

Standard for the Classification of Occupational Injuries and Illnesses  
September – 2014

1

<b>AECI LIMITED</b> <b>GROUP SHE</b>		Revision <b>9</b>	Reference <b>AS 3</b>
<b>DOCUMENT TYPE: STANDARD</b>		<b>DATE: SEPTEMBER 2014</b>	
<b>TITLE:</b> <b>THE CLASSIFICATION OF OCCUPATIONAL INJURIES AND ILLNESSES</b>		<b>PAGE 1 OF 26</b>	
<b>COMPILED BY:</b> DR A B KOTZE		<b>AUTHORISED BY:</b> GROUP MANAGER TECHNOLOGY & SHEQ :	
<b>CONTENTS</b> 1. INTRODUCTION 2. PERFORMANCE INDICES 3. DEFINITIONS 4. ACCIDENT INVESTIGATION, CLASSIFICATION & RECORDING 5. RECORD KEEPING 6. REPORTING APPENDIX A			

2

## **1. INTRODUCTION**

AECI's objective is the prevention of all work-related injuries and illnesses. If we are to achieve our objective we need to measure our performance.

There is no universally accepted system to measure safety and health performance. We have adopted the "Record Keeping Guidelines for Occupational Injuries and Illnesses" under the US Occupational Safety and Health Act 1970 (OSHA) as the basis for classifying and recording work related injuries and illnesses across our businesses. This is the most consistent recording and classification system in use internationally and is considered by AECI as the one most appropriate for its businesses.

In addition to aligning our safety and health classification with an international standard it also makes health and safety performance more immediately understandable.

The OSHA system, through the capture and investigation of both injuries and illnesses, provides an accurate measure of progress towards our objective and will ensure that uniform processes are applied everywhere we operate.

This standard explains the application of the AECI reporting requirements.

### **Which work-related injuries and illnesses should you record?**

You must record any **significant work-related injury or illness** that is diagnosed by a physician or other licensed health care professional.

You must record any work-related case involving cancer, chronic irreversible disease, a fractured or cracked bone, or a punctured eardrum.

Record those work-related injuries and illnesses that result in:

- death,
- loss of consciousness,
- days away from work,
- restricted work activity or job transfer, or
- medical treatment beyond first aid.

AECI's key performance indicators will be:

- The Fatality Incident Rate (FIR)
- The Lost Time Incident Rate (LTIR)
- The Non-lost Time Incident Rate (NLTIR)
- The Total Recordable Incident Rate (TRIR)

All incident rates will be expressed as the number of cases per category reported per

200,000 hours worked. (The 200,000 hours relates to the normal hours worked by 100 persons in a year. It is thus an approximation to the percentage of the workforce being injured or made ill per year).

Although not required to be reported to Group Office, it is most important that all first aid and near-miss cases continue to be reported and managed at a local level. Through the monitoring of such reports, underlying behavior patterns which may ultimately lead to reportable incidents can be determined at an early stage and pre-emptive corrective action taken.

Whilst the new recording system replaces all previous classifications for injuries and illnesses, it does not supplant regulatory or other SHE system reporting requirements.

## **2. PERFORMANCE INDICES**

### **Fatality Incident Rate (FIR)**

All work related fatalities to employees or contractors must be reported to Group Office within 24 hours. Each report will include brief details as the root cause of the fatality and the steps taken to prevent a recurrence.

AECI will derive a Group Fatality Incident Rate (FIR)

### **Lost Time Incident Rate (LTIR)**

This is roughly equivalent to the old concept of a disabling injury rate. Fatalities are not counted in this total but occupational illnesses involving lost time or restricted work are included.

Each LTI report will be accompanied by brief details as to the root cause and the steps taken to prevent a recurrence.

AECI will derive a Group Lost Time Incident Rate.

### **Non-lost Time Incident Rate (NLTIR)**

This is roughly equivalent to the old concept of a classified injury rate. However Lost Time Incidents are excluded. Occupational illnesses where there is no lost time or restricted work are included.

AECI will derive a Group Non-lost Time Incident Rate.

### **Total Recordable Incident Rate (TRIR)**

This is the sum of fatal, lost time and non-lost time incident rates.

