



CANADIAN ASSOCIATION
OF PETROLEUM PRODUCERS

GUIDE

Reporting of Occupational Injuries

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The Canadian Association of Petroleum Producers (CAPP) represents 150 companies that explore for, develop and produce natural gas, natural gas liquids, crude oil, oil sands, and elemental sulphur throughout Canada. CAPP member companies produce more than 95 per cent of Canada's natural gas and crude oil. CAPP also has 130 associate members that provide a wide range of services that support the upstream crude oil and natural gas industry. Together, these members and associate members are an important part of a \$100-billion-a-year national industry that affects the livelihoods of more than half a million Canadians.

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1 Introduction

1.1 Purpose

The purpose of this Guide is to provide a framework for consistent reporting of occupational injuries for petroleum industry operations managed by a CAPP member company and for benchmarking safety performance. These data provide statistical information and are intended to support prevention and improvement activities.

1.2 Scope

These reporting requirements are for occupational injuries affecting employees and contractors. Injuries occurring in a joint venture under a member company's operating control are included. Injuries occurring in downstream oil and natural gas, chemicals, subsidiaries or to partnerships are not included.

1.3 Reporting Protocol

The initial (December 2001) version of these Guidelines has been modified to be consistent with the U.S. Department of Labor Occupational Safety and Health Administration Recordkeeping Handbook (OSHA) (2005)

- CAPP does not consider restricted work cases to be lost time cases,
- For CAPP reporting, illness cases are not combined with injuries,
- OSHA does not include contractor reporting.

2 Guide to Determination of Recordability of Cases

Only work-related injuries classified as being more severe than first aid are considered recordable for benchmarking purposes. The decision-making process (Figure 1) for determining recordability consists of the following seven basic questions:

- Is the injury work related?
- How do I record it?
- Is it an injury or illness?
- Is it a fatality?
- Would/Did the worker miss the following day?
- Did the worker do their routine duties?
- Did the injury require medical treatment?

The answers to these questions will lead to those injuries that are recordable, and the categories they fall in to, as follows (in order of severity):

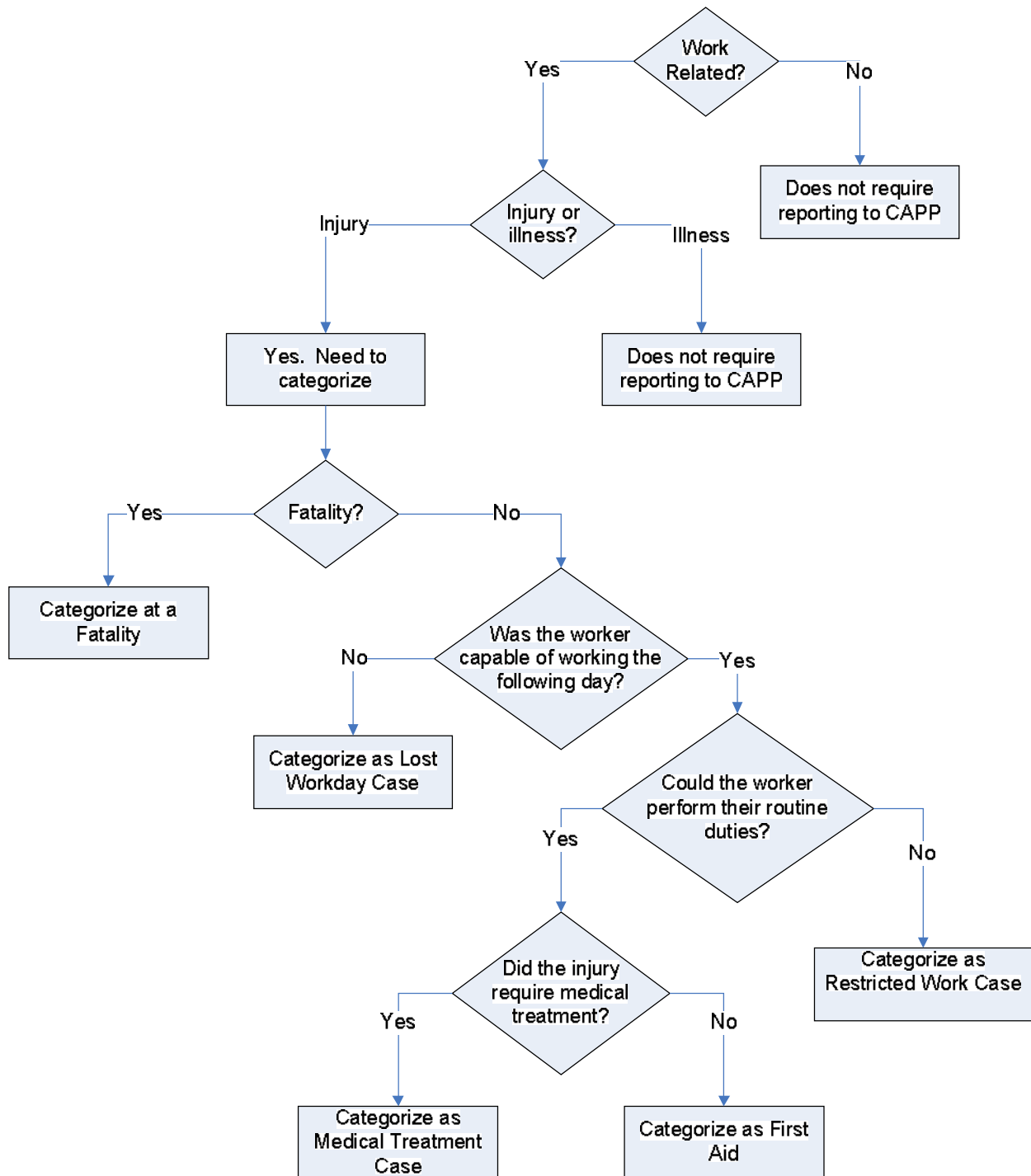
- Fatality
- Lost time injury (incurring workdays lost beyond the day of the event)
- Restricted work
- Medical Treatment

An injury may progress from a lower category to a higher or more severe category. If this happens, the injury should be reported in the higher category only.

