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## Preventing Workplace Injuries Commonly Sustained by Hotel Guestroom Attendants

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Preventing Workplace Injuries  
Commonly Sustained by Hotel Guestroom Attendants  
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## **Part One**

### **Introduction**

Hotels are generally organized into various departments. These provide specialized services to guests. Almost every hotel in the world has (in one form or another) a housekeeping department. Guestroom attendants (GRAs) are a primary component of any housekeeping department. GRAs (also known as maids, housekeepers, or room/suite service attendants) are employed by hotels to clean guestrooms, change bed linens, restock supplies, and provide turn down services when requested (see Appendix A). Those employed as GRAs frequently suffer injuries at work that can be costly to employers. This paper reviews some of the more common causes of GRA workplace injuries and explores methods of injury prevention that can be used effectively by hotels.

### **Purpose**

The purpose of this paper is to develop recommendations to present to hotel executives that effectively prevent workplace injuries among GRA staff.

### **Problem statement.**

Compared to other service industry employees, hotel workers are 51% more likely to sustain serious, disabling injuries that result in time away from work. Furthermore, 77% of GRAs report that pain regularly interferes with their ability to perform job activities. While most musculoskeletal injuries are preventable, an employer's tendency to focus on the bottom line results in little or no investment in employee health (Liladrie, 2010).

Workplace injuries can be costly for employers and the benefits of effective methods of prevention can outweigh the investment. Various techniques for preventing

the types of injuries that GRAs frequently sustain have been studied and implemented. Many hotels are not using the most effective techniques available and some are not currently using any injury prevention methods at all. Review of the extant literature is necessary to determine which techniques are most effective for preventing costly injuries to GRAs.

### **Justification**

The direct cost (primarily workers' compensation insurance premiums to cover medical treatment, lost time benefits, permanency awards, legal fees and expenses) of workplace injuries is estimated at 14-16% of payroll. The indirect cost (lost productivity, employee replacement costs, poor morale, workers functioning in a lesser capacity, and record-keeping/administrative fees) associated with workplace injuries is estimated at 42-48% of payroll (Gonser & Weiss, 2008).

Job strain has been shown to lead to performance problems, moderate-high levels of psychological stress can decrease workplace success, and excessive levels of stress effect the productivity of the hotel workforce (Faulkner & Patiar, 1997; Gill, Flaschner, & Shachar, 2006; Hilton & Whiteford, 2010; O'Neill & Davis, 2011). The mental and physical consequences of stress can negatively impact an employee's commitment to the business (Gill, et al., 2006). Kim (2008) reports that stressed hospitality industry employees are likely to become exhausted and cynical and thereby provide poor service quality to guests.

Both directly and indirectly work related injuries can be extremely costly to employers. While always important, cost reduction is needed more today than perhaps at any other recent time due to the on-going recession. Unfortunately, many hotel

executives see only the costs involved with implementing work injury prevention programs and do not fully understand the benefits of a successful program. Therefore, development of recommendations for hotels that employ GRAs is very timely and useful in both preventing costs and reducing injuries.

### **Constraints**

Research on this subject is limited by the availability of existing studies and reporting of previous authors. Available literature is finite and case studies are separated by time and geography. The recommendations in the conclusion section of this paper are based on assumptions drawn from information gained through an extensive review of available articles on the subject.

The scope of this paper is specific to the hotel guestroom attendant. It would be possible to utilize the recommendations in Part 3 to assist with preventing injuries to employees working in other positions or in different industries, however additional research would be necessary to determine if these same methods would be equally as effective in other situations and if in fact there would be recommendations better suited in such instances.

### **Conclusion**

This paper examines causes and methods of prevention of musculoskeletal and stress related on-the-job injuries commonly incurred by GRAs. It concludes with recommendations to present to hotel executives. These recommendations have been developed based on an in-depth review of previously studied methods of preventing some of the more common injuries sustained by GRAs in the work environment. The intent is



for hotels to execute a program that will result in injury prevention savings that outweigh implementation costs, to achieve an overall positive effect on the bottom line.

## **Part Two**

### **Literature Review**

#### **Introduction**

A review of the extant literature is necessary to determine which techniques are most effective for preventing costly injuries to guestroom attendants (GRAs). This review is divided into three sections. The first section provides a definition of the GRA in terms of her demographics (primarily female), job functions, and the scope of her employment within the hierarchy of a hotel. Knowledge of who the GRA is and what she is required to do on-the-job is a crucial element to understand when determining how to effectively prevent a workplace injury.