### **Incident Rate**

This index expresses the number of injuries or illnesses sustained against the total number of hours worked during a given time period. The incident rates used are Fatality Incident Rate (FIR), Lost Time Incident Rate (LTIR), and Non-Lost Time Incident Rate (NLTIR). These are derived as follows:

$$\frac{\text{Number of incidents (FI etc) *}}{200000} \\ \text{Total Person} \\ \text{Hours}$$

The 200,000 used in the incident rate calculation is derived from the annual number of hours worked by 100 people (assuming fifty x 40 hour weeks are worked per annum).

The incident rate therefore is approximately equivalent to the percentage of the workforce that sustains injuries or illnesses per year.

### **3. DEFINITIONS**

#### **Contractor**

Any non-AECI person working on behalf of an AECI business purposes and receiving his or her instructions from another non-AECI person.

***Principle:***

Injuries and illnesses incurred by contractors shall be investigated and reported on the same basis as Company employees. In the case of illnesses, particular attention will be required to ensure that illnesses which are reported are caused or aggravated by work on Company premises or on behalf of the Company and that the impact of any external factors are carefully assessed.

#### **Disputed Cases**

An injury or illness where, following investigation and application of the standard, there is insufficient evidence relating to the circumstances of the injury or illness to confirm or exclude a probable causative or aggravating exposure or activity in the work environment.

However, where additional information subsequently becomes available relevant to determination of work attribution or recordability, the case may be reclassified.

The AECI Group Manager: Technology & SHEQ will arbitrate on injury and illness classification when required to.

#### **Employee**

A person on the AECI payroll and for whom workers' compensation premiums are paid.  
A non-AECI person working under the full time supervision of and receiving directions from an AECI employee.

Full time, part time and casual employees shall be included.

Employee status generally exists when the employer supervises the output, product or result to be accomplished by the person's work, and also the details, means, methods and processes by which the work objective is accomplished.

***Principle:***

Injuries and illnesses shall be allocated to the Business that normally employs that employee unless, at the time of the occurrence of injury or illness, the employee is reporting to, or directly supervised by, another AECI business or function. In this case the latter business or function shall assume responsibility for the injury or illness and the employee's hours should be allocated to that business.

**Employer**

Means any person who employs or provides work for any person and remunerates that person or expressly or tacitly undertakes to remunerate him or her. A Labour Broker is specifically excluded from this definition.

**Fatal Incident (FI)**

This is an incident within the workplace that results in the death of an employee or a contractor.

**First Aid Treatment**

Any one-time treatment and subsequent observation of minor scratches, cuts, burns, splinters and so forth which do not ordinarily require professional medical care. Such treatment and observation are considered first aid even though a physician or registered professional personnel may administer it.

Although it is not necessary to report these incidents to Group Office it is most important that first aid and near miss cases continue to be reported and managed at a local level. Through the monitoring of such reports underlying behavior patterns, which may ultimately lead to reportable incidents, can be determined at an early stage and pre-emptive corrective action taken.

In general, first aid treatment can be distinguished from medical treatment as follows:

- First aid is usually administered after the injury or illness occurs and at the location (*e.g.*, workplace) where the injury or illness occurred.

- First aid generally consists of one-time or short-term treatment (More than three treatments) Thereafter the person must be referred to a medical practitioner.
- First aid treatments are usually simple and require little or no technology.
- First aid can be administered by people with little training and even by the injured or ill person.
- First aid is usually administered to keep the condition from worsening, while the injured or ill person is awaiting medical treatment.

We consider the listed treatments to be first aid regardless of the professional qualifications of the person providing the treatment; even when these treatments are provided by a physician, nurse, or other health care professional, they are considered first aid for recordkeeping purposes.

We do not distinguish, for recordkeeping purposes, between first aid and medical treatment cases on the basis of number of treatments administered. We do not distinguish between various kinds of health care professionals, assuming they are operating within their scope of practice.

