Analysis Tool to assist with the development of goals and objectives. SWOT analysis is a method used to evaluate strengths, weaknesses, opportunities, and threats of a program or project. Goals and objectives are easily defined after completing a SWOT analysis and can be used to explore solutions to an issue, identify barriers, assist in making decisions regarding direction of a project, expose program limitations, organize brainstorming, and enhance project or program credibility.

Another approach to establishing workplace injury prevention goals and objectives, is to utilize logic models. Logic models are tools used as frameworks for change (typically by evaluators of programs or managers) to assess effectiveness of a project. Logic models have been used as a graphical depiction of relationships between the intricacies of program construction and development. There are various methods in which a logic model can be shown but the essence of the model is based upon causal relationships (if this, then that). While logic models are most often utilized during the evaluation of a project, they have also proven to be useful during the planning and implementation phase of a project or program. For more information on logic models visit “Tools and Resources” at the end of this section and use the Logic Model Tool as your team’s template.

Time-out!

Now is a good opportunity to take a time-out and evaluate your team’s progress. Taking a time-out gives the team a chance to stop and confirm that everyone is working toward the same goal and meeting team expectations. Use this time with your team to go over the literature review, Haddon Matrix, Workplace Injury Prevention Prioritization Tool, SMART goals, SWOT analysis, or logic models, if you have chosen to utilize any of these tools.

By now, you and your team should have clearly identified a specific workplace injury prevention problem(s) in your ED, identified risk factors, and written goals and objectives to move ahead on the Workplace Injury Prevention project. At this point you might be wondering if your department is aligned with other EDs and whether or not the identified causative factors fall within the top four mechanisms of injury in the ED environment. More than likely your identified mechanisms for injury in the ED will be bodily reaction/overexertion, contact with objects or equipment, slips, trips, and falls, and needlesticks. However, not all EDs are the same and you might have encountered other issues like stress and fatigue, which can result in compromised personal and patient safety. Keep in mind that psychosocial elements are also considered as an injury risk.

Use this time-out to assess progress and verify that goals and objectives meet organizational needs. Ask essential questions like: Are we falling under the top four mechanisms of injury in the ED environment? How is the team working together? Are there any issues in communication? Are we meeting deadlines and upholding our commitments? Take this time to address program issues, evaluate progress, and celebrate achievements. Acknowledging and celebrating achievements, no matter how small, assists in building momentum and creates team identity. This is an opportunity to ensure that each member of your team is working toward the same goals and objectives. Remember that the more straightforward and specific the goals and objectives are, the better the workplace injury prevention program evaluation process will be.

Moving Forward

After taking a time-out, evaluating progress, and making the necessary adjustments, it is time to move forward and begin the process of choosing and developing a strategy. During Step 2, you and your team have identified causative factors, established project goals and objectives, and have paused to evaluate progress. As stated earlier, not all EDs are the same and your assessments may have identified causes or risk factors specific to your work environment such as the psychosocial factors of stress and fatigue.

You and your team are the champions for raising awareness of workplace injuries and promoting change in your emergency care facility. The next step will guide you in developing a culture of safety and promoting the importance of recognizing and mitigating hazards before injuries occur.
Step 2: Tools and Resources

**Tools**
- □ Haddon Matrix Example
- □ Haddon Matrix Template
- □ Literature Review Example
- □ Literature Review Template
- □ Logic Model Tool
- □ SMART Goals Worksheet
- □ SWOT Analysis Tool
- □ Workplace Injury Prevention Prioritization Tool

**Resources**

**Literature Databases**
- The Cochrane Database of Systematic Reviews
- National Guideline Clearinghouse
  - http://www.guideline.gov/
- PubMed
- TRIP (Turning Research into Practice) Database Plus
  - http://www.tripdatabase.com/

**Levels of Evidence**
- Understanding levels of evidence

**Prioritization Techniques**
- National Association of County and City Public Health

**SMART Goals**
- Centers for Disease Control and Prevention: Writing SMART Objectives
  - CDC SMART GOAL writing

**SWOT Analysis**
- The Community Tool Box, Work Group for Community Health and Development at the University of Kansas
- Rutgers School of Social Work
  - http://socialwork.rutgers.edu/Libraries/Huamin/Brochure_2.sflb

**Logic Models**
- Centers for Disease Control and Prevention, Division of Adolescent and School Health: Logic Model Magic Tutorial
  - http://www.cdc.gov/healthyyouth/tutorials/logicmodel/page001.htm
**References**


Now that you have evaluated the present status of your ED and have identified areas for improvement, the next step is to focus on defining your desired project outcomes. This step defines how you will respond to the information uncovered by your assessment. It acknowledges that you believe improvement is necessary, and that it is within your reach and achievable.

Goals and objectives during this phase should focus on choosing and developing a strategy that will create a culture of safety. A culture of safety is described by the American Nurses Association as a working environment that embodies principal standards and behaviors as a result of shared, uniform, and sustained commitment by multidisciplinary staff to safety. The culture places safety over opposing goals and emphasizes a fair and nonpunitive environment.

By choosing and developing workplace injury prevention initiatives, you and your team are building an implementation plan, setting the foundation for your overall strategy and helping to develop a sustainable practice change that will have positive effects for your staff and your institution. When considering appropriate initiatives, think about the various levels of interventions required, potential solutions, costs, HR involvement, training, equipment, and the prospective injury reduction with anticipated cost savings.

So, how do you pick the interventions that best fit your department? Choosing the right workplace injury prevention initiatives and interventions requires analysis of the data already collected, involvement of the team, and choosing the strategy that best suits the department. The department assessment and survey conducted in Step 2 should have uncovered any preexisting workplace injury prevention programs in your organization, or perhaps the literature review might have unveiled examples of successful initiatives you and your team might want to implement. Whichever path you and your team decide to take, ensure that the interventions are closely aligned with the characteristics of your ED.

The goals for Step 3 are to choose interventions that best accommodate and suit the needs of the department and to develop operational strategies.

**Goals and Objectives:**
- Choose initiatives and interventions that fit your organizational needs
- Develop operational strategies
- Communicate findings

**Approaches to Safety**

**Emergency Department Workplace Injury Prevention Model**

As mentioned earlier, it is sometimes more efficient to use a model that is evidence-based and has already been evaluated for effectiveness. One option is ENA's Emergency Department Workplace Injury Prevention (EDWIP) Model. The EDWIP Model is a framework for the EDWIP project that uses four fundamental components — safety programs, policies and training; access to safety equipment and controls; optimal staffing; and administrative support — making up a culture of ED workplace safety. This framework is a strong foundation of building sustainable safety programs, policies, and training that exceed quality improvement benchmarks and metrics, promoting access to a safe care environment and an overall collective support for workplace safety.

The four components of the Model for ED Workplace Injury Prevention, along with current best practice recommendations from the field of occupational health and safety, form a foundation for creating a culture of workplace safety. Safety policies, programs and training, access to necessary equipment and controls, and optimal staffing levels are essential ingredients in the effort to improve ED workplace safety and mitigate the risk and occurrence of injuries among emergency nurses. As you develop your ED’s strategy, remember to address safety policies and procedures, and safety training and education, including a focus on safe patient handling,
access to decontamination and post-exposure treatment and control, and optimal staffing levels. You and your team should refer often to the components of the EDWIP Model to help identify possible objectives and to ensure your initiatives and interventions satisfy each component of the EDWIP Model:

- Safety policies and procedures and training programs
- Access to post-exposure treatment and controls
- Optimal staffing levels/quality improvement metrics and benchmarks
- Administrative support

Three Pillars of Safety: Prevent, Respond, and Report
Another approach to safety is the Three Pillars approach. ENA recognizes that the issue of workplace injury unfolds in three major areas: prevention, response and reporting, and thus requires a multifaceted approach to improve and maintain a culture of safety in your ED. As you begin to develop an action plan, you can use the Three Pillars (Prevent, Respond, and Report) Guide and Template as well as the Three Pillars Example to ensure the initiatives and interventions you choose contain central components of a successful workplace injury prevention program.