The second section of the literature review explores workplace injuries and their causes. There are potentially hundreds of ways an employee can injure herself at work. For the purposes of this paper the scope is narrowed to injuries and risks most relevant to the hotel GRA. Upon reviewing the definition of the GRA, it is concluded that musculoskeletal injuries and stress related conditions are two of the most common types of injuries to which she is susceptible. Knowing the cause of an injury is necessary before determining how it can best be prevented. Causes and consequences of musculoskeletal and stress related injuries are reviewed below.

The third section of the literature review examines workplace injury prevention. The reasons (primarily fiscal and from the perspective of the employer/hotel) for preventing workplace injuries are reviewed, along with methods of injury prevention, and ways to measure the success or failure of such initiatives. The information presented in the literature review section is utilized in Part 3 of this paper to develop recommendations

to present to hotel executives regarding how best to prevent workplace injuries among GRAs.

### **Defining the GRA**

Hotels are generally organized into various departments that provide specialized services to guests. Almost every hotel in the world has some form of a housekeeping department. GRAs are often referred to by other names both colloquially and professionally. Common alternatives to the title GRA are maid, housekeeper, and room/suite service attendant. GRAs are employed by hotels as a part of the housekeeping department to clean guestrooms, change bed linens, restock supplies, and provide turn down services when requested (see Appendix A). The following sections of the literature review expand the definition of the job title and the employee's role within the hotel so that information regarding who she is and what she does can be used to determine how she is most often subjected to injurious situations at work.

#### **GRA demographics.**

Faulkner and Patiar (1997) surveyed housekeeping operational staff in four hotels. They found that 93% of GRAs are female (which is why the feminine form is used throughout this paper), 50% are over the age of 36, and 51% are married. Also significant was their finding that only 28% of GRAs are educated beyond a high school level. According to information published by Payscale.com in June, 2011, a person applying for the position of hotel room attendant in Las Vegas, Nevada and having at least five years experience could expect to earn \$10.25 per hour on average (the lower end of the pay scale is \$8.26 and the higher \$14.81). To put this pay rate into perspective, according to the United States Department of Labor, the minimum hourly

wage in Nevada as of June, 2011 was \$8.25 if no health insurance benefits were provided by the employer, and \$7.25 if the employee received health insurance benefits.

**GRA job duties.**

Presented in Appendix A of this paper is the job description for a GRA utilized by a large Las Vegas hotel resort in 2001. The basic job instruction given is to clean hotel guestrooms and baths working an 8 hour shift 5 days per week. The essential functions of the job include pushing a 100 pound linen cart 300 yards during a shift while walking. A GRA must also be able to lift mattresses and vacuum cleaners weighing 20 pounds and linen bundles weighing 5.5 pounds. They may be required to reach up to 6 feet high to load linen carts and dust furniture. GRAs must be able to kneel and stretch to sanitize and scrub bathrooms, and walk 2/3 of a mile including up to 30 stairway steps during the course of the day. She must also be able to speak and understand some English in order to announce “housekeeping” upon entering a room as well as be able to read daily room assignment reports, complete sign-in/out sheets, and phone in to a computer system to code in and code out of each room.

Faulkner and Patiar (1997) were told (in written survey form) by GRAs in four star hotels that their work is routine and repetitive including the activities of pushing heavy trolleys, moving heavy furniture, bending to make different sized beds, cleaning bathrooms, vacuuming, and dusting. Furthermore, it was reported that a GRA on average services 12-18 rooms during the course of a 7.5 hour shift.

Powell and Watson (2006) studied GRAs in 12 three and four star hotels using questionnaires, interviews and observation. Their findings confirmed those of Faulkner and Patiar (1997) in that GRAs are exposed to heavy lifting, pushing carts, moving

furniture, and repetitive bending. They further noted the exposure to hazardous cleaning products. The employees who participated in the study described their work as hard, tiring, low paid, repetitive, heavy, detailed, fussy, not interesting, lonely, servile, involving dealing with awkward guests, and dirty work.

A study of hotel GRAs by Liladrie (2010) mirrored the findings of Faulkner and Patiar (1997) and Powell and Watson (2006) in that GRA work is reportedly physically demanding and involves forceful movements, awkward body positions, lifting heavy mattresses, tucking in sheets, cleaning tiles, and vacuuming. Liladrie (2010) found that a GRA changes body position every 3 seconds while cleaning a room and that the average cleaning time for each room is 25 minutes, resulting in 8000 posture changes per shift.

#### **Recent changes to the GRA job.**

Faulkner and Patiar (1997) reported that hotels were modernizing their methods of quality control, and this resulted in requirements for GRAs to perform minor clerical tasks. More recently, Liladrie (2010) found that a decline in the tourism industry due to worldwide economic hardships resulted in a greater focus on the bottom line for hotel managers which in turn caused an increase in workloads and more stressful and dangerous work conditions for GRAs.