An injury should be classified according to the treatment rendered or the capability to work rather than time away if a worker is unable to return to the place of work due to travel arrangements. See Section 1 of Appendix B for examples.

Figure 1: Determining Whether and How to Record Injuries and Illnesses

Refer to definitions for additional help in categorization



2.0 Step 1: Establish work relationship

Work relationship is the first requirement for reportability. Work relationship is established under this reporting system when the injury results from an event or exposure in the work environment. The work environment is primarily composed of 1) the employer's establishment (see definitions), and 2) other locations where employees are engaged in work-related activities or are present for purposes of their employment.

When an employee is away from the employer's establishment, work relationship must be established; when at the employer's establishment, this relationship is presumed since the company is responsible for control of the work environment. The employer's establishment consists of the total establishment, all the areas within the employer's control. They include the primary work facility and other areas that are considered part of the employer's general work area: e.g. common foyers, entryways, stairwells, sidewalks, etc.

The following six questions will lead to the determination of whether an injury is work related or not:

- Was the worker traveling?
- Was the travel outside of routine commuting time and for work reasons?
- Was the incident outside of the normal living activities?
- Was the incident on the employer's site?
- Was the incident outside of living activities?
- Was the worker present for work purposes?

The answers to these questions will lead to those injuries that should be considered to be work related.

In order to provide additional clarification, the following examples illustrate non work-related incidents:

- Employees who travel on company business and are injured or become ill during normal living activities (eating, sleeping, recreation) after having established a "home away from home", or if the employee deviates from a reasonably direct route of travel (such as a side trip for vacation or other personal reasons)
- Employees who work on an offshore installation or camps and are injured during normal living activities (eating, sleeping, recreation) while off-shift, unless the injury is caused directly by some defect or condition in the workplace.
- Incidents that occur during normal commuting are not work-related.

The following points will cover most work-related situations:

Accountability for maintaining the establishment is a significant factor. When the employer has accountability for maintaining the premise(s), including common entry/exit areas, then the case is usually work-related. If the employer is not accountable (e.g. public parking lot), then the case is usually not work-related.

- Leased or rented facilities are usually considered part of the employers' establishment.
- Generally, if the injury occurs at the employer's establishment then the case is presumed work-related.
- Employee injuries resulting from incidents involving company vehicles, such as a truck on the road or loading and unloading away from its home base are work-related even though they do not occur on the employer's establishment.
- Injuries resulting from horseplay or criminal act at the company establishment are reportable.
- Injuries that occur outside of the company establishments are considered work-related if the employee is engaged in a work-related activity or is present at that location for work reasons.
- Injuries where the hours are used for calculation of injury rates or contract value used to calculate exposure hours.

2.1 Step 2: Determine whether a recordable case occurred

- Only work-related injuries more severe than first aid are considered recordable.
- Fault plays no role in determining whether a recordable injury has occurred.
- All cases occurring in the workplace are presumed to be work-related, although this presumption is rebuttable (see detailed examples and exceptions listed in Appendix B). The nature of the activity in which the worker is involved, the degree of employer control over the worker's activity, the preventability of the event, and the concept of fault do not affect this presumption.
- Cases that would normally require treatment by a medical professional are recordable, whether or not the treatment was provided by a medical professional.
- Precautionary medical practices do not make a case recordable (e.g., tetanus shot Hepatitis B vaccine, x-ray with a negative result)
- Pre-existing medical conditions do not influence recordability unless there is a new work related event which aggravates the previous condition.

2.2 Step 3: Distinguish between injuries and illnesses

Occupational illnesses are not included as part of this reporting Guide.

Whether a case is categorized as an injury or illness is determined by the nature of the original event or exposure that caused the case, not by the resulting condition of the affected employee. Injuries are caused by instantaneous events in the work environment or events close in time. Cases resulting from anything other than instantaneous events are usually considered illnesses. This concept of illnesses includes acute illnesses that result from exposures of relatively short duration. See Appendix A for definitions and Section 7 of Appendix B for additional case-specific examples.

2.3 Step 4: Decide if work-related injuries are recordable

If a work-related injury involves any of the following, then it is deemed recordable:

- Fatality
- Lost time case
- Any restriction of work or motion (i.e. any restriction of ability to do one's normal job)
- Medical Treatment
- Loss of consciousness
- Transfer to another job as a result of the injury

Minor injuries requiring only first aid treatment are not recordable.

Appendix A: Definitions

Contractor

Independent business entity, or the individual (s) it employs, engaged through a verbal or written agreement to perform services. Subcontractors and personal services contracts are considered contractors.

Off Site

For offsite contractors, the following table provides the criteria for classification.

Reportable	Non-Reportable
<ul style="list-style-type: none">• worksite dedicated to a CAPP member company's work, e.g. fabrication shop, but excludes workers hired by independently operated commercial and retail sites (e.g. associates and agents), or• task is directly supervised by a CAPP member company, or• task is directly related and exclusive to the CAPP member company, e.g. carrier hauling your product to your customer	<ul style="list-style-type: none">• contractor worksite not exclusive to a CAPP member company, or• when the work relationship between the CAPP member company and contractor ends (e.g. trucker who does work for CAPP member company during only one leg of a trip), or• contractor in full control of work activities, such as at the racksite (for drilling/service rigs) or at the contractor's yard.

Establishment

An establishment is a single physical location where business is conducted or where services or industrial operations are performed. For activities where employees or contractors do not work at a single physical location, the establishment is represented by main or branch offices, terminals, stations, etc. that either supervise activities or are the base from which personnel carry out activities. (OSHA)

Employee

Employee means a person who is employed in a business of his employer which affects commerce.