**If the incident required only the following types of treatment, consider it first aid.**

**Do NOT record the case if it involves only:**

using non-prescription medications at non-prescription strength;

- administering tetanus immunizations;
- cleaning, flushing, or soaking wounds on the skin surface;
- using wound coverings, such as bandages, Band Aids™, gauze pads, etc., or using SteriStrips™ or butterfly bandages;
- using hot or cold therapy;
- using any totally non-rigid means of support, such as elastic bandages, wraps, non-rigid back belts, etc.;
- using temporary immobilization devices while transporting an accident victim (splints, slings, neck collars, or back boards);
- drilling a fingernail or toenail to relieve pressure, or draining fluids from blisters;
- using eye patches;
- using simple irrigation or a cotton swab to remove foreign bodies not embedded in or adhered to the eye;
- using irrigation, tweezers, cotton swab or other simple means to remove splinters or foreign material from areas other than the eye;
- using finger guards;
- using massages;
- drinking fluids to relieve heat stress.

### **Hours Lost**

Lost time due to workplace fatalities and lost workday injuries or illnesses suffered by employees and contractors. This is a measure of the severity of the incident. It is not a measure of lost production.

The hours lost are determined by multiplying the number of lost days, following the day the incident occurred, by the number of hours normally worked per shift.

*Note: Weekends are included even though the employee may not normally be required to work weekends.*

## **Incident**

### **t**

Means an occurrence as contemplated in section 24(1) of the Occupational Health and Safety Act (Act 85 of 1993 as amended).

## **Lost Time Case**

An employee or contractor is unable to perform his normal work on a scheduled shift, other than the shift on which the injury occurred, because of occupational injury or illness. (This includes situations where overtime comprising a full day was scheduled but unable to be worked due to the injury or illness). Lost time cases include removals from normal work triggered by biological monitoring results.

*Note: Lost workdays include both days away from work and any days of restricted work activity or both.*

Lost workdays **do not include** situations where the person does not attend work (on either their normal job or restricted work) for reasons unrelated to the nature and severity of the injury. e.g.:

- Refusal to attend work.
- Attendance for medical investigations or doctor's appointments
- Periods of observation in hospital (where no other treatment is given or diagnosis made which would otherwise lead to classification)
- Prolonged travel time to and from work with attendant specific transportation requirements render attendance at work on restricted work activities impractical.
- Strike or work stoppage
- Pre-arranged leave, leisure days or scheduled days off
- Plant closure (e.g. Christmas plant closure)
- Public holidays (where the person was not already scheduled for work).
- A person was medically capable of performing either restricted work activities or their normal work but had been certified unfit for work for precautionary or related reasons.

However, a lost time case may still arise where a person does attend work but for purposes other than the performance of useful and meaningful work activities e.g.:

- Attend incident investigation, review by occupational health nurse or physician, or completion of workers compensation claim form.

- Restricted work activities.

**How do you decide if the case involved restricted work?**

Restricted work activity occurs when, as the result of a work-related injury or illness, an employer or health care professional keeps, or recommends keeping, an employee from doing the routine functions of his or her job or from working the full workday that the employee would have been scheduled to work before the injury or illness occurred.

Lost workdays and days of restricted work cease upon:

- Return to normal duties
- Permanent transfer (or implementation of permanent work restrictions)
- Retirement or termination of the employee for reasons other than the injury or illness
- Death of the employee

If the death is a result of the injury or illness, the case becomes reportable as a fatality and its previous classification (e.g. lost time case) and the number of lost workdays recorded against it are removed from the record.

Where an employee retires or is terminated because of work-related injury or illness, the number of days that the person would have been unable to perform their normal work activities had they not left the employ of the Company should be estimated and recorded.

Where lost workdays or days of restricted work cross the end of the Company year, an estimate of the number of lost work days (or days of restricted work) should be made and entered into the data for the year in which the injury or illness was reported. When the period of lost days or days of restricted work cease a retrospective adjustment should be made.

A single lost workday should be counted for every shift or work period lost up to twelve hours. Shifts exceeding twelve hours should be counted in twelve-hour increments.

For example a lost shift or work period of either eight or twelve hours would count as single lost workday. Similarly a lost period of four hours would also count as a full lost workday if that was the normal work period of a part time employee. Where the normal shift was 16 hours, then two lost workdays would be recorded.

Days of restricted work should not be aggregated. For example in the case of a person who is unable to work for one quarter of their normal work shift for four days, four days of restricted work would be recorded not one lost workday.