Even absent an increase in quota for GRAs, their workloads are still growing because hotels are offering increasing amounts of amenities to guests. Consequently, usage levels are elevated creating necessity for more clean-up and restocking by a GRA (“Health study,” 2000). Liladrie (2010) confirmed this finding and reported that as hotels offer more luxury services, the work of the GRA becomes more physically demanding and burdensome.

### **Scope of employment of the GRA.**

According to the findings of Faulkner and Patiar (1997) the GRA is a low level employee in the hierarchy of a hotel. GRAs have no involvement in any decision making process. They also have minimal contact with senior management thus affording them little opportunity for employment growth. However, Powell and Watson (2006) later reported that many hotels were beginning to empower GRAs by requiring them to self-check their rooms and work on a quota system rather than under the direct supervision of management.

### **Workplace Injuries and Causes**

According to the studies discussed above, the job of the GRA is physically demanding (involving heavy lifting and repetitive pulling and reaching) and more recently increasingly stressful. For this reason, it would appear likely that a GRA would be exposed to musculoskeletal injuries and to stress related injuries and conditions. A musculoskeletal injury can be any injury (whether acute or repetitive in nature) sustained to the muscular or skeletal anatomy. Stress related conditions are those brought upon by stress but can manifest themselves both physically and mentally/emotionally.

#### **Musculoskeletal injuries.**

The literature reviewed below discusses acute and repetitive injuries sustained to the muscular and/or skeletal systems of the human body. Rates of occurrence and causes of injury are examined.

#### ***Occurrence of musculoskeletal injuries.***

Liladrie (2010) reports that hotel workers are 48% more likely than any other service injury employees to become injured while working. Furthermore, 91% of GRAs

reported that they are in physical pain while working and 86% of that sample indicated that they did not have such pain until after beginning their careers as GRAs.

Also according to Liladrie (2010), increasing GRA workloads are strongly correlated with musculoskeletal conditions such as low back pain, tendonitis, shoulder injuries, bursitis of the knee, carpal tunnel syndrome, and persistent hand, neck and wrist pain. Cheng and Chan (2009) studied 205 workers in various manual labor positions and found that more than 24% of workplace musculoskeletal injuries are back injuries caused by overexertion.

### ***Causes of musculoskeletal injuries.***

Faulkner and Patiar (1997) associated tiring activities with spine and joint injuries. Liladrie (2010) reported that higher physical demands for GRAs have resulted in the majority of workers experiencing more pains and injuries.

After a 2 year long study of 240 construction apprentices it was concluded that shorter stature, prior history of neck pain, and being subjected to extreme environmental conditions on-the-job are all risk factors that result in higher instances of shoulder injuries (Borstad, Buetow, Deppe, Kyllonen, Liekhus, Cieminski, & Ludewig, 2009). McHugh and Cosgrave (2010) reviewed literature regarding how pre-stretching reduces sports injuries and found that risk factors for muscle strain include increasing age, history of previous muscle strain, and contralateral (opposite side) weakness.

### **Workplace stress.**

Stress in the workplace is realized often by GRAs and is a very real cause of physical and mental injury. The causes of stress in the GRA environment are reviewed below along with the injurious consequences related to such stress.

### *Causes of workplace stress.*

Faulkner and Patiar (1997) reported that GRAs have no direct say in decision making while on the job. They further noted that GRAs who exhibit initiative or offer suggestion for individualized work methods are often victimized resulting in stressful situations. The authors also reported that increasingly GRAs have been asked to perform minor clerical functions. They discussed that GRAs often have no prior clerical experience or skills and therefore even a limited amount of this type of work can result in high levels of stress for the employees.

Chiang, Birtch, and Kwan (2010) performed a study of food service employees working in a four star hotel. They found that high job demands, low job control and poor work-life balance resulted in high levels of stress.

Powell and Watson (2006) found that many hotels are empowering GRAs by requiring them to self-check their rooms and to work on a quota system rather than under the direct supervision of management. It was reported that this type of empowerment results in pressurized situations that are sustained for the duration of a GRA's shift and require her to maintain patience, pace, vigor and stamina. Findings of the study were that 80% of empowered GRAs reported very pressurized work demands.

O'Neill and Davis (2011) interviewed 164 employees at 65 different hotels for 8 days each. They found that the two most common stressors in the hotel industry were interpersonal tensions and work overloads. The hotel employees interviewed reported that these stressors were present 40-60% of work days, as compared to 25-44% reported by U.S. workers across all industries.