Employer

Employer means a person engaged in a business affecting commerce that has employees. (OSHA Act, 1970)

Employment

Employment means any activity that furthers the interests of the employer and all work or activity performed in carrying out an assignment or request of a CAPP member company or a reportable contractor, including related activities (such as travelling) not specifically covered by the assignment or request. Employment also includes activities undertaken at the company's request or for company business reasons, outside of normal working hours. (CAPP)

Exposure Hours

Exposure hours are the total number of hours of employment including overtime and training but excluding leave, sickness and other absences. In order to determine realistic injury frequencies, the total number of exposure hours must be relatively accurate. Determining the number of hours worked for contractors is often much more difficult than for employees, and in many cases will involve estimations. Section 11 of Appendix B outlines some guidelines for calculating/estimating employee and contractor exposure hours. (CAPP)

Fatality

Fatality is a death resulting from a work-related injury (CAPP)

First Aid

First aid when associated to an incident means:

(A) Using a non-prescription medication at non-prescription strength (for medications available in both prescription and non-prescription form, a recommendation by a physician or other licensed health care professional to use a non-prescription medication at prescription strength is considered medical treatment for recordkeeping purposes);

(B) Administering tetanus immunizations

(C) Cleaning, flushing or soaking wounds on the surface of the skin;

(D) Using wound coverings such as bandages, Band-Aids™, gauze pads, liquid adhesives etc.; or using butterfly bandages or Steri-Strips™ (other wound closing devices such as sutures, staples, etc., are considered medical treatment);

(E) Using hot or cold therapy;

(F) Using any non-rigid means of support, such as elastic bandages, wraps, non-rigid back belts, etc. (devices with rigid stays or other systems designed to immobilize parts of the body are considered medical treatment for recordkeeping purposes);

(G) Using temporary immobilization devices while transporting an accident victim (e.g., splints, slings, neck collars, back boards, etc.).

(H) Drilling of a fingernail or toenail to relieve pressure, or draining fluid from a blister;

(I) Using eye patches;

(J) Removing foreign bodies from the eye using only irrigation or a cotton swab;

(K) Removing splinters or foreign material from areas other than the eye by irrigation, tweezers, cotton swabs or other simple means;

(L) Using finger guards;

(M) Using massages (physical therapy or chiropractic treatment are considered medical treatment for recordkeeping purposes); or

(N) Drinking fluids for relief of heat stress. (OSHA)

Illness

Although illnesses are OSHA recordable, for the purposes of CAPP guidelines, illnesses are not included see Figure 1 Determining Whether and How to Record Injuries and Illnesses.

Injury

An injury is an abnormal condition or disorder. Injuries include cases such as, but not limited to a cut, fracture, sprain, or amputation. (OSHA)

Lost Time Injuries (LTI)

Lost time injuries include fatalities (F) and lost workday cases (LWC) resulting from work-related injuries.

Lost Time Injury Frequency (LTIF)

The lost time injury frequency measures the number of lost time injuries in the exposure period as a percentage of the workforce. It is calculated by multiplying the number of lost time injuries (LTI) by 200,000 and dividing by the exposure hours worked during the period. 100 workers work approximately 200,000 hours in one year. (CAPP)

$$\text{LTIF} = \frac{\text{Number of Lost Time Injuries} \times 200,000}{\text{Exposure Hours}}$$

Number of LTI/1,000,000 hours worked. [International Association of Oil and Gas Producers (OGP)]

Lost Workday Cases (LWC)

Lost workday cases are work-related injuries, which render the injured person temporarily unable to perform any regular job or restricted work activity on any day (including normal day's off, holidays etc.) after the day on which the injury occurred. In cases where employment is terminated, this would include any previously scheduled workdays lost that were planned prior to the event, or an estimate of workdays that would be lost after termination. A single incident can give rise to several lost workday cases, depending on the number of people injured as a result of that incident. (CAPP)

Any work related injury other than a fatality that results in a person being unfit for work on any day after the day of the injury. "Any day" includes rest days, weekends, leave, holidays, or days after ceasing employment. (OGP)

Medical Treatment

Medical treatment is the management and care of a patient for the purpose of managing an injury. Medical treatment does not include:

(A) Visits to a physician or other licensed health care professional solely for observation or counselling;

(B) The conduct of diagnostic procedures, such as x-rays and blood tests, including the administration of prescription medications used solely for diagnostic purposes (*e.g.*, eye drops to dilate pupils); or

(C) “First aid” as defined in this section. (OSHA)

Physician or Other Licensed Health Care Professional.

A physician or other licensed health care professional is an individual whose legally permitted scope of practice (*i.e.*, license, registration, or certification) allows him or her to independently perform, or be delegated the responsibility to perform, the activities described by this regulation.

Restricted Work

Restricted work occurs when, as the result of a work-related injury:

(A) You keep the employee from performing one or more of the routine functions of his or her job, or from working the full workday that he or she would otherwise have been scheduled to work; or

(B) A physician or other licensed health care professional recommends that the employee not perform one or more of the routine functions of his or her job, or not work the full workday that he or she would otherwise have been scheduled to work. (OSHA)

Restricted Workdays

The number of restricted workdays is the total number of scheduled workdays on which the injured person was temporarily unable to perform all normally assigned work functions (see definition on Restricted Work). Restricted workdays continue until the employee is declared fit to return to normal work. If the incident occurs prior to the termination of the contract, the number of days accountable as restricted work will be as estimated by a medical professional. (CAPP)

Total Recordable Injuries

Total recordable injuries are the sum of fatalities, lost workday cases, restricted work cases, and medical treatment cases. (CAPP)

Total Recordable Injury Frequency (TRIF)

Similar to LTIF, TRIF measures the number of total recordable injuries in the exposure period as a percentage of the workforce. It is calculated as follows: (CAPP)

$$\text{TRIF} = \frac{\text{Total Recordable Injuries} \times 200,000}{\text{Exposure Hours}}$$

Appendix B: Interpretive Guide

Background

CAPP's Guide for Reporting of Occupational Injuries follows the United States OSHA Recordkeeping Handbook. This approach depends on *the nature of the activity in which the worker is involved, the degree of employer control over the worker's activity, the preventability of the event, and the concept of fault do not affect this presumption*. This provides guidance on BLS and CAPP incident reporting rules and the reportability requirements for unusual incidents and situations. These requirements apply to both contractor workers and CAPP member company employees.