The Five E’s of Injury Prevention
Lastly, your team may want to use a public health model as your approach to safety. Developing an action plan alone can be difficult, but having additional support always eases the journey to success. The overall goal is to prevent workplace injuries and incidents from occurring and if or when prevention fails, reducing or mitigating the impact after an occurrence. The following are the Five E’s of Injury Prevention:

1. Education/Behavior
2. Enactment/Enforcement
3. Engineering
4. Economics
5. Environment

Each of the E’s can significantly influence the development of practical, comprehensive, and effective workplace injury prevention initiatives/interventions. Collectively, the E’s yield more effective interventions than when used individually. Exercising the five E’s of injury prevention in conjunction with other methods described earlier will help facilitate an effective and sustainable workplace injury prevention strategy. Keep the Five E’s in the back of your mind as you and your team begin to develop a strategy and action plan because they may assist in narrowing down specific initiatives and interventions. For more information on the five E’s, including a Five E’s Example, visit “Tools and Resources” at the end of this section. Whichever approach you and your team choose to follow, be sure it is aligned with your goals and objectives.
Developing a Strategy

Implementing an Action Plan
Strategies are techniques or approaches that are used to achieve specific objectives.\(^9\) If you recall from Step 2, you and your team identified causative factors and established goals and objectives. As emphasized throughout this toolkit, consensus among the team and stakeholders is essential to adopt the appropriate action plan. The term “strategy” can be interpreted in many ways but ultimately what you and your team are doing is determining the appropriate actions to take in order to achieve the goals and objectives you established in Step 2. While it is not necessary, it might be helpful to write a strategy statement to keep the team focused. For an example of a strategy statement, visit “Tools and Resources” at the end of this section.

The Action Plan
An action plan is a strategy that defines a starting point and goal for implementing change. Remember from Step 2, you and your team made objectives SMART so that you can easily integrate those goals into your action plan. First, start out with an objective or a goal. For example, let’s say that, based on Step 2 results, you and your team identified an increase in musculoskeletal injuries resulting from stretcher-to-stretcher patient transfers and the causative factor was the lack of use of safety/protective equipment. Your team’s goal could be to establish a prevention strategy to reduce the risk and occurrence of injuries related to stretcher-to-stretcher patient transfers. The next step is to brainstorm with your team and write down what the expected outcomes are. In the example we’re using, expected outcomes could be to improve utilization of safe patient handling algorithms and transfer equipment, and to make recommendations for purchase of additional safe patient handling transfer equipment. Now that you and your team have a goal and have decided on expected outcomes, it is time to think about what needs to take place in order to achieve your goal.

As you discuss this with your team, write down all the actions that need to occur in order to fulfill the goal. Each of these items is an action item — smaller, specific tasks that are necessary to accomplish in order to achieve your overall objectives. For example, in order to establish a prevention strategy to reduce the risk and occurrence of injuries related to stretcher-to-stretcher patient transfers, the following would need to occur:

1. Assign a team member to serve as safety champion to carry out action item.
2. Conduct an inventory of any mechanical lift equipment already in the ED.
3. Educate staff on proper use of equipment using safe patient handling algorithms.
4. Explore and estimate costs of transfer sheets for safe patient handling.

Remember that each ED is different and while this is just an example, you and your team might find other action items are required in order to complete an objective. Conversely, your ED may not require as many action items to complete goals. Ultimately, the team will decide which action items are necessary. As you decide this, you will find that each action item requires completion of even more specific steps in order to accomplish the task. Your team may require a more detailed action plan that clearly states who, what, when, where, and how the action item will be performed. If your team chooses to be more detailed and specific, you can develop specific tasks or action steps, which are comprehensive, and specific, and should clarify what will occur, how it will occur, who will perform these actions, when the action will be performed, and what resources are needed to perform the action.\(^{10}\) While this activity is not necessary, it might help to keep everyone on task and have clear assignments, making the project run more smoothly. Collectively, action items and action steps lead to the team’s overall action plan. Ultimately, an action plan achieves the overall established goal and outcomes through completion of all steps and objectives. The basic components of your action plan are depicted in the diagram of action plan components above.

As you determine what the action items are, you will need to consider the resources available and determine a realistic time frame to complete each step. For example, you can set a time frame of two weeks to conduct an inventory of any mechanical lift equipment already in the ED. Finally, just like in clinical nursing, we need to know when the objectives have been met by establishing...
outcome measures. Consider correcting the easiest things first, especially if they are necessary to staff safety and result in high visibility for your initiative.

Work with your team to review the summary information obtained through the ED and staff assessments completed in Step 2. Since you and your team have already enumerated and prioritized the goals and outcome objectives of your proposed workplace injury mitigation program in Step 2, use those findings to create a list of possible improvement goals and metrics that would address the issues and problems uncovered during your assessment.

Use the Action Plan Template and Action Plan Example as tools to record your outcomes and action items you defined for your workplace injury prevention initiative. If your team has decided to be more specific, use the Action Step Template and Action Step Example to help organize each action item. Visit “Tools and Resources” at the end of this section to access these templates and examples.

Communicating the Findings
The summary of your assessments up until this point including Step 2 findings is crucial because it will help you steer the efforts of this initiative toward improvements that count. The summary of the assessments can be documented to get administrative support for this project targeted at reducing work-related injuries and creating a safer ED. These observations can also be presented to staff to help elicit support and collaboration when executing the action plan.

Use the Sample Communication Letter or Talking Points to help create a personalized letter to inform your administration of the results of your assessment and the proposed initiative you have developed with your team. When reviewing your findings, it is important to highlight any events that you see as emergent or urgent, and identify those as first-tier priorities. For instance, you might want to present any immediate issues that are threatening the safety of the staff on a daily basis and make those a priority, or present them to the appropriate administrative personnel for immediate action. Engage nursing leadership, employee health, risk management, and HR as needed to endorse the efforts of this project as a positive step toward creating a safer work environment.

Review
In this section, you and your team focused on choosing and developing a strategy. We reviewed what entails a culture of safety and gave three examples of approaches to workplace injury prevention with tools and resources. We then dove right into developing an action plan, giving an example each step of the way and providing both tools and templates. Lastly, we learned how to communicate the findings with a sample letter. While Step 3 presents a lot of information, this step is essential to actually implementing interventions. Take a time-out with your team to evaluate progress and reassess goals and objectives.

Continuously reevaluating progress on a routine basis will help improve the effectiveness of the intervention and initiatives. Taking the time to reassess after each step will save time in the long run. You and your team do not want to get to Step 5 only to find out your implementation strategies are not applicable to your ED. It is imperative to regularly assess progress and perform a program evaluation early on. In the next step, you and your team will begin implementing interventions and exploring guidelines for workplace injury prevention. If you would like more information on program evaluations, visit the “Tools and Resources” section at the end of this section.
Step 3: Tools and Resources

**Tools**
- Communication Letter
- ED Workplace Injury Prevention Action Plan Example
- ED Workplace Injury Prevention Action Plan Template
- ED Workplace Injury Prevention Action Step Example
- ED Workplace Injury Prevention Action Step Template
- Five E’s Of Prevention
- Safety Strategy Statement Example
- Talking Points
- Three Pillars Of Safety Example
- Three Pillars Of Safety Guide & Template

**Resources**
- Emergency Department Workplace Injury Prevention Model

**Creating a Culture of Safety**
- [http://www.ihi.org/topics/PatientSafety/Pages/default.aspx](http://www.ihi.org/topics/PatientSafety/Pages/default.aspx)
- Culture of Safety PowerPoint Presentation

**Centers for Disease Control and Prevention Healthy Workplace Model**

**Emergency Nurses Association Healthy Work Environment Position Statement**
- [http://www.ena.org/SiteCollectionDocuments/Position%20Statements HEALTHYWORKENVIRONMENT.pdf](http://www.ena.org/SiteCollectionDocuments/Position%20Statements%20Statements%20HEALTHYWORKENVIRONMENT.pdf)

**Five E’s of Prevention**
- FEMA: Five E’s of Prevention

**Action Plan**
- Community Toolbox, Work Group for Community Health and Development at the University of Kansas
- U.S. Department of Health and Human Services
  - [http://www.health.gov/communication/literacy/sampleplan.htm](http://www.health.gov/communication/literacy/sampleplan.htm)
- Centers for Disease Control and Prevention Sample Action Plan

**Strategy Statements**
- *Harvard Business Review*
- University of Iowa
  - [http://www.uiowa.edu/~c019162/strategy.htm](http://www.uiowa.edu/~c019162/strategy.htm)

**Program Evaluation**
- Centers for Disease Control and Prevention
- Community Toolbox, University of Kansas
References


Finally, you and your team have reached the point in the workplace injury prevention program where you will begin implementing initiatives and interventions. Workplace injury prevention initiatives can succeed only to the degree to which your organization and stakeholders recognize the necessity for implementing change. As emphasized throughout this toolkit, safeguarding leadership support in facilitating change is just as important as constant program evaluation. Fundamental phases to implementing initiatives and interventions include identifying a rollout or go-live date, anticipating barriers, and educating and training all staff, including leadership. The goals and objectives in Step 4 are to build a culture of safety by implementing initiatives and interventions based on your department’s needs.