### ***Consequences of stress.***

Between 50-75% of illnesses have been determined to be stress related (“The stressful price,” 1978). Hilton and Whiteford (2010) surveyed employees working for 58 large employers and found that moderate-high physical stress increased the rate of workplace accidents. Job strain can result not only in poor mental health but also in physical health problems (O’Neill & Davis, 2011). According to Gill, Flaschner, and Shachar (2006), job stress and employee burnout can lead to headaches, stomach problems, heart attacks, job dissatisfaction, anxiety and depression.

More specific to the hotel industry, O’Neill and Davis (2011) also reported that interpersonal tensions at work have been linked to negative physical health symptoms. It has also been noted that excessive stress can directly and adversely affect the health of housekeeping staff (Faulkner & Patiar, 1997). GRAs are less healthy than the general public due in part to performing heavy physical work but also because that work is performed under stressful conditions (“Health study, 2000). Krone, Tabacchi, and Farber (1989) have correlated stress in the hospitality industry with headaches, fatigue, indigestion, ulcers, hypertension, heart attacks, and strokes.

### **Workplace Injury Prevention**

Injuries sustained by GRAs while at work can be costly to both employees and employers. Measures should be taken to prevent such occurrences and literature regarding several methods of doing so is reviewed below.

#### **Reasons to prevent workplace injuries and stress.**

Most musculoskeletal injuries are preventable, but the unfortunate reality of today’s economic climate is that management’s attention to bottom line performance

diverts investment away from employee health and injury prevention. This is particularly problematic in the hotel industry because, compared to other industries, hospitality employees are 51% more likely to sustain serious and disabling injuries that result in time spent away from work. Furthermore, 77% of GRAs report that pain interferes with their job activities (Liladrie, 2010).

Gonser and Weiss (2008) reported that the direct cost of workplace injuries can amount to 14-16% of payroll expense. Direct costs include primarily workers' compensation insurance premiums to cover medical treatment, lost time benefits, permanency awards, legal fees, and administrative expenses. Also reported by Gonser and Weiss, indirect costs of workplace injuries can amount to 42-48% of payroll expense. Indirect costs include lost worker productivity, the cost of replacing an injured employee either permanently or temporarily, poor morale among injured and non-injured employees, record-keeping and administrative costs resulting from handling an injury, and "presenteeism" which occurs when a worker is present at the job but is functioning in a lesser capacity due to injury or illness.

O'Neill and Davis (2011) found that job strain can lead to performance problems. Similarly, Faulkner and Patiar (1997) reported that excessive levels of stress affected the productivity of hotel workers. Hilton and Whiteford (2010) also found that moderate-high psychological stress decreased workplace success. Gill et al. (2006) reported that the health issues associated with job stress and burnout can negatively impact employee performance, productivity, and commitment to the organization. As a final noted consequence of workplace stress, Kim (2008) reported that stressed hospitality

employees can become exhausted and cynical. Both of these states of mind can lead to poor service delivery and employee turnover.

### **Methods of workplace injury prevention.**

While some employers take no measures at all to prevent workplace injuries, most large employers have some type of program or programs in place. Literature relating to existing and potential methods of workplace injury prevention is reviewed and discussed below.

### ***Assessing risk.***

Following their study of construction workers, Borstad et al. (2009) determined that risk for injury can be decreased if risk factors are first identified. Cheng and Chan (2009) utilized functional capacity evaluations (FCEs) to assess the physical work capabilities of individual employees. An FCE is a test that is administered by a medical professional (usually a physical therapist) for the purposes of systematically and objectively determining a subject's physical capabilities. The evaluation normally takes 3-6 hours to complete and requires the subject to perform a series of activities including lifting, pushing, grasping, twisting, and reaching. Several validity control measures (such as pulse monitoring and repetition) are utilized to determine whether the subject is putting forth maximum effort during the course of the examination. These evaluations can cost several hundreds of dollars per employee but can be valuable in objectively determining a person's physical capabilities and limitations (Chen, 2007). Cheng and Chan (2009) also used the FCE experience as an opportunity to observe an employee's lifting posture and techniques so as to suggest corrections on the spot.

A second assessment tool utilized by Cheng and Chan (2009) was a radiological examination of the lumbar spine. Also known as an x-ray, this is an exam performed by a doctor or technician using radiation to create a photographic image of the inside of an area of the human body. These exams are less expensive than FCEs, generally costing \$100 or less per person, and can identify pre-existing pathologies. Although the ability of an x-ray to predict injury is controversial, showing the results to the individual can have a profound effect on that person's self-perception of vulnerability and thus increase their attention to injury prevention directives.

***Promoting exercise.***

Poppel, Koes, Smid, and Bouter (1997) studied three methods of industrial back pain prevention: lumbar supports, education, and exercise. Of the three, exercise was the only method consistently shown to have a positive effect on the instance of back pain in an industrial setting.