Exceptions

- If the worker is on the employer's premises as a member of the general public, any incidents would be considered to be not work-related. For example, if a worker enters a company gas bar as a paying customer and slips on the floor. [Note that the case is work-related if there is a relationship between the worker's presence on the premises and their status as a worker. Employers should ask; would the person have been on the premises but for the fact that he was a worker.]
- If the worker's symptoms are entirely the result of a non-work related event, condition or exposure off premises and merely surface on the employer's premises (with no aggravating work-related event or exposure), then they are not recordable. Where a worker's knee gives way or the worker trips and falls at work for no apparent reason, the case is considered work-related unless the worker is known to have a trick knee. If a worker has a pre-existing condition, and there is no work-related initiating event or exposure, and this condition surfaces at work, then the condition is not a recordable incident (e.g. epileptic seizure, dislocated shoulder or trick knee). However, if another injury results from the condition then the resulting injury is recordable. For example:
 - worker falls due to trick knee going out and breaks wrist - the broken wrist is recordable,
 - worker falls due to trick knee going out but has no other injury than a hurt knee - not a recordable incident.
- Injuries which result solely from voluntary flu shot programs on the employer's premises are not considered work-related. If a vaccination is given off-premises, and the worker voluntarily chose to receive the vaccine, any reaction to the shot is not work-related. If the worker was given the shot off the employer's premises but as a condition of employment, then a reaction to the shot is work-related.
- Injuries which result solely from the donation of blood during voluntary blood drives on the employer's premises are not considered work-related and are not recordable.

- Exposures to harmful substances, in and of themselves, are not recordable. However, they should be recorded when the exposure results in a work-related injury.
- Going to a hospital for observation is not recordable, provided there was no medical treatment, loss of consciousness, restricted work activity, or job transfer involved. For example, if a driver involved in an automobile accident is sent for a physical examination and no injury is diagnosed, the case is not recordable.
- Lost workdays (hence the classification of the injury) are excluded for situations where an individual is physically capable of working but is unable to return to the place of work due to circumstances such as:
 - a seaman missing a ship sailing,
 - a worker unable to return to an offshore platform due to bad weather or lack of reasonably available transportation, or
 - lack of local medical facilities needed for observation or treatment provided there was no unnecessary delay in traveling to seek such medical treatment.

Employer's Establishment

- Incidents occurring on an employer's establishment begin with the presumption they are work-related.
- Incidents that occur on employer establishment during non-duty hours are generally recordable. Presence on the employer's establishment is normally sufficient to establish work relationship. It does not matter whether or not the incident occurs during regular working hours if the worker is present to perform some job task or receive some employment benefit, or if his presence is in some way related to his status as an employee. This does not apply to workers present at a camp or offshore installation during off duty hours, unless the injury is caused directly by some defect or condition in the workplace. For example, a worker falling off of a bed due to vessel motion is a workplace injury.
- Injuries incurred while a worker is intoxicated at work are work-related despite the intoxication.
- Injuries from "acts of God" such as being struck by lightning while at work are considered work-related.
- Incidents occurring during the course of employment that are due to someone's willful act are reportable, regardless if they occur on or off employer establishment. For example, a worker on a business trip who gets mugged after leaving a taxicab on the way to check-in to their hotel may sustain reportable injuries.
- Injuries sustained by a worker during a fight with a co-worker at the worksite are reportable.
- The front steps of company buildings and company sidewalks are considered employer establishment, but the front steps of a public building in which the employer leases space are not considered to be the employer's establishment. The determination of whether a particular location constitutes part of the

employer's establishment depends upon whether the location is considered part of the "employer's domain", not whether he owns or leases it. As a general rule, if the site is part of an establishment of the employer, it is considered part of his establishment. An establishment is a single physical location where business is conducted or where services or industrial operations are performed.

- Where a worker is injured at an off-establishment training session (such as fire training), the case is work-related if the worker was present at the session as a condition of employment. In contrast, a worker's participation in a local volunteer fire company during pay/duty status would not be considered a condition of employment, and any subsequent injuries would not be work-related.
- Company restrooms, hallways, or cafeterias are generally all considered to be part of the employer's establishment and constitute part of the work environment. Injuries incurred in a cafeteria open to the general public are not presumed to be work-related, even though the cafeteria is in a building owned by the employer and the employer subsidizes the cost of the cafeteria.
- The specific activity the worker was engaged in at the time of the injury is not the controlling factor. Examples:
 - A worker who gets food poisoning from eating company supplied food or who burns his or her hand from spilling hot coffee at work is considered to have a work-related condition.
 - Food poisoning from food brought in from a sandwich shop for a business meeting is work-related.
 - Food poisoning from food brought in by the worker is not work-related.
- Incidents involving workers at on-site physical fitness centers are not work-related, even though the employer encourages participation in fitness programs and subsidizes the costs of participation, and only workers may use the centers. If participation is mandatory, then any resulting incidents are work-related.
- Injuries occurring off of the employer's establishment are not presumed to be work-related; work relationship must be established. Injuries that result from an event off the employer's establishment are work-related if the worker was engaged in work-related activities or was present as a condition of employment. If the worker was injured while performing duties in the interest of the company, the injury would be considered work-related. If the worker was injured while performing normal life activities (e.g., eating), the injury would not be considered work-related. Pay status is not a factor to be considered for recordability. Work relationship off the employer's establishment is determined by the activity the worker is performing.
- If a worker was involved in a formal company-sponsored program for "working at home", injuries incurred while performing duties in the interest of the employer while at home would be work-related. A person with his or her home as an office is considered at work when he or she is in that office and when he or she leaves his establishment in the interest of the company. Similarly, if a worker was injured on the job and was assigned to work at

home as a result of the injury, injuries incurred while performing duties in the interest of the employer while at home would be work-related. If a worker who works from his or her home becomes injured or ill while performing normal life activities (e.g., eating), the case would not be work-related. When a worker who works at home develops carpal tunnel syndrome, it must be determined whether the worker's work duties in any way caused, contributed to, or aggravated his or her condition. If so, it is considered work-related. If the worker was injured at home while performing duties in the interest of the employer, the injury would be work-related; pay status is not a factor.

- A truck on the road or loading and unloading away from its home base would be off the employer's establishment. However, injury exposures experienced during these activities would still be work-related because the workers are engaged in work-related activities. The truck and its surroundings are considered part of the work environment even though they are not part of the employer's establishment.
- For reporting purposes, the definition of work establishment excludes all employer controlled ball fields, tennis courts, golf courses, parks, swimming pools, gyms, and other similar recreational facilities which are often apart from the workplace and used by workers on a voluntary basis for their own benefit, primarily during off-work hours. Therefore, injuries to workers in these recreational facilities are not recordable unless the worker was engaged in some work-related activity, or was required by the employer to participate.
- Injuries to workers participating in social events off establishment are not work-related, regardless of the workers' pay status, unless the workers are required to participate in the social events as a condition or expectation of employment.