**Goals and Objectives:**
- Identify a rollout or go-live date
- Recognize barriers and devise a plan to overcome obstacles
- Educate and train all staff, including leadership
- Implement initiatives and interventions

**Identify a Rollout or Go-Live Date**
In Step 3, Choosing and Developing an Action Plan, you and your team took the time to clearly define actions that needed to take place in order to actually implement a change. Using your action plan, work with your team to develop a timeline or timeframe for your initiatives and interventions and agree upon a final rollout or go-live date for implementing your project. Remember to consider barriers, training time, promotion or marketing, and the actual time it may take to complete interventions when deciding on an overall rollout date. It might be useful to create a timeline to help keep your team organized and build anticipation for change. Visit “Tools and Resources” at the end of the section to see a sample Project Timeline and an Implementation Timeline Template.

**Common Barriers to Change**
- Lack of knowledge
- Lack of time
- Fear of change
- Lack of interest
- Lack of confidence
- Negative attitude, beliefs, or values
- Lack of shared governance
- Inadequate staffing
- Insufficient resources
- Limited support from leadership
- Absence of change mentors

**Recognizing Barriers and Overcoming Obstacles**
Implementing an evidence-based practice change can be difficult. However, with the appropriate planning, organization, support, and tools, translating evidence into practice can be achieved. One of the best ways to implement an evidence-based practice change is to involve practice champions, coaches, or evidence-based practice mentors. Engaging a diverse team throughout the entire process of planning is critical, as is understanding your target population. Knowing what your department’s culture is like through the previous environmental scan, readiness assessments, and surveys completed in Step 1 will help you and your team anticipate barriers. Above is a list of common barriers. The list provides a general idea of common barriers your department might experience. Not all EDs will have the same barriers, and solutions may range from establishing a formal implementation team to simply allowing more time for education and training. Or perhaps your organization might find that developing a mentorship program is the most useful approach to overcoming barriers. Take the time with your team to make a list of anticipated barriers and begin thinking of solutions to overcome these obstacles. Refer to the Tips for Implementing Change and Strategies for Integrating EBP into the Clinical Environment located in “Tools and Resources” at the end of this section.
Educate and Train Staff
As it has been emphasized throughout this toolkit, knowing the culture of your ED will help guide education and training of staff. Remember to implement various teaching methods including traditional classroom instruction, skills labs, online learning modules, visual aids, and engaging staff to make learning fun. Other methods to disseminate information that have proven to be effective are hands-on technical assistance, replication guides, and training workshops with more hands-on experience. Try informational sessions prior to launching training to get staff familiar with the coming changes. Use the Workplace Injury Prevention Training Sessions Sign-up Sheet as a template for your informational sessions and encourage staff to take a Pledge of Safety to commit to participating in a culture of safety.

Well-managed workplace injury prevention initiatives and interventions require commitment and careful planning. You and your team might find that implementing change may require restructuring of the day-to-day processes, and perhaps the best option is to initiate change on a smaller scale by conducting a pilot. If your organization conducts a pilot, use the Pilot Testing Evaluation Worksheet to assess participants’ experience. Ultimately, education and training must be geared toward your department and should be implemented on a smaller, manageable scale rather than overwhelming staff. There are many approaches to educating and training. Use a variety of approaches and celebrate successes early and often to ensure compliance, build excitement, and generate positive attitudes. For more information on education and training, visit “Tools and Resources” at the end of this section.

Implementing Initiatives and Interventions
More than likely, you and your team have found that your department-specific workplace injury prevention issues stem from five main contributing factors. These factors contribute to the risk for non-violence-related workplace injuries among emergency nurses. The five main contributing factors are:

1. Increased workloads
2. Aging of the nursing workforce
3. Obesity among patients, nurses, and staff
4. Workplace stress and fatigue
5. Nonstandard work schedules and extended hours

As a result of the above contributing factors, there are also four primary mechanisms of work-related injuries. These mechanisms are:

1. Overexertion/bodily reaction (e.g., patient handling)
2. Contact with objects and equipment
3. Slips, trips, and falls
4. Needlesticks

The study conducted by ENA on ED non-violence-related workplace injuries discussed earlier identified three factors found to be most highly correlated to a lower occurrence of nurse-reported injuries. These three factors are (1) Having safe patient handling programs, policies and training; (2) Access to safety equipment and controls; and (3) Optimal staffing.

So, how can you and your team prevent these injuries from occurring? By using this toolkit, following each step, and working with your team to complete the tasks, you have already taken the steps toward creating a culture of safety. Now you and your team must start implementing initiatives and interventions to address department-specific issues. As you and your team begin implementing initiatives and interventions, keep the three factors above in mind to create your culture of safety. To help get started, the following are brief overviews with tools and resources addressing the most common issues in ED workplace injury prevention.

These mechanisms are:
1. Overexertion/bodily reaction (e.g., patient handling)
2. Contact with objects and equipment
3. Slips, trips, and falls
4. Needlesticks
Safe Patient Handling

Click here to see tools and resources

With recent evidence showing that proper body mechanics alone cannot protect healthcare workers, it is even more imperative that safe patient handling and mobility methods including technology must be implemented to lift, transfer, or reposition patients. Founded on overwhelming evidence-based data, the American Nurses Association (ANA) has developed national standards for safe patient handling and mobility. This comprehensive standard is intended to guide professionals in diverse settings in creating a culture of safety. The guidelines include eight central standards of care that encompass organizational and healthcare worker responsibilities. These standards may also serve as quality metrics for third-party payers and as conditions for payment. Furthermore, government agencies may use these standards to regulate or improve services of an industry.

The following are the ANA safe patient handling and mobility national standards:
1. Establish a culture of safety.
2. Implement and sustain a safe patient handling and mobility (SPHM) program.
3. Incorporate ergonomic design principles to provide a safe environment of care.
4. Select, install, and maintain SPHM technology.
5. Establish a system for education, training, and maintaining competence.
6. Integrate patient-centered SPHM assessment, plan of care, and use of SPHM technology.
7. Include SPHM in reasonable accommodation and post-injury return to work.
8. Establish a comprehensive evaluation system.

Safe patient handling encourages the elimination of manual handling. Over 30 years of evidence has demonstrated that manual patient handling and relying on body mechanics is unsafe. The adoption of safe patient handling guidelines that promote the use of assistive equipment during transfers has proven to be effective in reducing the incidence of musculoskeletal disorders.

As you and your team begin implementing initiatives and interventions related to safe patient handling, choose strategies that eliminate manual handling while you build your culture of safety. Aim for a no-manual-lift environment and take the time to extensively research alternatives to manual handling. Review page 40 for tools and resources specific to safe patient handling, including links to regulatory agencies, national associations, and states making progress with their initiatives.

Musculoskeletal Injuries and Disorders

Click here to see tools and resources

The strenuous physical demands associated with patient handling, growing obesity rates of both healthcare workers and staff, the shortage of nurses, and the aging of the workforce contribute to musculoskeletal injuries. Work-related musculoskeletal disorders (MSDs) are musculoskeletal injuries or disorders of the muscles, nerves, tendons, joints, cartilage, and spinal discs that are a result of the work environment or performance of work, and the condition is aggravated or persists longer due to the working conditions.

Musculoskeletal injuries and disorders among emergency nurses are attributed to the high job demands and have also been associated with a higher level of burnout. Moreover, MSDs also result in time lost and because of injury underreporting, the true impact of nursing injuries may not even be known. An overwhelming majority of research indicates that greater availability of safety devices including lift-assist devices is associated with fewer musculoskeletal injuries. However, these lift and safety devices must be easily accessible, and barriers against safety device use must be eliminated.

Implementing safe practices including safe patient handling algorithms, ergonomic interventions, and safe patient handling programs will help to reduce the incidence of musculoskeletal injuries. At the end of this section are tools and resources specific to musculoskeletal injuries and disorders to help your team implement initiatives and interventions to reduce and eliminate their incidence.
Bloodborne Pathogens, Infectious Diseases, and other Exposures

Click here to see tools and resources

Exposures to bloodborne pathogens, infectious diseases, and other hazardous substances are occupational risks and can occur from contact with blood, bodily fluids, chemicals, and patient-visitor contact. Primary concerns are human immunodeficiency virus (HIV), hepatitis B virus (HBV), and hepatitis C virus (HCV). However, ED workers are also at risk for other exposures like methicillin-resistant staphylococcus aureus (MRSA) and vancomycin-resistant enterococcus (VRE), seasonal influenza, Bordetella pertussis, MERS-coronavirus (MERS-CoV), Mycobacterium tuberculosis (TB), norovirus, and other emerging infectious diseases like Ebola Virus Disease (EVD).