***Principle***

Injuries involving a loss of consciousness are counted as **Lost Time cases**, as are illnesses such as noise induced hearing loss, fibrotic lung disease, allergic disorders, etc., even though they may not result in lost workdays, restricted work or actual medical treatment.

### **Non-lost Time Case**

An injury or illness where there is no lost time or restricted work but where medical treatment must be administered by a physician or other registered personnel (e.g. nurse) under the standing orders or professional supervision of a physician. For the purposes of this definition the number of visits is irrelevant. Medical treatment also includes treatment (other than treatment at a first visit) provided by a physiotherapist or chiropractor.

For reporting purposes Non Lost Time Incidents include situations where medical treatment is indicated by the nature of the injury but for some reason has not been taken or obtained.

Medical treatment generally includes:

- Treatment of infection.(including complications of a first aid injury)
- Application of sutures (stitches).
- Use of prescription medications.
- Cutting away dead skin (surgical debridement).
- Positive X-ray diagnosis e.g. fractures, broken bones (including hairline fractures).
- Admission to hospital or medical facility for treatment.
- Chipped or broken teeth.
- Complications of an injury requiring medical treatment e.g. treatment of allergic reaction or infection.

### **Normal Work**

The total scope of the work an employee has been hired to do and as specified within his job description. Whether an employee may or may not be required to undertake a specific section of his normal work, as a matter of routine, is irrelevant.

### **Restricted work**

A work restriction occurs when the employer keeps the employee from performing one or more routine functions of the job, or from working the full workday the employee would otherwise have been scheduled to work.

If the employee is able to perform all of his or her routine job functions (activities the employee regularly performs at least once per week), the case does not involve restricted work. Loss of productivity is not considered restricted work.

### **Restricted Work Case**

Occurs when the employee, because of the result of a job related injury or illness is physically or mentally unable to perform his/her normal work during all or any part of the scheduled workday or scheduled shift. For the purpose of this definition, overtime planned before the illness or injury occurred is included as part of the scheduled workday or scheduled shift.

Restricted work cases will include:

- A change in role or work activities after the injury to prevent restriction of work activity  
e.g. reassignment of some aspects of a person's job or assigned tasks to another person after the injury (e.g. maintenance activities).

Restricted work does not include:

- Precautionary transfer (other than transfer necessitated by the results of biological monitoring) unless subsequently proved justified by the injury or illness (see example).
- Inability to attend work for part of a day to attend doctor's appointments etc.
- Removal (job transfer) of an asymptomatic employee for administrative exposure control purposes. In some cases employers voluntarily rotate employees from one job to another to reduce exposure to hazardous substances; job rotation is an administrative method of reducing exposure that is permitted.

### **Examples**

- A maintenance technician / mechanic may receive work assignments on a daily basis. If the technician cannot be assigned to all normal tasks because of injury or illness, even though he or she could be assigned some tasks they could perform, this would be a restricted work case because there is a restriction on normal assignability.
- An injured person works on a fixed job rotation through three areas of the plant. If because of injury he is unable to fully perform the tasks required during his next scheduled rotation ("Area B"), a restricted work case would arise. However if he was able to perform the tasks associated with the next scheduled rotation ("Area C") a restricted work case would not arise.
- A person develops a rash and is removed from their work area for two days until the rash can be diagnosed:
  - The rash is considered to be due to a reaction to food and no restrictions were required.  
Precautionary transfer

- The rash was considered to be due to chemical exposures at work and restrictions were indicated.  
Restricted work case
- A person develops or reports mild back pain at work:
  - The manager restricts their work activities for the remainder of the shift resulting in complete resolution by the next shift.  
Not reportable
  - The manager restricts their activities. Review of work capability by professional resources is arranged at the first practical opportunity (two days).
  - The Managers restrictions are confirmed.  
Reportable
  - Indications for restrictions are not confirmed.  
Precautionary transfer

***Principle***

Typically this is work which has been specifically created for an injured employee to enable him / her to be kept at work. If carefully selected and in accordance with professional medical advice, it can speed up the recovery process whilst minimising lost workdays. However, retaining an employee at work in a restricted work capacity does not minimize the severity of the original injury or prevent it from being reportable as a lost time incident.