Commuting to Work / Parking Lots

- Injuries incurred during a normal commute to and from work are not presumed to be work-related. Travel after work between a worker's residence and a CPR class that he or she attended as part of employment would be considered work-related. For workers who travel between several work sites during the day (e.g., construction project supervisors who do not always report to a home office prior to beginning their first assignment at the start of the work shift), their travel from home to the first work site and from the last work site to home is considered their normal commute. After completion of the work at the first assignment, injuries sustained traveling to and from other work sites are considered work-related.
- A parking lot ends with the perimeter of the parking pavement or surface. The boundary could be the fence surrounding the parking lot in one case, or the curb encircling the parking spaces in another. Parking ramps are normally considered part of parking facilities, not part of the employer's establishment. A parking lot is defined as the area on which cars can be parked; it does not include surrounding sidewalks, which are considered part of the employer's establishment. Stairs and sidewalks contained within the perimeter of a parking garage or facility are considered part of the parking lot.

- Injuries from a fight between workers in a company parking lot are not work-related.
- Injuries incurred in a parking lot while repairing it or while going on a work-related trip are work-related.
- Injuries incurred while passing through a parking lot to get from Building A to Building B on the employer's establishment are considered work-related, since the worker had completed the commute to work.
- Where a worker has to use a "swipe badge" to get through the company gate and is then in the employer's establishment, but has an injury before reaching the parking lot, the injury is considered to have occurred during a normal commute and is not presumed to be work-related.
- Injuries occurring on a public sidewalk while walking from a parking lot to an employer's establishment are considered to be part of the normal commute and not recordable. Injuries incurred on a public sidewalk during a break are not presumed to be work-related. Injuries incurred on a public sidewalk while engaged in work-related activity, such as walking to a business meeting, are recordable.
- If an injury occurs in a company-maintained parking lot during normal commuting due to a deficiency in that parking lot (such as potholes, unsanded icy conditions, accumulated debris, etc.), then the injury is work-related and recordable.

Travel

- Workers who travel on company business are considered to be engaged in work-related activities all the time they spend in the interest of the company, including, but not limited to, travel to and from customer contacts; and entertaining or being entertained for the purpose of transacting, discussing, or promoting business, etc. However, an injury would not be reportable if it occurred during normal life activities (eating, sleeping, recreation); or if the worker deviates from a reasonably direct route (side trip for vacation or other personal reasons). He or she would again be in the course of employment when he or she returned to the normal route of travel.
- Any travel between a worker's residence and a point outside of the worker's normal area of operations is not considered a normal commute and is considered work-related. A worker's "normal geographic area of operation" includes the town or city where the worker normally works and directly adjoining municipalities.
- Where a worker is injured in the parking lot of an off-site training facility, whether the injury is considered work-related or not depends on whether the worker was in travel status or engaged in a normal commute. If the worker was in travel status, the injury is considered work-related. If the injury occurred during a normal commute, the case would not be considered work-related.
- An injury on the way to the airport for a business trip is considered being in travel status. When in travel status, work-related activities begin when the worker leaves home, assuming that the worker did not intend to report to the

office before beginning the trip. This is true even if the worker traveled on a weekend to save the cost of the plane ticket; the timing of the trip is not a factor to be considered since the worker was traveling for business purposes.

- When a worker on travel status is injured while participating in recreational activities with a customer, whether the injury is work-related depends on whether the worker's participation in the activities was work-related. Thus, a snowmobile accident over the weekend would not be work-related if solely for recreational purposes, but would be work-related if the snowmobiling included transacting, promoting, or discussing business, or was perceived by the worker to be an expectation of employment.
- When a traveling worker checks into a hotel or motel, he or she establishes a "home away from home". Thereafter, his or her activities are evaluated in the same manner as for non-traveling workers. For example if a worker on travel status is to report each day to a fixed worksite, then injuries sustained when traveling to this worksite would be considered off the job. The rationale is that a worker's normal commute from home to office would not be considered work-related.
- There are situations where workers in travel status report to, or rotate among, several different worksites after they establish their "home away from home" (such as a salesperson traveling to and from different customer contacts). In these situations, the injuries sustained when traveling to and from the sales locations would be considered work-related.
- Members of offshore drilling crews are treated the same as workers in travel status. Trips to and from the rig are considered travel status, while once on the rig workers can establish a "home away from home". Then only workshift periods would be considered work-related, and cases incurred during normal living activities (e.g., eating, sleeping, recreation) and outside of the workshift would not be.

Time of Incident

- Cases are recordable so long as the worker was on active duty or in pay status when the work-related injury exposure occurred. The worker does not need to be an active employee or in pay status at the time the case is reported (i.e. they could be retired or no longer with the same employer when the injury is reported).
- There are no time limits for reporting cases. For example, if a worker says he was injured two weeks ago, but there was no report or report of it at that time, the incident must still be reported if it can be established that a recordable injury did occur.
- Injuries due to a deficiency in equipment or other management control item, for which the employer is responsible, even if the injury occurs outside working hours, are recordable. It is not necessary that the worker be involved in some specific job task at the time of the injury exposure for the case to be recordable, or that they occur during hours for which wages are paid.