Primary routes of infectious disease transmission are contact (direct and indirect), droplet, and airborne. Direct contact transmission requires the transmission of infectious pathogens to a susceptible individual through physical contact with an infected person (direct skin-to-skin contact). Indirect contact occurs when an infectious agent is transferred through contaminated surfaces like bed rails, tables, door handles, or medical equipment. Droplet transmissions occur when pathogens are expelled through coughing, sneezing, or talking, or during procedures like intubating and suctioning. Lastly, airborne transmission occurs through small droplet nuclei that are suspended in the air and can be transmitted through the respiratory tract. Examples of airborne transmissible agents are TB and the rubella virus that causes measles. For more information on bloodborne pathogens and infectious diseases, visit “Bloodborne Pathogens and Exposures Tools and Resources” listed at the end of this section.

While these potential exposures are frightening, they can all be prevented with the proper precautions. The role of the ED staff is to communicate potential exposures, take the necessary steps to prevent exposure, and participate in 100% reporting. Using basic standard precautions is the first step to preventing exposures. Hand washing and wearing the proper personal protective equipment (PPE) will assist in preventing exposures. You and your team must implement the appropriate initiatives and interventions that focus on prevention, education, and training. It is also important that the initiatives and interventions you and your team choose not only incorporate prevention strategies like vaccination programs, but also post-exposure procedures like testing, monitoring, and counseling. Here are a few ideas for initiatives and interventions to implement in your facility:

- 100% occurrence reporting
- Influenza vaccination program
- Hands-on PPE drills and training
- Hand washing campaigns
- Online quarterly bloodborne pathogen learning modules
- Isolation precaution signs/carts
- Skills labs focusing on sharps and needlestick injury prevention
- Journal clubs focusing on infectious diseases
- Decontamination procedures for exposures to hazardous substances

Use the “Bloodborne Pathogens and Exposures Tools and Resources” at the end of this section to help guide your team in choosing the appropriate initiatives and interventions for your department.
Needlesticks and other sharps mishaps are serious workplace injuries, but like most injuries, they are preventable. There are an estimated 385,000 needlesticks and other sharps-related injuries incurred by hospital-based healthcare workers annually. While the cost of each needlestick and sharps injury ranges from $71 to nearly $5,000, it is difficult to quantify the detrimental damages these occurrences have, especially due to the emotional consequences of these injuries.

Some workplace injury prevention programs have found success in a variety of strategies such as using alternatives to needles, emphasizing work safety practice controls, focusing on education, forming specific needlestick and sharps committees, simulation training, or establishing specific policies and protocols.

In order to prevent needlestick and sharps injuries, effective workplace injury prevention initiatives and interventions must include several components that work simultaneously with other safety programs and infection control processes. An effective strategy must have continuous quality improvements and specific organizational procedures for prevention and post-exposure measures. Along with these fundamental elements, a successful needlestick and sharps injuries program must involve leadership and have a clear operational process that includes 100% reporting, a nonpunitive environment, surveillance, data collection and analysis, and ongoing education and training.

Take the time to review the “Needlestick and Sharps Injuries Tools and Resources” at the end of this section to get some ideas for your ED’s workplace injury prevention strategy. Make sure to work with your employee health, risk management, and HR departments to implement the appropriate policies and procedures.
Fatigue and Other Psychosocial Factors

Click here to see tools and resources

Recent research has shown a correlation between fatigue and adverse events.11,30-36 The ever-changing healthcare arena has created an environment of increased demands for improved patient outcomes. The work environment for emergency nurses includes high levels of stress, altering work patterns, long shifts, overtime, and complex patient care. While these are just a few examples of the ED environment, the demands on an ED nurse can be both emotionally and physically exhausting. With this exhaustion and fatigue there are increased opportunities for mistakes, medication errors, and regretted decisions.33-36 Decision making can be difficult, reaction times can be slower, and the ability to solve problems is compromised.36 Extended hours, rotating shifts, and inadequate breaks contribute to lapses of attention to detail, errors of omission, compromised problem solving, reduced motivation, slowed reaction times, and decreased energy.36 Moreover, the impact of fatigue can also result in confusion, irritability, impaired communication, slowed judgment, and loss of empathy or compassion fatigue.36

Other psychosocial factors that can impact workplace injuries are moral distress, anxiety, depression, and bereavement.31 While these are just a few examples, it is important that you work with your team to determine which psychosocial factors are impacting or might impact your department. Here are some ideas for initiatives and interventions to implement in your facility to prevent, reduce, and mitigate fatigue and other psychosocial factors:

- Staff-designed work schedules
- Eliminating 12-hour shifts
- Fatigue-management plans
- Quiet rooms
- Designated break person for shift
- “Sleep Tips” bulletin board
- Monthly massage programs
- Wellness committee

Use the “Fatigue and Other Psychosocial Factors Tools and Resources” listed at the end of this section to help guide your team in choosing the appropriate initiatives and interventions for your department.

Hospital Helipads, Helicopters, and Noise

Click here to see tools and resources

Helicopter emergency medical services (HEMS) provide access to medical service for thousands of Americans annually who would not have been able to reach a trauma facility within an hour of their emergency. However, there are several safety concerns associated with helicopters and helipads including equipment hazards, helipad safety, noise, ergonomic issues, and fueling hazards.37 Implementing initiatives and interventions to prevent workplace injuries associated with helicopter pad safety can be difficult because so many regulatory agencies are involved like the Federal Aviation Administration (FAA), the U.S. Department of Transportation, the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA), the National Fire Protection Association, state and local fire marshals, state air medical associations, local zoning commissions, city councils, and even neighborhood associations.38 If you and your team are looking to implement workplace safety prevention specific to helicopter safety, make sure you approach this with caution, use your resources, and seek senior leadership assistance. For more information visit “Hospital Helipads, Helicopters, and Noise Tools and Resources” listed at the end of this section.
Step 4: Tools and Resources

Tools
- Implementation Timeline Template
- Pilot Testing Evaluation Worksheet
- Pledge Of Safety
- Project Timeline Example
- Strategies For Integrating EBP Into The Clinical Environment
- Tips For Implementing Change
- Workplace Injury Prevention Training Sessions Sign Up Sheet

Resources

Creating a Timeline
- http://www.gantt.com/

Implementing Change
- Agency for Healthcare Research and Quality
  - Change Management: How to achieve a culture of safety
- Rogers’s Diffusion of Innovation Theory
- Creating a Culture of Innovation in Nursing Education, Bernadette Melnyk, PhD, RN, CPNP/PMHNP, FAAN
- The Change Curve Model
- Kotter & Cohen’s Model of Change
- Transtheoretical Model of Health Behavior Change
  - http://www.umbc.edu/psych/habits/content/the_model/

Education and Training
- http://howtopodcasttutorial.com/

Articles
- Coaching for Success: Sustaining Change in Emergency Care
- Guide to Implementing Quality Improvement Principles
- Implementing Evidence-based Nursing Practice: An Overview
- Translating research into practice
Safe Patient Handling Tools and Resources

Safe Patient Handling Validation Checklist
Safe Patient Handling Algorithm

ANA resources
- http://www.nursingworld.org/MainMenuCategories/WorkplaceSafety/Healthy-Work-Environment/SafePatient

Emergency Nurses Association Healthy Work Environment Position Statement
- http://www.ena.org/SiteCollectionDocuments/Position%20Statements/HEALTHYWORKENVIRONMENT.pdf

Occupational Safety and Health Administration (OSHA) Worker Safety in Hospitals
- https://www.osha.gov/dsg/hospitals/
- Safe Patient Handling Program, Fact Sheet

Faculty Guidelines Institute, Patient Handling and Movement Assessments (white paper)

Centers for Disease Control and Prevention
- http://www.cdc.gov/niosh/topics/safepatient/

U.S. Department of Veterans Affairs

The Joint Commission
- http://www.jointcommission.org/assets/1/18/TJC-ImprovingPatientAndWorkerSafety-Monograph.pdf

Association of Safe Patient Handling Professionals
- http://www.asphp.org/

New York State Zero Lift Task Force
- http://www.zeroliftforny.org/

Massachusetts Nursing Association Safe Patient Handling Toolkit

Minnesota Hospital Association Safe Patient Handling Toolkit
- http://www.dli.mn.gov/WSC/DOC/Sample_SHPprogram_for_hospitals.docx

Washington State Hospitals Safe Patient Handling Toolkit
Musculoskeletal Injuries and Disorders Tools and Resources

Safe Patient Handling Algorithms
- Veterans Affairs safe patient handling assessment and algorithm
- ENA safe patient handling algorithms

Centers for Disease Control and Prevention

National Institute for Occupational Safety and Health
- http://www.cdc.gov/niosh/topics/ergonomics/
- http://www.cdc.gov/niosh/docs/97-117/

OSHA

Additional links
- http://dx.doi.org/10.1080/00140139.2012.661087
- http://www.iwh.on.ca/msd-tool-kit