Borstad et al. (2009) recommended that employers encourage exercise to optimize the mechanical motions of their employees. McHugh and Cosgrave (2010) found that the instance of muscle strain is reduced by pre-stretching. However, they also noted that 50% of the effect of an 8 minute stretch is lost after 30 minutes.

In 2011 MGM Resorts International initiated a pilot program aimed at preventing injuries and increasing energy levels among housekeeping staff. Each day supervisors lead employees in exercises while offering wellness and ergonomic technique tips. The supervisors describe every exercise and its purpose in detail and help the employees to understand that stretching is meant to be easy and fun.

***Personal wellness.***

According to the findings of Cheng and Chan (2009), workplace health issues (including lifestyle in addition to lifting and handling capabilities) should be addressed at the individual level. They also recommended that programs be relevant and capable of attracting the attention of the participants (employees and managers). The authors suggested that programs include health education, personalized advice, skill development, and use of partnership techniques in the design of the intervention.

***Educating managers.***

To facilitate positive results, employees and management staff alike must be educated on the purpose and implementation of workplace injury prevention programs. It goes without saying that in order for an employee to effectively implement a safety program she must be aware of that program and taught how to execute it. This awareness starts (and unfortunately sometimes dead-ends) with the management staff.

According to Gonser and Weiss (2008), after a company identifies which employee activities are most risky and develops work methods to mitigate these risks, it should then develop or enhance its existing business processes to implement risk mitigation behavior and identify risk on an ongoing basis. Pertinent to this strategy is the education and awareness of the management staff because business processes are only effective if they are carried out consistently.

***Behavior-based injury prevention.***

Ficca (2003) reported that safe and ergonomically correct procedures can effectively prevent workplace injuries, but that a major barrier to these programs is changing the behaviors of the employees. Human behavior develops and is conditioned

over long periods of time and therefore can only be changed over long periods of time. Any behavior shift requires consistent and long-term education precipitated by involvement at every level of an operation. The author recommends clear communication, well-define objectives, appreciation of employee value, engagement, and measurement of outcomes.

***Transformational leadership.***

The role of the supervisor or manager is critical when it comes to preventing injury. The type of leadership style used can greatly effect how employees follow direction (including safety related instruction), and feel emotionally while performing their job duties. Gill et al. (2006) define transformational leadership as “raising subordinate awareness of the importance and value of designated outcomes, getting employees to transcend their own self-interests for the sake of the group or organization, and changing or increasing subordinate needs” (p. 470). The authors implemented pilot studies at two organizations involved in customer service and concluded that transformational leadership reduces job stress which in turn decreases employee burnout. Implementation methods for managers in the pilot study included use of a bulletin board and handouts for communication, periodic performance-review meetings to convey organizational goals, on-the-job training and guidance, encouragement of upward communication, attentiveness to new ideas from the staff, and enhancement of employee motivation.

***Personalized training for employees.***

Gonser and Weiss (2008) recommend the employees be provided with personalized communication regarding risk avoidance and mitigation. Cheng and Chan

(2009) found that teaching coping strategies, ergonomics, and material handling techniques can be effective. The authors also noted that providing job specific education to employees can help to prevent musculoskeletal back injuries. Furthermore, utilizing job specific education programs to enhance risk perception and helping employees develop adequate coping strategies can reduce the health threats raised by manual labor.

### **Measuring workplace injury prevention efforts.**

Gonser and Weiss (2008) reported on effective techniques for measuring workplace injury prevention efforts. They recommend prioritizing efforts based on greatest benefit. In order to do this, management staff should gather, analyze, act-on, and measure data. Management should compare and prioritize risks, and then allocate resources for risk reduction appropriately.

Gonser and Weiss (2008) noted that experts generally focus on severity of injury rather than rate of occurrence. It is therefore practical to gather mass quantities of data through the use of technology to identify tasks with moderate rates of injury but high rates of occurrence. Managers and supervisors can then be provided with information regarding how best to prevent and mitigate common risks. Reports can be created to show the effectiveness of their current efforts. This distribution of information will allow for business processes to be enhanced on a continuous basis in order to quickly identify and reduce risk.

### **Conclusion**

The job of the GRA is physically demanding and more recently increasingly stressful. For this reason, GRAs are frequently exposed to muscle strains from acute or repetitive motions, and to stress on the job. The studies reviewed above have shown that

stress can result in mental as well as physical injury and decreased physical capabilities. There are many negative consequences to musculoskeletal and stress related injuries that can directly affect a hotel's bottom line. Several scholars have studied methods of preventing workplace injury and these approaches can be implemented effectively by hotel executives and management staff today.