**4. ACCIDENT INVESTIGATION CLASSIFICATION AND RECORDING**

The responsibility for investigation, classification and recording of injuries and illnesses rests with the employer. The employer may delegate the responsibility for record keeping to someone else, or may rely on the advice of a doctor, but the responsibility for the decision is ultimately his.

There are five steps that should be addressed as part of any incident investigation:

- Determine whether a case occurred; that is whether there was a death, illness or an injury.
- Establish that the case was work related i.e. that it resulted from an event or exposure in the work environment.
- Decide whether the case is an injury or an illness.
  - If the case is an illness then make use of the guidance contained in 4.4.1 and Appendix A.
  - If the case is an injury, decide if it is reportable based on the finding of medical treatment, loss of consciousness, restriction of motion or transfer to another job.

Where appropriate, the evidence used in an investigation may include statements from the employee, fellow employees and witnesses.

Relevant additional information (e.g. the person's work activity with other employers or off the job activities) may be obtained and recorded in situations where work relationship is uncertain.

Information relating to a person's medical history relevant to the case may also be obtained through the site or business occupational health service. The employee's prior written informed consent shall be obtained to ensure that medical confidentiality is appropriately respected.

#### **4.1 Establishment of Work Relationship**

An injury or illness is considered work-related if an event or exposure in the work environment caused or contributed to the condition or significantly aggravated a pre-existing condition. The work environment is primarily composed of:

- 1) the employer's premises, and
- 2) other locations where employees are present as a condition of their employment.

When an employee is on the employer's premises, a work relationship is presumed. When an employee is off the employer's premises, a work relationship must be established.

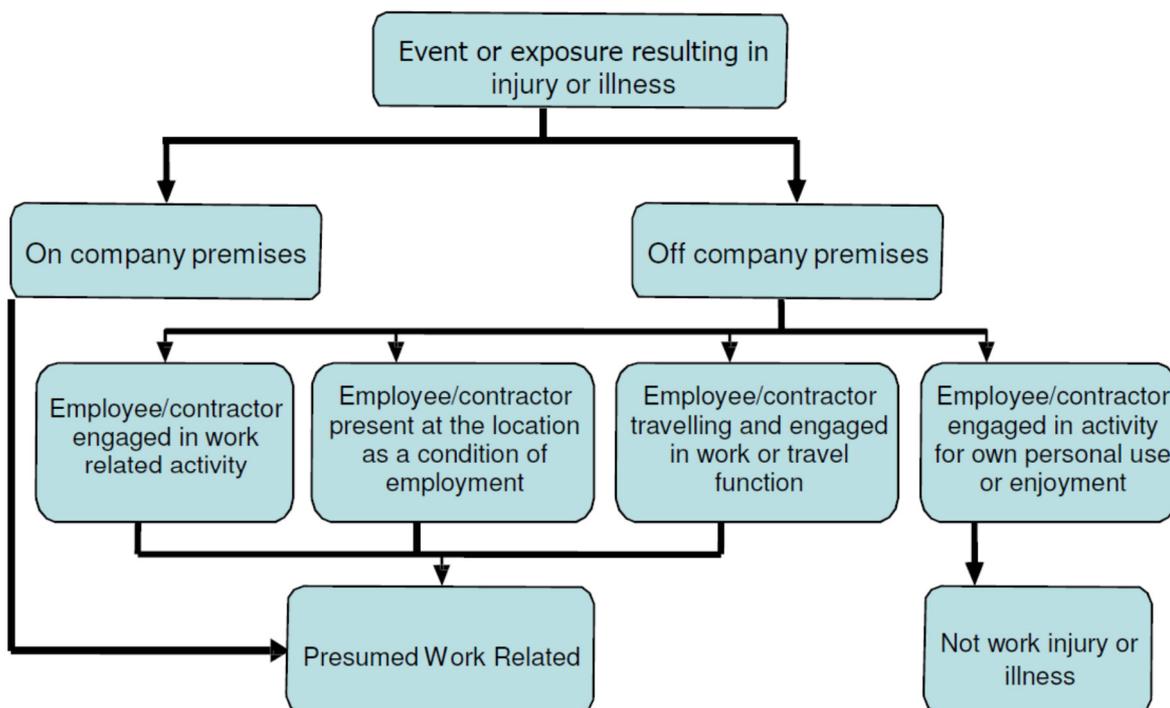
#### **Exposure**

The reasonable likelihood that a worker is or was subject to some effect, influence, or safety hazard or in contact with a hazardous chemical or physical agent at sufficient concentration and duration to produce a work related illness or injury.