Bloodborne Pathogens and Exposures Tools and Resources

Centers for Disease Control and Prevention
- http://www.cdc.gov/niosh/topics/bbp/emergnedl.html
- http://www.cdc.gov/niosh/topics/bbp/
- http://www.cdc.gov/niosh/stopsticks/bloodborne.html

Guideline for Isolation Precautions

Emergency Nurses Association
- Communicable Disease Position Statement

Ebola Virus Disease (EVD) Resources
- http://www.ena.org/about/media/ebola/Pages/default.aspx

Hand Hygiene
- http://www.cdc.gov/handhygiene/
- http://www.jointcommission.org/topics/hai_hand_hygiene.aspx

World Health Organization, hand hygiene
- http://www.who.int/patientsafety/events/05/HH_en.pdf

HIV/AIDS
- http://www.cdc.gov/hiv/default.html
Occupational HIV prevention

Hepatitis
- http://www.cdc.gov/hepatitis/
- Hepatitis B and Healthcare personnel-CDC

Influenza
- http://www.cdc.gov/flu/professionals/infectioncontrol/

OSHA

Additional resources
- Complying with the Bloodborne Pathogen Standard
- World Health Organization standard precautions
- Choosing personal protective equipment (PPE) PowerPoint-CDC
- Personal protective equipment (PPE) poster
- http://ehs.okstate.edu/modules/bbp/
- MERS-CoV Checklist

Needlestick and Sharps Injuries Tools and Resources

Emergency Nurses Association Position Statement

American Nurses Association
- www.needlestick.org

Centers for Disease Control and Prevention
- http://www.cdc.gov/niosh/topics/bbp/emergnedl.html
- http://www.cdc.gov/niosh/stopsticks/bloodborne.html
- http://www.cdc.gov/sharpsafety

Needlestick Safety and Prevention Act
- International Sharps Injury Prevention Society
- http://www.isips.org/
- International Healthcare Worker Safety Center
National Alliance for the Primary Prevention of Sharps Injuries
• http://www.nappsi.org/safety.shtml

OSHA
• https://www.osha.gov/SLTC/bloodbornepathogens/index.html

Training for the Development of Innovative Control Technologies
• http://www.tdict.org/

Slips, Trips and Falls Tools and Resources

List of Top STF Hazards

Centers for Disease Control and Prevention
• http://www.nsc.org/learn/safety-knowledge/Pages/safety-at-home-falls.aspx

National Institute for Occupational Safety and Health
• http://www.cdc.gov/niosh/topics/falls/

OSHA
• https://www.osha.gov/SLTC/walkingworkingsurfaces/index.html
• https://www.osha.gov/Publications/smallbusiness/small-business.html

Slips, trips and falls PowerPoint Presentation

Safe Work Australia
• Slips and trips at the workplace fact sheet
• Managing the risks of falls at workplaces

American Red Cross
• Preventing slips, trips & falls

Other links
• http://www.hsa.ie/eng/Your_Industry/Healthcare_Sector/Slips_Trips_and_Falls_in_Homecare/
• http://www.comcare.gov.au/preventing/hazards/physical_hazards/slips_trips_and_falls

Fatigue and Other Psychosocial Factors Tools and Resources

American Nurses Association
• http://nursingworld.org/MainMenuCategories/WorkplaceSafety/Healthy-Work-Environment/Work-Environment/NurseFatigue

Emergency Nurses Association
• http://www.ena.org/practice-research/Practice/Pages/TopicBriefs.aspx
  • Compassion Fatigue Topic Brief
    ◦ http://www.ena.org/practice-research/Practice/Documents/CompassionFatigue.pdf
  • Healthy Work Environment Position Statement
• http://www.ena.org/SiteCollectionDocuments/Position%20Statements/HEALTHYWORKENVIRONMENT.pdf

Joint Commission
• http://www.jointcommission.org/sea_issue_48/
Additional resources
- http://eo2.commpartners.com/users/swsd/

Wellness plans
- http://www.livestrong.com/article/297582-how-to-start-a-personal-wellness-program/

Hospital Helipads, Helicopters, and Noise Tools and Resources

Air Medical Physician Association
- https://ampa.org/position-papers

American College of Emergency Physicians

Association of Air Medical Services
- Fact sheet

FAA

International Helicopter Safety Team
- http://www.ihst.org/
- Helicopter weather tool

National Flight Nurses Association
- http://www.astna.org/position_papers.html

National EMS Pilots Association
- http://www.rotor.com/LinkClick.aspx?fileticket=xMhQLMWMc9Q%3D&tabid=179

Noise resources
- http://www.hsa.ie/eng/Topics/Physical_Agents/Noise/Noise_-_Frequently_Asked_Questions/
- http://www.cdc.gov/niosh/topics/noise/

U.S. Department of Labor, OSHA
References


Step 5: Evaluate, Disseminate, and Sustain

Congratulations! At last, you and your team have reached the final step of implementing evidence-based workplace injury prevention initiatives and interventions, but the work is not over yet. The final challenge of Step 5 is to evaluate your initiatives and interventions, report your findings, and devise a working plan to sustain your program.

Goals and Objectives:
- Evaluate your initiatives and interventions
- Disseminate your results/findings
- Develop a plan for sustainability

Throughout this toolkit, you and your team have been taking time-outs to evaluate processes, review work already completed, and ensure that everyone is working toward the same goals. You might have already started acknowledging accomplishments and announcing successes. Similar to what you and your team have already been doing, in Step 5 your purpose is to examine the effects of the initiatives and interventions that have been implemented in order to improve practices and sustain your workplace injury prevention program. Generally, the process of a program evaluation assesses feasibility, usefulness, and accuracy. There are a variety of frameworks that provide a step-by-step guide to evaluate your initiatives and interventions. Some frameworks are lengthier than others but all encourage a systematic approach to evaluating program processes, strategies, and outcomes.

Evaluation

The systematic process of program evaluation can be extremely useful in solving issues and understanding if the implemented initiatives or interventions are working as intended. Similar to the logic model discussed in Step 2, a written evaluation plan can provide a useful guide or road map for outlining the program’s purpose and goals, clarifying measurable objectives, and linking program activities with the intended outcomes described in your action plan. As you progress through the evaluation steps, you may find that there were variations in implementation and/or unexpected outcomes that were not reflected in the initial program design. Information gathered from this type of process and from outcome evaluations helps to determine changes that should be made to the implementation process. It’s important to remember that we often can learn as much from the unanticipated outcomes as from those we expected to occur. Identification of unexpected outcomes can lead to a better understanding of injury occurrence in your workplace, allowing for further quality improvement changes and refinement of your program plan. Additionally, when priorities or program modifications occur over time, you can update your evaluation plan to reflect those changes. You and your team can use the Team Program Evaluation Discussion Questions to guide the evaluation process. Visit “Tools and Resources” at the end of this section for links to various frameworks or models to follow when evaluating your program.
Dissemination

Dissemination is the process of broadcasting the results of the initiatives and interventions as well as presenting the deliverables to key stakeholders and target audiences. Dissemination is necessary because it provides the opportunity to share your experiences, discuss the process, and essentially create a summary of the work you and your team have done. The purpose of disseminating your results is to raise awareness, inform others, engage stakeholders, promote your initiatives/interventions, demonstrate the value of your program, and ensure sustainability of the work. It is essential to plan appropriately, ensure timely delivery of information, remain unbiased (share mishaps and unexpected findings, and report impartially) and choose the most suitable communication method for your target audience. The timing, tone, style, and format you and your team choose to announce project results can greatly impact the continued success of your initiatives/interventions. For ideas on methods of disseminating information, use the Dissemination Methods Guide, and to assist in recapping the team’s work, use the Project Summary Worksheet. For more information on dissemination plans, visit “Tools and Resources” at the end of this section for links.