## **Part 3**

### **Introduction**

Due to physically demanding work, stress factors, and demographic risk factors, guestroom attendants (GRAs) are susceptible to frequent occurrences of musculoskeletal and stress related injuries on the job. These workplace injuries can be extremely costly to hotel employers. Gonser and Weiss (2008) note that costs manifest themselves both directly (in the form of workers' compensation benefits due), and indirectly (in the form of lost productivity). A hotel can also suffer a lower quality of service delivery if its employees are injured, fear injury, or encounter frequent stressors during the course of their employment (Kim, 2008). Although more difficult to measure than direct costs, lower service quality can have a substantial negative long-term effect on a hotel's financial performance. For these reasons, cost effective measures should be taken to prevent workplace injuries among hotel GRA staff.

### **Recommendations**

What follows is a four step program recommended for presentation to hotel executives for their use in preventing workplace injuries among GRAs. These recommendations have been developed based upon conclusions drawn from the literature review discussed in Part 2 of this paper. The four steps are presented in a logical order, however should be implemented concurrently rather than sequentially, and on a continuous basis.

#### **Step 1: Identify and mitigate individual risk factors.**

Federal regulations prohibit employers from discriminating against employees during the hiring process based on demographics, pre-existing injury, or physical

condition. However, it is perfectly legal for employers to implement post-hire screening programs to evaluate the physical capabilities of their employees.

***Job description.***

Every hotel should have a well defined job description for its GRAs. This job description should describe in explicit terms exactly what activities the job entails. Material handling requirements (such as lifting, pushing, pulling, bending, and reaching) should be presented quantitatively and all-inclusively (see Appendix A for an example).

***Diagnostic testing.***

X-rays of the lumbar spine are an inexpensive and effective way of identifying pre-existing pathologies that expose GRAs to risk on the job (Cheng & Chan, 2009). It is recommended that all hotels send new hires for an x-ray evaluation prior to beginning their first shift.

In their study, Cheng and Chan (2009) utilized functional capacity evaluations (FCEs) to assess the physical work capabilities of individual employees. These exams are administered by medical professionals, take 3-6 hours to complete, and can cost several hundreds of dollars (Chen, 2007). It is not recommended that all employers order full FCEs for every new hire. However, because the use of an FCE has been shown to be very effective, it is recommended that larger hotels hire a part-time in-house physical therapist to administer job specific functional tests prior to an employee commencing her job duties. During the course of the limited FCE, the therapist should record physical limitations as well as observe employee material handling techniques and correct any inappropriate behaviors.

### ***Work restrictions and ergonomics.***

Once the above diagnostic testing results have been reviewed, individual capabilities and limitations can be assessed (either by the in-house physical therapist, or a trained manager/human resources professional in the case of a smaller hotel). These capabilities should then be reviewed against the hotel's GRA job description so that appropriate work restrictions can be put into place. Individuals should not be asked to perform duties (for example lifting over 20 pounds) if such duties are pre-determined to be outside of their functional capabilities. These pre-established work restrictions must be communicated to both the employees and supervisors to follow diligently.

Individual ergonomic assessments should be completed and recommendations implemented. An ergonomic assessment can be performed by a trained professional. This person can be an outside vendor or a manager/human resources professional who has been trained appropriately. Equipment (such as carts and vacuum cleaners) should be modified as necessary to meet individual needs and GRAs should be shown ergonomically correct usage techniques.

### ***Individual counseling.***

Cheng and Chan (2009) found that it is useful to address employee lifestyle issues on a personal level. Human resources professionals or managers should perform post-hire interviews to identify any elements of the individual GRAs lifestyle that may put her at risk for job related stress. If available through the company, individuals with lifestyle issues can be referred to an employee assistance program.

## **Step 2: Data collection and analysis.**

Gonser and Weiss (2008) reported that risk evaluation experts tend to only identify and focus on employee behaviors or tasks that have a high probability of severity, but also a low probability of occurrence. For this reason it is recommended that hotels collect data regarding workplace injuries in order to identify activities that may only result in a moderately severe injury, but have a high probability of occurring. The information collected for each injury should at a minimum include:

- the date and time of the injury;
- the name of the injured employee;
- the location of the injury;
- the activity being performed by the employee at the time of the injury;
- the type of injury sustained (body part and diagnosis);
- and the direct cost incurred by the hotel as a result of the injury.

Most insurance carriers and third party claims administrators already have software available for use by their clients and are willing to provide analysis at little or no cost to hotels as the results are mutually beneficial. If software is not available, data collection can be performed manually by a manager or human resources professional by recording the above information in a spreadsheet.

Data should be collected and analyzed on a continuous basis to identify which locations and activities carry the most risk. Injury prevention efforts can then be prioritized based upon both frequency and severity.