#### **Work Environment**

The work environment comprises Company premises and other locations where employees are engaged in work related activities for the benefit of AECI or are present as a condition of their employment or as otherwise directed by their management.

### **Figure 1: Process for Establishing Work Relationship**



#### 4.1.1 Work Environment

Company premises comprise the total Company establishment.

- Hallways, roads, green areas, rest rooms/toilets and cafeterias
- That part of a leased building on a non-company owned site, which is occupied by the Company.
- All parts of a Company owned and occupied building or site except those parts to which the general public has unrestricted access (e.g. shops or a shopping area in an office building).
- In the case of site project work, that portion of a customer site on which AECI is carrying out, under its own direct control, a work related activity, even if such activity is ultimately for the benefit of third parties.

The guiding principle in the classification and recording of injuries and illnesses occurring on Company premises is the employment status at the time - not the activities being performed.

Injuries and illnesses occurring on Company premises including cases where a person is present on Company premises outside their normal working hours are presumed to be work related except where:

- The employee or contractor is present on Company premises as a member of the public.
- The illness or injury is a recurrence of an underlying condition, or is the manifestation of an illness or injury that was caused outside Company premises.

- The injury or illness is sustained in a Company parking lot (unless the person is engaged in work activity, e.g. sweeping, repairs, loading a car with sales material or commencing travel, on behalf of the Company).
- The injury or illness is sustained in recreational facilities, e.g. playing fields or gymnasium. Unless work activity is being performed, e.g. maintenance activities or the person has been requested by management to partake in such activities as an AECI representative.

**Example 1**

An employee during lunch break in an on-site canteen:

- Slips on a wet floor breaking his / her wrist  
Reportable injury

**Example 2**

An employee falls and fractures an ankle on their day off when:

- Calling into the office to pick up their pay

Reportable injury

- Purchasing paint from a trade centre to paint the house

Not reportable

- Attending a site open day as a member of the public

Not reportable

**4.1.2 Events or Exposures off Company Premises**

Unlike injuries and illnesses which occur on Company premises, when an employee is off Company premises and suffers an injury or an illness exposure work relationship must be established (not presumed).

The guiding principles in determining the classification and recordability of injuries and illnesses arising off Company premises is whether the person was engaged in a work activity or whether the injury or illness occurred in the work environment.

The work environment in these circumstances includes locations where employees are engaged in job tasks or work related activities or places where employees are present due to the nature of their job or as a condition of employment.

### **4.1.3 Travel**

Employees who travel on Company business shall be considered to be engaged in work activities all the time they spend in the interests of the Company. This includes but is not limited to:

- Reasonably direct travel to and from customer contacts and Company premises (other than travel from home to the normal place of work).
- Entertaining, or being entertained, for the purpose of transacting, discussing or promoting business.

Work related activities begin when the person leaves home if the employee does not first report to their usual place of work. If the person reports to their usual place of work, then travel status begins when they leave their usual place of work to commence the trip and concludes upon return to point of origin of the trip.

Travel between home and normal place of work is not work-related. This also applies to travel between a hotel at which the employee may be staying during business travel "home away from home" and a fixed place of work e.g. daily travel between a hotel and the Company head office is not work related.

Travel directly between home and another place of work, e.g. a customer's premises or another Company site, are considered work-related. This also applies to direct travel between a hotel at which the employee is staying during business travel "home away from home" and differing customer sites or Company premises.