Pre-existing Conditions

- Pre-existing conditions usually do not affect recordability except when the injury is aggravated by another work related event. Employers should report each case resulting from a new event (such as a slip, trip, fall, or overexertion) and each exposure that results in a recordable work injury regardless of the worker's pre-existing condition. If injury results solely from a physical defect (i.e., employee falls while walking when trick knee gives way AND there is no environmental factor), it is not recordable. However, if the work environment or a work event contributes (i.e., worker steps on a stone or slips, trick knee gives way, and he falls), any resulting injury is occupational.
- If a hernia arises on the employer's premises, work relationship is presumed. If an event or exposure within the work environment either caused or contributed to the condition, or aggravated a pre-existing condition, it is considered work-related for injury reporting purposes. Back and hernia cases should be evaluated in the same manner as any other case. For a back or hernia case to be considered work-related, it must have resulted from a work-related event or exposure in the work environment. It is necessary to distinguish between back injuries that result from an event in the work environment, and back injuries that are caused elsewhere and merely surface in the work environment. The former is recordable; the latter is not. This test should be applied to all injuries, not just back and hernia cases.
- Particularly stressful activity is not required for an injury to be recordable. If an event (such as a slip, trip, fall, sharp twist, etc.) occurred in the work environment that caused or contributed to the injury, the case would be recordable, assuming it meets the other requirements for recordability. Usually, there will be an identifiable event or exposure to which the employer or employee can attribute the injury. However, this is not necessary for reporting purposes. If it seems likely that an event or exposure in the work environment either caused or contributed to the case, the case is recordable, even though the exact time or location of the particular event or exposure cannot be identified. If the backache is known to result from some non work-related activity outside the work environment and merely surfaces at work, then the employer need not report the case
- Medical verification is not required for recordability. However, employers have the ultimate responsibility for making good-faith reporting determinations. If an employer doubts the validity of an employee's alleged injury and there is no substantive or medical evidence supporting the allegation, the case is not recordable.
- New incident reports should not be made for the recurrence of symptoms from previous cases unless another initiating event occurs. If a new initiating event occurs, then this constitutes a new injury regardless of pre-existing condition.
- **Injuries:** The aggravation of a previous injury almost always results from some new incident involving the worker (such as a slip, trip, fall, sharp twist, etc.). Consequently, new work-related incidents should be reported as new cases.

Distinguishing Between Injuries and Illnesses

- An occupational injury is any injury such as a cut, fracture, sprain, amputation, etc., which results from a work accident or from an exposure involving a single incident in the work environment. Conditions resulting from animal bites, such as insect or snakebites, or from one-time exposure to chemicals are also considered to be injuries.
- An occupational illness is any abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to environmental factors associated with employment. It includes acute and chronic illnesses or diseases that may be caused by inhalation, absorption, ingestion, or direct contact. Examples include food poisoning, chronic hearing loss, infectious diseases and dermatitis.
- The basic definition of an occupational injury includes those cases that result from a work incident or from an exposure involving a single instantaneous incident in the work environment. Contact with a hot surface or a caustic chemical which produces a burn in a single instantaneous moment of contact is an injury. Conversely sunburn or welding flash burns that result from prolonged or repeated exposure to sunrays or welding flashes are considered illnesses. Similarly, a one-time blow that damages the tendons of the hand is considered an injury; while repeated trauma or repetitious movement which produces tenosynovitis is considered an illness. The basic determinant is the single-incident concept. If the case resulted from something that happened in one instant, it is classified as an injury. If the case resulted from something that was not instantaneous, such as prolonged exposure to hazardous substances or other environmental factors, it is considered an illness.
- Some conditions may be classified as either an injury or an illness (but not both), depending upon the nature of the event that produced the condition. For example, a loss of hearing resulting from an explosion (an instantaneous event) is classified as an injury. The same condition arising from exposure to industrial noise over a period of time would be classified as an occupational illness. Similarly, irritation of the throat from exposure to chlorine gas fumes could be classified as either an injury or an illness. If the exposure was instantaneous and occurred when a cylinder of gas ruptured, the case would be considered an injury. The case would be an illness if the worker were exposed to the agent over time, such as working in an area where chlorine fumes from a bleaching process were present over a period of time. Muscle strain due to overexertion over a period of a few hours is considered to be an injury. Strains from repetitive motion over long periods of time are considered to be an illness.
- This method for reporting certain types of cases has its foundation in industrial safety practice. The safety measures required to avoid instantaneous events are considered fundamentally different from those required to prevent many occupational illnesses with a long latency period, or for which exposures over a period of time are necessary for symptoms to appear. The classification of a case as an injury or an illness is intended to reflect this distinction.

- It is very important, particularly when tracking illnesses, to determine that the occurrence is occupationally related. In some cases, such as contact dermatitis, the relationship between an illness and work-related exposure is easy to recognize. In other cases where the occupational cause is not direct and apparent, it may be difficult to determine accurately whether a worker's illness is occupational in nature. In these situations, it may help employers to ask the following questions:
 - Has an illness condition clearly been established?
 - Does it appear that the illness resulted from, or was aggravated by, suspected agents or other conditions in the work environment?
 - Are these suspected agents present (or have they been present) in the work environment?
 - Was the ill worker exposed to these agents in the work environment?
 - Was the exposure to a sufficient degree and/or duration to result in the illness condition?
 - Was the illness attributable solely to a non-occupational exposure? If not, then the illness is presumed to be work related.
- Employers should check "Material Safety Data Sheets" for those substances suspected of causing employee illnesses to verify the relationship between the exposure and the resulting symptoms.
- Carpal tunnel syndrome is a condition involving compression of the median nerve in the wrist that results in tingling, discomfort, and numbness in the thumb, index, and long fingers. Because work-related carpal tunnel syndrome cases almost always result from repetitious movement, they should be classified as occupational illnesses.
- Conditions resulting from one-time exposure to chemicals are injuries. If a worker is exposed to a chemical inhalation for more than one breath, the exposure is non-instantaneous. A one-time chemical exposure lasting 45 minutes is an illness, because it is non-instantaneous. Eye irritation apparently caused by non-instantaneous exposure to chemical vapors is an illness.
- Ear damage associated with descent of an aircraft (e.g., barotitis media) is an illness because the change in air pressure during the descent occurred over time.
- Weld flash is an injury if it is the result of an instantaneous exposure to a welding arc. It is an illness when developed over time (non-instantaneous) as the result of exposure to welding arcs.
- Reaction to a hepatitis B vaccination is considered an injury because the original exposure (the inoculation) was instantaneous.
- An infection resulting from a laceration should be classified as an injury because the classification is based on the original event—the laceration—not on the subsequent developments.
- All blood borne pathogen cases are classified as injuries, whether or not they are triggered by an instantaneous event.
- All conditions resulting from animal bites, such as insect or snake bites, are considered injuries. These include contagious diseases related to body contact exposure (e.g., scabies or lice).