Sustainability

Implementing evidence-based change is an arduous task that requires commitment and well-organized strategies to keep the project going. Derived from the Latin term to “endure” or “support,” there are a variety of definitions and descriptions of sustainability. Generally, the term refers to the capacity to maintain program services or interventions even after changes in staffing, management, or organizational modifications. While certain aspects of the program, project, or initiatives may change, the overall dedication to the cause remains constant. Sustainability is the continued commitment and momentum of a particular cause. Think of sustainability as institutionalizing policies and practices within your organization to ensure lasting change. A critical component of program sustainability is being able to demonstrate desired program effects. To help begin your sustainability plan, use the Sustainability Planning Questionnaire and Sustainability Checklist. Think of sustainability as your team’s legacy. What sort of imprint will you leave? What aspects of your initiatives and intervention strategies do you feel your organization will continue to benefit from? These are the sorts of questions you and your team must ask each other as you devise a plan to sustain or keep the momentum going. For additional information and other examples of successful and sustainable programs, visit “Tools and Resources” at the end of this section for links.
Step 5: Tools and Resources

Tools
- Dissemination Methods Guide
- Project Summary Worksheet
- Sustainability Checklist
- Sustainability Planning Questionnaire
- Team Program Evaluation Discussion Questions

Resources

Evaluation
- Community Toolbox, Work Group for Community Health and Development at the University of Kansas
- Centers for Disease Control and Prevention
  - http://www.cdc.gov/EVAL/framework/
  - CDC evaluation workbook
- Additional resources
  - Evaluating health programs
  - Evaluation handbook
  - Taking stock program evaluation
  - http://www.uwex.edu/ces/pdande/evaluation/evaldocs.html

Dissemination
- http://www.chip.uconn.edu/research/dissemination-and-implementation-resources/

Sustainability
- http://www.odh.ohio.gov/~/media/ODH/ASSETS/Files/lhd/healthycommunitiessustainabilityapproaches.ashx
- http://www.gatesfoundation.org/How-We-Work


Throughout this toolkit, you and your team have defined your department’s workplace injury prevention issues, examined data, conducted an environmental scan, and identified causative factors of workplace injuries. Moreover, your team has established and prioritized goals and objectives, chosen initiatives and interventions that fit your organizational needs, and developed operational strategies. Using tools throughout this toolkit, you and your team were able to educate, train, and implement initiatives and interventions. Lastly, your team has evaluated and disseminated program results and made plans for sustainability.

Ongoing evaluation of your safety initiatives is a critical part of any process in that it validates that you are on the right path. While hours of time and critical thinking are invested in the original plan, you must always be prepared to alter the plan should you discover that the road to completion was not as you expected. By reevaluating and adjusting your project plan, you keep the workplace injury prevention initiative relevant to the goals that you and your team would like to see achieved over time. To effectively adjust your project plan, it is a good idea to take periodic “snapshots” of each initiative to determine what is working, what might simply need to be reinforced, what is not working, and what might need to be improved or adjusted to ensure sustainability.

The efforts you and your team have made are commended and your goal of creating a culture of safety is one that will benefit your staff, patients, and community. ENA acknowledges that workplace injury prevention is a necessity and an integral aspect of emergency nursing. These accomplishments deserve recognition and ENA applauds and supports your commitment and dedication to safe practice, safe care.

Your feedback on this toolkit is important and provides opportunities for improvement. Please send your comments to ISQIP@ena.org.
Mrs. Smith is a 74-year-old woman, weighs 250 pounds, and is relatively healthy. She lives at home with her husband and describes herself as independent. She was brought to the ED reluctantly by her husband and two children after multiple falls at home. Usually, Mrs. Smith is able to ambulate on her own and occasionally, her right knee “locks up.” Upon examination in the ED, she was diagnosed with a urinary tract infection.

Hearing those results, she admitted that she has been experiencing urinary urgency and has been “rushing” to the bathroom. It is anticipated that Mrs. Smith will be prescribed antibiotics and discharged with instructions to follow up with her primary care physician.

You are the nurse caring for Mrs. Smith and the following questions have presented:

Answer the following questions based on this scenario:

1. Mrs. Smith has slipped down in her bed and needs to be repositioned on her side. How would you handle this?
   A. Encourage patient to assist using a positioning aid of cues.
   B. Use smooth mover, crank lift, or ceiling lift to position the patient on her side.
   C. Staff assistance is not needed; patient may use the positioning aid (trapeze or transfer ladder).

2. If Mrs. Smith was more immobile and less independent, you would need to use a smooth mover, crank lift, or ceiling lift, and two to four staff members due to Mrs. Smith’s weight being greater than 200 pounds.
   A. True
   B. False

3. Mrs. Smith insists on walking to the restroom and refuses a bedpan. The restroom is approximately 25 feet away. How would you best handle the situation?
   A. Provide Mrs. Smith with a walker and have her walk herself to the bathroom.
   B. Insist that she use a bedpan so you can record her output and summon a patient care technician for turn assist.
   C. Take Mrs. Smith in a wheelchair to the bathroom, then assist her to the toilet with one to two staff members.
An emergency nurse just administered a tetanus-diphtheria vaccine to a patient. He engaged the safety feature and went to dispose of the needle into the sharps container. The sharps safety lid would not close so he pushed on it to ensure the needle was deposited into the sharps container. He immediately felt a slight prick to his finger and noticed a spot of blood.

**Answer the following questions based on this scenario:**

4. What is the next step this nurse should take in regard to the needlestick?
   - A. Immediately remove his gloves, wash his hands with soap and water.
   - B. Immediately remove his gloves, wash his hands with soap and water, complete an incident report, notify his supervisor, and follow the institution’s needlestick injury policy.
   - C. Immediately remove his gloves, wash his hands with soap and water, complete an incident report, and make an appointment with employee health tomorrow to have HIV, HBV, and HCV testing.

5. If post-exposure prophylaxis (PEP) is not administered within 24 to 36 hours after injury, it has no effect on preventing disease transmission.
   - A. True
   - B. False

6. The injured nurse completes his baseline testing. Because he feels fine, he decides not to continue further testing. Is this a good decision?
   - A. Yes, because if the injured nurse feels okay, he is saving money for the organization, avoiding the inconvenience of follow-up and the stress of waiting for test results.
   - B. Yes, if he was exposed to HIV he would have contracted it within hours of exposure.
   - C. No, it is critical to continue with recommended follow-up because laboratory or other evidence of infection may not be detectable for weeks or months following the injury.
Answer the following questions based on this scenario:

7. Based on the presenting description of Emily, what do you feel is happening?
   A. She is exhibiting signs and symptoms of fatigue and compassion fatigue.
   B. She is having difficulty adjusting to her empty nest.
   C. She is exhibiting signs and symptoms of clinical depression.

8. After recognizing her own issues with fatigue and compassion fatigue, Emily asks you, her coworker, “What do you think we can do in our department to help relieve fatigue or other psychosocial issues?” What is the most useful answer to Emily’s concerns?
   A. Eliminate overtime and only allow staff to pick up day shifts.
   B. Work with management to implement a designated break person on each shift to ensure every staff member working is able to take a break.
   C. Issue a survey targeting individuals exhibiting signs and symptoms of fatigue or other psychosocial issues and recommend they seek professional assistance.

9. Imagine you are Emily. You recognize you are having signs of fatigue and feel an increased lack of empathy toward your patients, families, and coworkers. What are some personal things you can do to overcome fatigue and prevent compassion fatigue?
   A. Speak with your manager about changing your schedule to eliminate 12-hour shifts and dedicate time in your life specific to personal well-being.
   B. Start a nursing blog and use this as a way to vent about annoying coworkers and complain about patients and their families.
   C. Recognize that this is a work-related injury and try to transfer to another department like a mother/baby unit.
Carmen is a nurse new to the ED and you needed help moving a patient up in bed. As you popped your head out of the room, you noticed Carmen walking by. You asked Carmen, “Hey, can you help me with a boost?” Carmen is eager to help, enters the room and replies, “Should I go get more help?” The patient weighs approximately 280 pounds but you know that other coworkers are busy. You reply to Carmen, “Nah, we can do it.” As you and Carmen stand on each side of the bed, lower the rails, tilt the bed backwards to get gravity to help, and tell the patient to “give yourself a big hug,” you and Carmen pull the patient back up in bed. Immediately, Carmen winces and reaches for her back. As both you and Carmen step out of the room, you ask Carmen, “Are you okay?” Carmen replies, “No, I think I pulled my back.” Now, unable to work, Carmen is evaluated, sent home, and instructed to follow up with employee health. As a result of the injury, Carmen is off work for six weeks, requires physical therapy, and when she returned to work, she had to restart her new-hire orientation.

Answer the following questions based on this scenario:

10. Why are mechanical lifting aids needed for safe patient handling?
   A. Nurses do not have sufficient training using proper body mechanics.
   B. Manual lifting techniques alone are not sufficient to protect nurses from injury.
   C. Nursing staff levels have declined in many institutions in recent years.

11. Imagine you were Carmen and you were asked to help perform a lift you felt was unsafe. What would have been the best response?
   A. “I’m sort of busy right now, hit the call light and wait for someone to come help you.”
   B. “Tell me how I can help you move the patient.”
   C. “We should refer to the safe patient handling algorithm and see what the best way to move the patient is.”

12. To prevent future occurrences, you have joined the workplace injury prevention committee. What are some suggestions for change you can make to avoid injuries like Carmen’s?
   A. Recommend the committee throw a pizza party for Carmen’s return.
   B. Suggest the department commit to 100% reporting of all workplace injuries.
   C. Propose that all safe patient handling devices be relocated to a central place and made easily accessible for staff.