Work related travel does not include:

- Deviation from a reasonably direct route of travel (side trip for vacation or other personal reasons).
- Normal living activities such as eating, sleeping or recreation other than for work purposes. For example, activities once a traveler has checked into a hotel at the conclusion of the day's business activities (or in the case of a function/conference held at a hotel where the person is staying - return to room at conclusion of all work and Company sponsored entertainment activities).
- If an employee of a non-AECI business, operating on a multi-user site, has an accident whilst travelling from the outer access way to his normal place of work, the responsibility for investigating the incident shall rest with the site custodian. Unless proven otherwise, the categorisation of the outcome of such investigation will normally be "off the job".

### **4.1.4 Working from Home**

The work environment is limited to situations where:

- Work from home on a routine basis and/or for substantial periods is an inherent requirement of that position (as specified in either a job description or Written agreement) or other specific written arrangements have been made Between the Company and an individual employee to permit a substantial component of the job to be performed from the employee’s home; and
- Work is being done during normal working hours and in a space specifically dedicated as a work area.

#### 4.1.5 Multiple Offices

Staff may establish only one base of operations. Staff with a home office and a work office shall designate one of them as their official work office. A person is considered at work when they are in that office, and any time when they leave that office in the interests of the Company.

A similar principle shall also apply to employees who have more than one work office.

#### 4.1.6 Errands

A work relationship would be limited to errands where the employee was engaged in a work-related activity or their presence at a location was required by their job, e.g. a supervisor directed errand.

#### 4.1.7 Off-Site Recreational Activities

A work relationship exists during participation in off-site recreational entertainment activities if they arise from activities connected with the person’s job or for which they are required to participate and irrespective of whether or not they are paid by the Company.

<b>Example</b>	
An employee fractures:	
• A wrist as a result of a fall at a Company golf day with customers	- <u>Reportable injury</u>
• A rib whilst go-karting at a team building <u>injury</u> course	- <u>Reportable</u>
• A wrist as a result of a fall at a <u>reportable</u> social club golf day (even if the Company provided some sponsorship or equipment)	- <u>Not</u>

#### 4.1.8 Personal Activities during Working Hours

A work relationship does not exist for personal activities conducted off site e.g.

shopping during lunch break or a personal doctor's appointment.

### **Meals**

A work relationship applies to meals taken in an off-site work environment e.g. company canteen, a customer's premises, another Company site, or at a work luncheon or dinner at a restaurant or functional centre e.g. conference or lunch with a customer.

#### **Example 1**

An employee visiting or working at a customer site fractures an ankle during: :

- Lunch at the customer's canteen - Reportable injury
- A business lunch with the customer at an Injury off site restaurant - Reportable
- At a local hamburger shop where an reportable employee or group of employees have taken themselves for lunch - Not

## **4.2 Exposure Relationship**

In most cases the relationship of the injury or illness to exposure within the work environment is clear. However there are situations where difficulties may arise or where a standardised approach is required.

### **4.2.1 Aggravation or Recurrence**

The question to be asked is whether the person either developed a new health problem (injury or illness) or aggravated an existing or underlying problem as a result of their work activities.

It is sometimes difficult to differentiate a new case from a recurrence of a previous condition (i.e. something which would have happened anyway as part of the normal course of an underlying or pre-existing condition).

The aggravation of a previous injury almost always results from some new incident such as a slip, trip, fall or sharp twist. When work-related these should be reported as new cases.

Each new occurrence of an occupational illness should be reported separately. Certain illnesses may have prolonged effects that recur over time. However, where a pre-existing illness is worsened by a new exposure e.g. further noise exposure resulting in worsening hearing loss, asthma worsened by exposure to irritants, these should be recorded as new cases.

### **4.2.2 Specific Job Tasks**

For a case to be reportable, the person must simply be in pay status. It does not mean that the person must be involved in some specific task at the time the injury or illness exposure.

#### **4.2.3 Identifiable Events**

Usually there will be an identifiable event or exposure although this is not necessary for recording purposes. If it seems likely that an event or exposure in the work environment either caused or contributed to the case, the case is reportable even though the exact time or location of the particular event or exposure cannot be identified.

#### **4.2.4 Reporting Delay**

If it is established that a reportable injury or illness did occur, it must be included even if there was no record made of it at the time. The actual date of awareness must be recorded.

#### **4.2.5 Activities of Normal Daily Living**

If an injury occurs at work because of a pre-existing condition and occurs during normal daily living activities, it is not reportable.