- A chemical burn resulting from a single drop of a corrosive that appears several hours after exposure is considered an injury.
- If a non-instantaneous event or exposure caused a sprain or strain, it is an illness. This holds true for all conditions (e.g., hearing loss, hernias, and burns), except for back cases. Where a worker lifts trays 50 times per day and feels pain in the shoulder, the case is an injury if it was caused by a one-time lifting of the trays, and an illness if it was caused by the cumulative effect of lifting trays. The employer must evaluate the circumstances and make a determination, giving strong weight to any medical opinion.

Recordability

- Occupational illnesses must be diagnosed by a medical practitioner. Diagnosis is commonly defined as the act or process of detecting and deciding the nature of a diseased condition by examination of the symptoms. Diagnosis may be by a physician, registered nurse, or a person who by training or experience is capable to make such a determination. However, a case more difficult to diagnose, such as silicosis, would require evaluation by properly trained medical personnel.
- Hearing loss may be classified as either an injury or an illness, depending upon the type of event or exposure that caused the loss. If the hearing loss resulted from or was aggravated by an instantaneous exposure, it is considered an injury, and is recordable only if it involves medical treatment, loss of consciousness, restriction of work or motion, or transfer to another job. If the hearing loss resulted from or was aggravated by anything other than an instantaneous exposure it should be classified as an occupational illness.
- Work-related heart attacks are classified as illnesses because they normally do not result from work accidents or single instantaneous incidents in the work environment. Heart attacks must satisfy the same requirements for work relationship as any other type of illness before they are reported. Heart attacks are not necessarily reported if they occur in the work environment, but rather that they must result from an exposure in the work environment.
- Variations in the characteristics of particular workers or their susceptibility to various illnesses do not affect decisions of incident classification or reporting.
- Worker complaints of such common subjective symptoms as general malaise, headache, and/or nausea, etc., are not reported as cases of illnesses if there are no indications that the symptoms are work-related?
- Injuries resulting in fractures which are not minor in nature and ordinarily require medical treatment or involve restriction of work or motion are recordable.
- Injuries that result in chipped or broken teeth are recordable because they ordinarily require medical treatment.
- Work-related situations where a worker damages a prosthetic device, such as an artificial arm or leg are recordable if they involve either some form of medical treatment or restriction of work or motion.
- More than one follow-up visit to a doctor for minor cuts or burns is not recordable if the second visit is simply for observation or to change an

adhesive or small bandage. It would be recordable, however, if any medical treatment were provided.

- If a worker is injured and loses work time in traveling to or from a doctor's office for a medical examination, this does not necessarily result in a recordable injury. Injuries should be evaluated on the extent of medical treatment required, not on the amount of time spent seeking treatment. If the examination revealed that no medical treatment was required, the case would not be recordable. Restriction of work or motion concerns the worker's ability to perform normal job duties; it does not include loss of work time for travel to or from a doctor's office.
- Tetanus shots provided for minor scratches should not be regarded as recordable unless other treatment was provided. Treatments given by a chiropractor for a work-related injury are considered to be recordable medical treatment, as are any other required medical treatments by any medical professional.
- Use of prescription medications to treat an occupational injury normally constitutes medical treatment. However, it is considered first aid when a single dose of a prescription medication is administered on the first visit for minor injury/discomfort or for diagnostic purposes. A "single dose" is the measured quantity of a therapeutic agent to be taken at one time. The best available treatment should not be reduced or eliminated in order to avoid recordability.
- If a worker suffers an adverse reaction in response to a nonprescription medication provided as treatment for a minor injury, the case is deemed to be a recordable injury. This case should be considered an injury since the case determination must relate back to the original event. The affected worker would not have suffered the adverse reaction to the medication but for the occupational injury. Initially, the case was not recordable because the provision of a nonprescription medication does not constitute medical treatment. **The case may now be recordable.** To be recordable, the adverse reaction must have been serious enough to require additional medical treatment or involve loss of consciousness, restriction of work or motion, or transfer to another job.

Burns

Recordable medical treatment includes treatment of second- or third-degree burns. When a blister forms three days after the burn occurs, a first-degree burn (first aid) must be upgraded to a second-degree burn (medical treatment / recordable). Burns may result from exposure to heat, chemicals, electricity, intense light and radiation.

- First Degree Burns - Only the outer layer of skin is damaged, characterized by reddening of skin, pain and sometimes swelling. Not recordable if the condition doesn't require repeated treatment beyond initial antiseptic.
- Second Degree Burns - Injure the epidermis and damage the superficial underlying tissues. Characterized similar to first degree burns but blistering of

skin may also occur. Intense pain, reddening and a mottled skin appearance are common. These cases are recordable if:

- medical treatment is required beyond initial antiseptic,
- blistering is larger than one inch in diameter, or
- damage is not considered "minor" by a medical professional.
- An injury is not "minor" if it:
 - must be treated by a physician,
 - impairs normal use of limbs or senses,
 - results in damage to the physical structure beyond a non-superficial nature, or
 - requires follow-up medical treatment.

- Third Degree Burns - Most serious category of burns where the entire skin thickness is affected, with blackened or blanched (grey-white) skin. Treatment includes debridement (removal of burned skin) and skin grafts. All cases are recordable.

Restricted Work

- Example 1

A pipefitter twists his ankle while performing pipefitting work. He is taken to a hospital and x-rays reveal that there are no broken bones. He does not require any medical treatment (therefore this is not a medical treatment case) and the doctor allows him to return to work but restricts the worker from doing pipefitting work. He returns to work the next day and is put to work reviewing drawings in the construction office. This would be classified as a Restricted Work Case because the worker is unable to perform a major part of his job function as a pipefitter.

- Example 2

A welder receives a muscle strain to his leg while welding on an above ground platform. He is checked out by the appropriate medical personnel but does not require medical treatment (i.e. the incident is not a medical treatment case). He returns to work but is unable to perform welds that require him to weld above ground (Doctor has told him not to climb a ladder). He is put to work welding pipe spools in the fabrication shop at site. This would be classified as a Restricted Work case because of the Doctor's restrictions and therefore would be a recordable incident.

In this example where a doctor has indicated a restriction, this should clearly be considered a Restricted Work case, and the employer should get doctor's clearance that the restriction is removed before having the worker do this type of work. In the following example, the worker is capable of performing normal duties, and proactive management has been used to avoid any possible aggravation.