### **Step 3: Program implementation (education and leadership).**

Once risk factors have been identified and prioritized, managers can develop and implement training programs to mitigate injurious exposure. These programs must be communicated to the shift supervisor who can then work directly with the GRAs on implementation.

#### ***Training.***

All new hires as well as existing employees should receive on-going risk avoidance training. Communication should be oral (in the form of meetings and individual counseling) and reinforced in writing (in the form of handouts or a manual). It is recommended that supervisors provide on-the-job training to demonstrate specific risk mitigation behaviors to employees and to show their commitment to the program. Proper ergonomics and material handling techniques should be demonstrated, observed, and corrected as necessary. GRAs should be taught to identify and avoid known risk factors as much as possible during the course of their shifts.

If GRAs are required to perform clerical functions or self-checking procedures, they should be thoroughly trained on these activities and given the opportunity to openly and honestly discuss any concerns or apprehensions they may have with respect to such requirements. Additionally, supervisors should suggest stress coping strategies to promote general employee wellness. According to O'Neill and Davis (2011) the two most common stressors in the hotel industry are interpersonal tensions and work overloads. Supervisors should be trained to control work overload issues in as much as possible by distributing tasks fairly and staffing shifts appropriately. Shift supervisors are in the best position to observe and mitigate interpersonal tensions among employees.

First, it is up to management to ensure that the shift supervisors are not themselves the cause of employee stress. Once this is clear, supervisors should pay close attention to employee interactions and take measures necessary to resolve any issues that arise by disciplining offenders, scheduling GRAs to work with employees they get along with, or referring individuals to the employee assistance program for personal issues (if available).

***Exercise.***

According to studies performed by Borstad, Buetow, Deppe, Kyllonen, Liekhus, Cieminski, and Ludewig (2009) and Poppel, Koes, Smid, and Bouter (1997), exercise and stretching can play a valuable roll in musculoskeletal injury prevention. McHugh and Cosgrave (2010) had the same findings, but further noted that 50% of the effect of an 8 minutes stretch is lost after 30 minutes. Stretching is therefore recommended both before and during the course of the GRA shift.

Supervisors should hold pre-shift stretching sessions, leading employees in appropriate exercises to warm-up the muscles most commonly used by a GRA. Signage containing position diagrams should be posted in employee areas. GRAs should be encouraged to stretch during the course of their shift and should be provided with short breaks at reasonable intervals to complete exercises.

**Step 4: Follow through and monitoring.**

As reported by Ficca (2003), human behavior develops and is conditioned over long periods of time and therefore can only be changed over long periods of time. Any behavior shift requires consistent and long-term education precipitated by involvement at every level of an operation. It is therefore imperative that management staff consistently

follow through with program implementation and monitor to ensure that supervisors and GRAs do the same.

***Measuring results.***

The same software or spreadsheet used to identify risk factors can also be utilized to measure how effective program implementation has been. If a risk factor is identified, and measures are taken to reduce exposure to that risk, there should be less occurrences of injury related to that particular risk going forward. If injuries are not reduced, then methods are either ineffective or not being implemented properly. Management can then take steps to either reinforce appropriate implementation, or redesign procedures more effectively.

All GRAs should be educated as a group, however the database can also identify particular individuals who tend to suffer more injuries than others. Investigation can be completed by supervisors and feedback obtained from the GRAs to determine the underlying causes of their repeat injuries and to provide assistance, training, or counseling at the individual level.

***Reinforcing and rewarding compliance.***

Gill, Flaschner, and Shachar (2006) studied transformational leadership which involves making employees at all levels aware of their importance to the organization as a whole and persuading them to place the needs of the company ahead of their own. It is recommended that management staff educate GRAs on the importance of the hotel's bottom line so that they understand how their active participation in injury prevention can benefit the company. In addition, GRAs should also be made aware and periodically reminded of how injury prevention benefits them personally. Not only will they be

healthier and lead more productive lives if they are injury free, but employees will also see more pay raises, bonuses, benefits, and facility improvements as profits increase.

It is recommended that management staff record the number of GRA injuries sustained over a given period of time (for example quarterly) and chart improvement. These results should be displayed prominently in a common employee area and remarked upon during pre-shift meetings. Although it is not advisable to punish the entire group if injury occurrences rise, positive reinforcement is recommended if the number of injuries decreases. For example, employees can be treated to a pizza party or rewarded with a television in the break room if the entire group performs well.

On the individual level, supervisors should always be monitoring employee behavior and material handling techniques. Employees caught swaying from the proper ergonomic procedures or performing functions outside of their work restrictions should be disciplined. On the contrary, GRAs observed doing something positive (such as taking extra measures to avoid risks, or leading coworkers in a mid-shift stretching session) should be praised and rewarded. Injury prevention compliance should also be discussed at every regularly scheduled performance review.