13. Slips, trips, and falls are:
   A. Preventable, costly, and one of the leading causes of workplace injuries.
   B. Not very common among healthcare workers.
   C. Preventable, costly, and a major concern only among older nurses.

14. Which of the following is a poor example of proper workplace safety?
   A. Providing warning signs for wet floors.
   B. Turn off hallway lights during night shift to allow patients to sleep better.
   C. Use of floor plugs for equipment to avoid using extension cords.

15. What action can you personally take to minimize your chance of slipping, tripping, and falling in the emergency department?
   A. Instruct workers to walk slower and use a wheelchair to move bulky loads.
   B. Start a journal club focusing on traumatic brain injuries as a result of falling.
   C. Use waterproof or grip footwear to decrease slip, trip, and fall hazards.

16. Every slip, trip, and fall should be reported whether or not injuries were sustained.
   A. True
   B. False
Storyboard Answer Key

1. **The correct answer is A.**
   **Explanation:** Since Mrs. Smith is partially able to assist herself, encourage her to assist using a positioning aid or cue. This not only promotes independence but also provides physical exercise.

2. **The correct answer is A, True.**
   **Explanation:** Since Mrs. Smith weighs 250 pounds, she will need two to four staff members present to assist, along with the smooth mover, crank lift, or ceiling lift.

3. **The correct answer is C.**
   **Explanation:** Given her recent visit to the ED for frequent falls, Mrs. Smith does require some assistance. Although she is independent, she is not accustomed to using a walker and it might cause an increased risk for falling. Insisting Mrs. Smith use a bedpan to prevent risk for falls eliminates independence and can contribute to tissue breakdown.

4. **The correct answer is B.**
   **Explanation:** It is important to immediately remove gloves and wash hands vigorously with soap and water. Completion of an incident report needs to occur immediately as well as reporting to a supervisor. Following institutional policies is the safest route to take. All workplace injuries should be reported and evaluated; by not receiving proper evaluation and treatment, the nurse is placing himself at further risk of injury. When needlesticks occur, post-exposure prophylaxis can help prevent transmission of bloodborne pathogens. It is also important to have baseline and follow-up testing. This nurse’s situation is particularly concerning because the source patient is unknown, so a different protocol of testing is needed.

5. **The correct answer is B, False.**
   According to the Centers for Disease Control and Prevention’s “Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV and HIV and Recommendations for Post-Exposure Prophylaxis (PEP),” recommendations state that the interval within which PEP should be initiated for optimal efficacy is not known. The interval after which no benefit is gained from PEP is undefined. PEP should be initiated as soon as possible after the injury, but can have benefit depending on the situation. Each incident needs to be evaluated individually as soon as possible.

6. **The correct answer is C.**
   According to the Centers for Disease Control and Prevention’s “Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV and HIV and Recommendations for Post-Exposure Prophylaxis (PEP),” recommended follow-up testing can be recommended for six months or more. It is important to comply with follow-up testing to determine if infection with bloodborne pathogens occurred due to the injury and obtain prompt treatment for any infection. Failure to follow up, even if feeling well, can cause delays in recognition of occupationally acquired infection and subsequent treatment. It is important to comply with follow-up.

7. **The correct answer is A.**
   Emily is exhibiting signs and symptoms of fatigue and compassion fatigue. She is having headaches, muscle tension, sleep disturbances, mood swings, irritability, and a reduced ability to feel empathy toward patients, families, and coworkers. While she might be having difficulties adjusting to the night shift or preparing for her children to leave home, the important factor is that Emily is demonstrating fatigue.

8. **The correct answer is B.**
   Working with management and expressing concerns regarding fatigue, compassion fatigue, and other psychosocial issues is the first step in developing a preventative strategy. One of the issues Emily was experiencing was the inability to take a break. Implementing a designated break person to ensure everyone working has a relief is a small step but a very feasible change. Eliminating overtime may not be easy given that this department is currently experiencing a shortage of nurses, and only allowing staff to pick up day shifts will still leave evening and night shifts unstaffed. Also, this would not necessarily assist a majority of the staff with combating fatigue or other psychosocial issues. Lastly, while a survey would be eye-opening for staff and help in recognizing fatigue or other psychosocial issues, recommending that staff seek professional assistance is not making a difference in the department.
9. The correct answer is A.

Long hours and extended shifts can be grueling. Research has shown that working longer shifts can contribute to fatigue and even nurse burnout. Recognizing that extended hours might be contributing to increased fatigue can be discussed with your manager and changes to your schedule can easily be made. Another important aspect is to dedicate time in your personal life for well-being. This may include massages, meditation, fitness, reading, or any other hobby that assists in relieving stress. Starting a nurse blog and venting about coworkers or even patients can cause many issues in the workplace as well as issues with patient privacy, adding more stress. While it is important to recognize that this is a work-related injury, transferring to another department like a mother/baby unit is not an answer since every unit has its own stressors.

10. The correct answer is B.

Manual lifting techniques and ergonomically correct applications alone are not sufficient to protect nurses and other healthcare workers from injuries. Nurses are given training for using proper body mechanics but again, these techniques alone will not prevent injuries. Although staffing levels nationally have fluctuated and do cause some shortages, staffing levels should not be a reason to implement safe patient handling.

11. The correct answer is C.

Being placed in a situation where you feel uncomfortable for yourself and the patient is alarming, but there are tools and resources to assist in making safe decisions. Referring to your institution’s policies, protocols, or evidence-based guidelines like safe patient handling algorithms will assist in making appropriate and safe decisions. Making an excuse and not helping your coworker demonstrates poor teamwork and agreeing to help with instructions still places you and your coworker at risk for injuries.

12. The correct answer is C.

Proposing all safe patient handling devices available in the department be relocated to a central place and made easily accessible for staff increases the likelihood that staff will use these devices. Having safety equipment centrally located where staff knows where to look eliminates running around trying to track down devices and saves both time and energy, further increasing the likelihood of their use. Recommending the committee throw a pizza party celebrating Carmen’s return does not address workplace injury issues. Committing to 100% reporting is an excellent idea but again does not directly prevent future occurrences of injury.

13. The correct answer is A.

Slips, trips, and falls are preventable, costly, and are one of the leading causes of workplace injuries among healthcare workers. While falls among older nurses are a major concern, healthcare workers of any age are affected by the risk of slips, trips, and falls.

14. The correct answer is B.

Turning off hallway lights during the night shift to allow patients to sleep better might seem like a considerate gesture for patients; however, it presents a risk to staff, visitors, and patients as well. Poor lighting is a top risk for slips, trips, and falls. Providing warning signs for wet floors and using floor plugs for equipment in lieu of extension cords are good practices to prevent slips, trips, and falls.

15. The correct answer is C.

Using appropriate footwear like waterproof shoes or shoes with grips helps to decrease the risk of slips, trips, and falls. Instructing others to walk slower may be helpful but it is not a personal action to take to minimize individual chances of slipping, tripping, or falling. Also, using wheelchairs to move bulky loads is not recommended. While starting a journal club is an excellent idea, it is not a personal action that will prevent slips, trips, and falls.

16. The correct answer is A, True.

Every slip, trip, and fall should be reported whether or not injuries were sustained. Even near misses should be reported. The goal to achieve a culture of safety includes 100% reporting. Significant data can be obtained from understanding the who, what, when, where, and how of occurrences.
Action item A documented task or activity that requires attention and can be handled by a single individual. The individual assigned to an action item is then responsible for completing the task and reporting both progress and completion back to the team. Once completed, the action item is removed from the task list.

Action plan A strategy that defines a starting point and goal for implementing change. Action plans break down goals into smaller, specific objectives called action items. Action plans also divide objectives into smaller tasks called action steps and enable assignment of each action step to a specific team member, ultimately achieving established goals and outcomes through completion of all steps and objectives.

Action step Detailed efforts that must be made in order to reach a goal or objective. Action steps are comprehensive, specific, and should clarify what will occur, how it will occur, who will perform these actions, when will the action be performed, and what resources are needed to perform the action. Collectively, action steps lead to the team’s overall action plan.

Barrier An obstacle that prevents progress, communication, or advancement.

Champion See “Practice champion.”

Compassion fatigue A combination of emotional, physical, and spiritual depletion or exhaustion that may lead to an increase in the number of sick days, difficulty with problem solving, isolation or withdrawal, or behavioral outbursts. These signs can signal burnout or post-traumatic stress disorder, which can manifest into physical symptoms including tachycardia, increased respiratory rate, or elevated blood pressure.