- Example 3

A welder receives a muscle strain to his leg while welding on an above ground platform. He is checked out by the appropriate medical personnel but does not require medical treatment (i.e. the incident is not a medical treatment case). He returns to work and is physically capable of climbing ladders to weld above ground (Doctor has told him to take it easy on that leg, but hasn't indicated any restrictions). As a precautionary measure in the interest of not unnecessarily aggravating the leg, he is put to work welding pipe spools in the fabrication shop at site. This would not be classified as a Restricted Work case and would not be a recordable incident.

Exposure Hours

Employee Hours

The actual hours worked by persons employed by the company and engaged in work-related activities

- Include all persons on a company payroll working in the corporate head office, field offices, and exploration and producing field operations.
- Do not include persons working on personal service contracts under the direct supervision of employee supervisors, and vacation time and statutory holidays for company employees.

Information Sources

- Actual hours from time sheets and Human Resource Department or Payroll records.
- Where only the number of employees is known, estimate the hours using a standard 2000-hour work year

Calculations - Where actual hours do not exist, annual reportable hours can be estimated from payroll records using the following pay period formulae:

- Monthly: No. of employees x 166.7 x 12 = annual hours
- Semi monthly: No. of employees x 83.3 x 24 = annual hours
- Bi-weekly: No. of employees x 76.9 x 26 = annual hours

Example: Company B has an average of 65 employees paid semi-monthly over a Reporting Year, the reportable hours would be 65 employees x 83.3 hours/period x 24 periods = 129,948 hours

Contractor Hours

The actual hours worked by persons engaged through a contract, subcontract, or purchase order in company work-related activities. Include:

- persons engaged as **contract employees** at head office, field offices, and exploration and producing field operations,
- persons employed by a **contractor or sub contractor** engaged in providing a good or service directly to the company, and working in company premises,

- on company leases, traveling on company business on company roads, or traveling in company vehicles, vessels, or aircraft on company business, and
- persons working at off-site locations where the company has primary control of the work site.

Does **not** include:

- persons working at off-site locations where a contractor has primary control of a work site (Refer to Appendix A for onsite/offsite definitions), or Information Sources.
- Actual hours from time sheets and invoices available from Human Resource, Accounting, or field office records.
- For situations where contractor hours are not reported, an estimate of hours can be obtained by using proportions of capital and operating budgets for different Company activities.

Calculations

There are two principle methods for determining contractor hours;

- measuring or estimating contractor hours for all oilfield activities, or;
- using labour factors as percentages of capital or operating budgets.

It may be possible to use a combination of the various methods identified below to determine the number of Contractor Hours for a Reporting Year.

Activity Base

Contractors supply personnel hours on all invoices or tickets submitted for goods or services provided.

Where actual hours for contract employees are not available, annual reportable hours can be estimated from monthly or semi-monthly invoices and assuming an 8-hour work day using the following pay period formulae:

- Monthly: No. of contract employees x 12 x 166.7 = annual hrs.
- Semi-monthly: No. of contract employees x 24 x 83.3 = annual hrs.

Example 1: Company C has an average of 6 contract employees paid semi-monthly over a reporting year, the reportable hours would be as follows:

$$6 \text{ persons} \times 83.3 \text{ hours/period} \times 24 \text{ periods} = 11,995.2 \text{ hours}$$

For drilling and completion operations, the rig days on hole can be used as the basis for estimating person-hours on site.

$$\frac{24 \text{ hour drilling}}{\text{on location} \times 12 \text{ hours/day}} = [(\text{normal rig crew} \times 2) + \text{auxiliary personnel}] \times \text{days}$$

Activity

Hours/\$ million expended

Geophysical	12,000
Drilling and completions	6,250
Facilities and Pipeline Construction	4,500
Well site Abandonment/Reclamation	9,000
Field Operations*	8,500

Field operations include all contract operating, electrical and mechanical maintenance, workovers, fluid transportation, inspections, and site maintenance activities.

Example 2: Company D has expended \$2.4 million on seismic, \$18 million on drilling and completions and \$8 million on field operations. The estimated contractor hours would be $(2.4 \times 12,000) + (18 \times 6,250) + (8 \times 8,500) = 209,300$ person-hours

For construction projects where actual hours are not available, but the percentage breakdown of labour and materials by AFE, contract, or purchase order is known, the number of hours can be calculated by dividing the labour component by a weighted average labour rate of \$43.65/hr. For estimating purposes, a 50 per cent allocation of labour and materials in AFE's has been used.

Example 3: Company E has an AFE for a construction project with a total value of \$1.5 million. The estimated contractor person-hours would be:

$$\frac{\$1,500,000}{2} \times \frac{1}{\$43.65} = 17,241.4 \text{ person-hours}$$

Where a total Company activity budget is known (e.g. Geophysical, Drilling and completions, etc.) the following labour-component percentages can be used to determine the dollar value.

Activity	% Labour of Budget
Geophysical	52
Drilling and completions	27
Facilities and Pipeline Construction	20
Well site Abandonment/Reclamation	39
Field Operations*	37

*Field operations include all contract operating, electrical and mechanical maintenance, workovers, fluid transportation, inspections, and site maintenance activities.

The result can be divided by a weighted average labour rate of \$43.65/hr. to determine the total number of contractor hours attributable to that activity.

Example: Company F has a geophysical budget of \$6 million for the Reporting Year. The estimated contractor person-hours (p-hrs) attributable to geophysical projects would be:

$$(0.52 \times \$6,000,000) = \frac{\$3,120,000}{\$43.65} \text{ (labour cost)} = 71,477.7 \text{ p-hrs (labour rate)}$$

Marine Installations

Installations: POB (Personnel on Board) x 12 hours x No. of days of operation / month

Vessels: POB x 12 hours x No. of days operation / month. Operator who has vessel under contract reports statistics.

Aviation: (No. of passengers moved/month x average flight time to installation) + (aircraft support personnel and crew monthly hours worked) where:

- Operations are shared, total aircraft support hours are divided by the number of different aircraft users,
- Each operator reports statistics for its people being moved, and
- Aviation statistics are reported for injuries on route as well as injuries that occur to occupants of aircraft during take off and landing.