## **Conclusion**

The above four step recommendation plan has been developed for the usage of hotel executives to implement for the purposes of preventing workplace injuries among GRA staff. These methods have been developed based on a review of the extant literature, but are presented in a yet untested program form. Based on the evaluation of the GRA job duties, along with common types of workplace injury, and studied methods of prevention, it is expected that the recommendations above will be highly effective.



Hotel executives should review and implement this program by hiring/training the necessary staff and purchasing or developing existing software.

## Appendix A

### **JOB DESCRIPTION IN USE BY A LAS VEGAS RESORT/HOTEL**

<b>JOB TITLE:</b>	Guest Room Attendant
<b>DATE COMPLIED:</b>	2001
<b>DEPARTMENT:</b>	Housekeeping
<b>REPORTS TO:</b>	Inspector

#### **JOB SUMMARY**

Cleans hotel guestrooms and baths. Position requires extensive physical exertion to include use of arms and legs, pushing, pulling, lifting, stretching, reaching above one's head, walking and kneeling. Rooms to be cleaned on a daily basis. Speaking must announce "HOUSEKEEPING". Hearing must answer guests questions, must be able to speak and understand some English.

#### **ESSENTIAL FUNCTION/DUTIES**

1. Pushing/pulling/turning a 100lb. linen cart.
2. Changing bed linen while lifting a 20 lb. mattress.
3. Dusting/polishing furniture using household cleaners, reaching 6 feet high.
4. Sanitize and scrub bath tub, sink, toilet, and floor while kneeling/stretching.
5. Lifting a 20 lb. vacuum cleaner and vacuuming guestroom.
6. Loading linen cart which requires reaching 6 feet, and lifting 5.5 lb. linen bundle.
7. Walking 2/3 mile to/from station which may include 30 stairway steps and pushing linen cart 300 yards during shift while walking.
8. Reading daily room assignment reports, sign-in/sign-out sheets, and signing for room keys.
9. Knocking on guestroom door and announcing "housekeeping." Code in upon entering. After cleaning code out. this is done by phone to computer.

#### **INCIDENTAL/ADDITIONAL FUNCTIONS**

1. Supplying extra linen to guests upon request.
2. Turning in lost and found items.
3. Reporting emergencies to supervisors.
4. Working a 8 hour shift, 5 days per week.

5. Does turn down service when assigned (Swing & Grave)

**JOB SPECIFICATIONS/REQUIREMENT**

**Physical - Extent**

- |                      |                |
|----------------------|----------------|
| 3 - standing         | 3 - lifting    |
| 3 - walking          | 2 - carrying   |
| 1 - balancing        | 3 - pushing    |
| 1 - climbing         | 3 - pulling    |
| 3 - turning          | 3 - hearing    |
| 1 - running          | 2 - observing  |
| 3 - bending/stooping | 2 - smelling   |
| 1 - sitting          | 1 - tasting    |
| 3 - reaching         | 3 - kneeling   |
| 1 - throwing         | 3 - stretching |

**Worker Characteristics - Extent**

- |                                     |                         |
|-------------------------------------|-------------------------|
| 1 - planning                        | 1 - directing others    |
| 1 - writing                         | 1 - using arithmetic    |
| 2 - discriminating colors           | 3 - working rapidly     |
| 3 - working at various tempos       | 1 - making decisions    |
| 2 - concentrating amid distractions | 1 - reading             |
| 1 - remembering names and faces     | 2 - remembering details |
| 2 - examining and observing details |                         |
| 1 - other:                          |                         |

**Working Conditions - Extent**

- |                 |                           |
|-----------------|---------------------------|
| 3 - inside      | 1 - outside               |
| 1 - humid       | 3 - hazards Chemicals     |
| 1 - high places | 1 - changing temperatures |
| 3 - odors       | 1 - hot                   |
| 1 - cold        | 1 - dry                   |
| 3 - wet         | 1 - dirty                 |
| 1 - noisy       | 1 - gloves                |
- 
- |              |                 |
|--------------|-----------------|
| 1 - light    | 0 - 30% of job  |
| 2 - moderate | 31 - 60% of job |
| 3 - heavy    | 61% + of job    |

The above job analysis is for the sole purpose of complying with “The American with Disabilities Act” and is not to be construed to include all employees employed in each job classification. The Employer reserves the right to change the requirements of each job analysis as changes in business and/or technology dictate. All weights, distances and measurements cited in this job analysis are approximations.

I have read and fully understand this job description is representative of the duties and responsibilities associated with this position and I may be required to perform additional functions as requested by management.

Signature \_\_\_\_\_

Date \_\_\_\_\_

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