Comprehensive Unit-based Safety Program (CUSP) A program that includes training tools to make care safer by improving the foundation of how physicians, nurses, and other clinical team members work together. It addresses safety issues by combining clinical best practices.

Cultural competence An understanding and ability to effectively interact appropriately with individuals of different backgrounds including race/ethnicity, religion, sex, culture, socioeconomic status, geographic location, and personal preferences. To become culturally competent, individuals must be aware of their own culture, have familiarity with other cultural practices, and exhibit skills to effectively communicate with various cultures.

Culture of safety A culture of safety is described by the American Nurses Association as a working environment that embodies principal standards and behaviors as a result of a shared, uniform, and sustained commitment by multidisciplinary staff to safety. The culture places safety over opposing goals and emphasizes a fair and nonpunitive culture.

Dissemination The systematic process of broadcasting results of a project and making the results available to the stakeholders and target audiences. It is an essential element for evaluation and critical for the success of the project, particularly for sustainability.

ED Manager Injury Assessment A survey audit tool that uses evaluative metrics to better understand the current work environment with intention to identify site-specific goals and prioritize issues in the ED. Features of this tool include an audit and review of your ED’s work environment, administrative policies, procedures, and staff preparation. It assists in focusing practices and analyzing the elements that can help achieve each metric and monitor progress over time.

ED Staff Injury Survey A survey tool that collects information regarding staff’s perception about workplace injuries. This tool consists of a comprehensive set of questions related to injury occurrences, staff perceptions of safety, training, and readiness, and staff beliefs regarding the support they receive in promoting a culture of workplace safety. Also serves as an exercise for staff to articulate their feelings about the safety of their workplace. The survey assesses the culture and attitudes of staff regarding work-related injuries, engages dialogue about possibilities for improvement, and aids in identifying staff readiness for change.
EDWIP Model A framework for the ED Workplace Injury Prevention (EDWIP) project that creates a culture of safety using four fundamental components: safety programs, policies, and training; access to safety equipment and controls; optimal staffing levels; and administrative support — resulting in a culture of workplace safety.

Environmental scan A systematic organizational survey that assists in gathering relevant evidence of the internal and external surroundings, including identifying risks, threats, and priority initiatives, to help recognize organizational strengths, weaknesses, opportunities and data, which may aid in implementing changes. The examination of the organization involves several stages to detect potential threats and opportunities for future plans.

Epidemiologic Triad A classical model showing disease causation, also known as the epidemiologic triangle. The triad consists of a host, an environment, and an agent. Also included are vectors, which are organisms that transmit infection. The model assists in identifying factors that may be associated with increased risk for disease but can also be applied to injuries and health behaviors.

Fatigue A state of tiredness, exhaustion, lethargy, or listlessness, which is sometimes described as a physical and/or mental state of being weak. It is possible to be physically and/or mentally fatigued. Physically fatigued can mean that an individual may not resume functioning at one’s normal levels of physical ability. Mental fatigue can refer to an individual’s state of mind, feeling sleepy, and unable to concentrate properly. Signs and symptoms may vary.

Five E’s of Prevention A commonly used approach for injury prevention that consists of five areas of prevention: education/behavior, enactment or enforcement, engineering, economic, and environment. Originally, there were three E’s (education, enforcement, and engineering) that were first introduced by President Harry S. Truman in 1947 at a conference on fire prevention. However, other areas have included economics and environment, and some versions have even added emergency response.

Haddon Matrix Designed by William Haddon in 1970, the Haddon Matrix is a two-dimensional framework used commonly in injury prevention, which includes epidemiological elements (host, agent/vector, and environment) and a second dimension divided into pre-event, event, and post-event. The conceptualized framework allows for analysis and recognition of identifiable causes and points of intervention that can help to reduce injury incidence.

Hanlon Method A well-respected technique was developed by J.J. Hanlon for objectively prioritizing health problems, taking into consideration explicitly defined criteria and feasibility factors. This complex method is beneficial when the anticipated outcome is an objective list of health priorities founded on baseline data and numerical values.

Hospital helipad A designated landing area or heliport restricted to serving helicopters involved in air ambulance or any other hospital-related purposes.

Literature review A process of evaluating scholarly and current information related to your topic of interest. The review includes gaining a general understanding of the topic and creating a summary of each article in an effort to more deeply understand the topic of interest. The process consists of reading, interpreting, analyzing, and summarizing the information. Literature reviews can be compiled into a chart or report for more organization and preparation for presentation.

Logic Model A tool used as a framework for change, typically by evaluators of programs or managers, to assess effectiveness of a project. Logic models have been used as a graphical depiction of relationships between the intricacies of program construction and development. There are various methods in which a logic model can be shown, but the essence of the model is based upon causal relationships (if this, then that). While logic models are most often utilized during the evaluation of a project, they have also proven to be useful during the planning and implementation phase of a project or program as well.

Metric A standardized measurement used for comparison that can be compared to national benchmarks or even an organization’s criteria.

Moral distress Defined in 1984 by Andrew Jameton, moral distress is a phenomenon in which an individual distinguishes the right and correct action to take but is conflicted and limited from taking the correct action. Typically, there is some sort of barrier that prevents the individual from taking the appropriate action (i.e., not using safe patient handling techniques or equipment due to lack of staffing).

Needlestick A penetrating stab wound caused by a needle.
Personal protective equipment (PPE) Refers to protective clothing and outerwear such as helmets, goggles, or other garments that are designed to protect the individual’s body from injury. Examples are gloves, gowns, masks, and protective eyewear.

PICOT PICOT is an acronym to assist in formulating a clinical question and guiding research for evidence. P = patient population, I = intervention or issue of interest, C = comparison intervention or issue of interest, O = outcome, and T = time frame.

Pilot program/study A small-scale preliminary test or study to evaluate feasibility, effects, and costs. Pilot testing, programs, or studies give insight and allow for adjustments to be made before initiating a larger-scale change.

Practice champion An individual chosen or who volunteers to be a coach, mentor, advocate, or leader of a particular issue/change. This individual should be well informed and versed in clinical practice, be a strong communicator, be culturally sensitive, and have excellent interpersonal skills. This individual should have the ability to manage change, provide constructive feedback, supervise others, and understand the goals and objectives of the overall team. Practice champions are role models for change and can work with multidisciplinary teams.

Program evaluation A systematic assessment of the quality, value, and significance of a project, plan, or program. The review consists of scrutinizing the importance, impact, cost-effectiveness, and overall quality of the program using various factors and measuring tools.

Protective factors Characteristics or conditions of an individual’s environment (strengths, coping mechanisms, resources, skills, or support systems) that enable the individual/population to mitigate and manage stressful events and in some cases, remove risks.

Readiness assessment An evaluation that measures how well prepared an institution is for a significant change. This evaluation gauges leadership styles, the culture of the environment, staff performance, department processes, and available resources. Conducting this review assists in identifying quality-improvement goals as well as organizational needs.

Root cause analysis A systematic and organized process for identifying the rudimentary or causative causal factors that trigger discrepancies in performance associated with adverse events or near misses/close calls.

Sharps Any object or device that can penetrate the skin. Examples of sharps are needles, scalpels, glass, broken tubes, wires, or any other object than can break skin.

Sharps injury An exposure or occurrence resulting from a sharp object/device penetrating and breaking skin.

Strategy statement A short, written declaration of your team’s plan that briefly describes goals and objectives, the scope of the team, and advantages. It assists in maintaining team focus and ensures a clear purpose with direction.

SWOT analysis Created by Albert Humphrey, the SWOT analysis, also known as a SWOT matrix, is a method used to evaluate strengths, weaknesses, opportunities, and threats of a program or project. Goals and objectives are easily defined after completing a SWOT analysis and can be used to explore solutions to an issue, identify barriers, assist in making decisions regarding direction of a project, expose program limitations, organize brainstorming, and enhance project or program credibility.

Sustainability Derived from the Latin term to “endure” or “support,” there are a variety of definitions and descriptions of sustainability. Generally, the term refers to the capacity to maintain program services or interventions even after changes in staffing, management, or organizational modifications. While certain aspects of the program, project, or initiatives may change, the overall dedication to the cause remains constant. It is the continued commitment and momentum of a particular cause.

Target population A group or groups of individuals that are identified as the focus population segment who can benefit from a specific program, policy, or behavior modification. The more information known about the target population, the better one can reach the audience, making the development and delivery of relevant information easier.

TeamSTEPPS An evidence-based teamwork system designed for healthcare professionals to improve patient safety within an organization. The teamwork system aims to optimize patient outcomes by improving communication and teamwork skills among healthcare professionals. It includes a wide-ranging set of ready-to-use materials and a training curriculum to successfully incorporate teamwork principles into any healthcare system.
Glossary References


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