Normal daily living activities include walking (on even ground), standing, sitting, turning, ascending or descending stairs and normal bending such as tying a shoe lace, picking up light weight items such as pencil or paper clip. Examples may include spontaneous bone fracture in a person with underlying bone disease.

Normal daily living activities do not include twisting or reaching or bending in clearly unergonomic circumstances (e.g. to pick up an item under a desk) or where there is a trip or slip.

However if there is no pre-existing condition and the injury occurs during normal daily living activities the condition is potentially reportable.

#### **4.2.6 Conditions acquired away from Work**

In some cases, conditions acquired away from work may subsequently surface at work (e.g. heavy manual activity away from work might cause a backache to surface at work).

If there is evidence to support this situation then the case is not reportable. The relevant evidence should be included in the incident investigation. If employer doubts the validity of an employee's alleged work related illness or injury and there is no substantive proof or medical evidence supporting the allegation, the employer need not record the case.

### **4.3 Special Cases**

#### **4.3.1 Back Injuries, Hernias, Heart Attacks**

These conditions should be subject to the same processes to determine cause as any other condition. Back injuries should generally be classified as injuries because they are usually triggered by an instantaneous event.

#### **4.3.2 Insect Bites**

The results of these are reportable if the employee was engaged in a work-related activity that exposed him to such an event, and the employer should reasonably have foreseen the possibility of an occurrence.

If however during normal body movements such as walking, sitting and eating an employee is stung by an insect, and the presence of the insect could not reasonably have been anticipated or prevented by AECl, the event would not be reportable in terms of AECl's requirements.

It may however be reportable in terms of other legislation that may from time to time be enacted e.g. COID or OHSAct.

#### **4.3.3 Exposure to a Toxic Agent Where No Adverse Health Effect Results**

These cases are not reportable, except where the exposure results in a biochemical abnormality or where the measurement of the agent or its metabolite in blood, body fluids or exhaled air exceeds a biological exposure standard (legislated or in-house standard). The case will then be reportable as an occupational illness refer 4.4.1 and Appendix A.

#### **4.3.4 Skylarking / Altercations / Horseplay**

Injuries or illnesses resulting from altercations (fights) and horseplay on Company premises (whether or not arising out of employment matters) are reportable if they occur in the work environment during scheduled working hours.

#### **4.3.5 Fault**

Fault is not relevant to the determination of reportable cases.

#### **4.3.6 Burns**

Burns will be treated just as other types of injury are, *i.e.*, minor burn injuries will not be recordable, while more serious burns will be recorded because they will involve medical treatment. For example, a small second degree burn to the forearm that is treated with nothing more than a bandage is not recordable. A larger or more severe second degree burn that is treated with prescription creams or antibiotics, or results in restricted work, job transfer, or days away from work is recordable. The vast majority of first degree burns and minor second degree burns will not be recorded because they will not meet the recording criteria, including medical treatment. However, more serious first and second degree burns that receive medical treatment will be recorded, and third degree burns should always be recorded because they require medical treatment.

#### **4.3.7 Loss of Consciousness**

Thus, any time a worker becomes unconscious as a result of a workplace exposure to chemicals, heat, an oxygen deficient environment, a blow to the head, or some other workplace hazard that causes loss of consciousness, the employer must record the case. The exceptions to the presumption of work-relationship allow the employer to exclude cases that "involve signs or symptoms that surface at work but result solely from a non-work-related event or exposure that occurs outside the work environment." This exception allows the employer to exclude cases where a loss of consciousness is due solely to a personal health condition, such as epilepsy, diabetes, or narcolepsy.

### **4.4. Deciding if a Case is an Injury or Illness (for further detail refer Appendix A)**

**Occupational injury**

Any injury such as a cut, fracture, sprain, amputation, etc. which resulted from a work accident or a single instantaneous exposure in the work environment. (This includes all work related back cases irrespective of nature of the cause or speed of onset.) A single instantaneous exposure to chemicals is classified as an injury.

**Occupational illness**

Any abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to environmental factors associated with employment. Acute and chronic illnesses or diseases caused by inhalation, absorption, ingestion or direct contact are included.

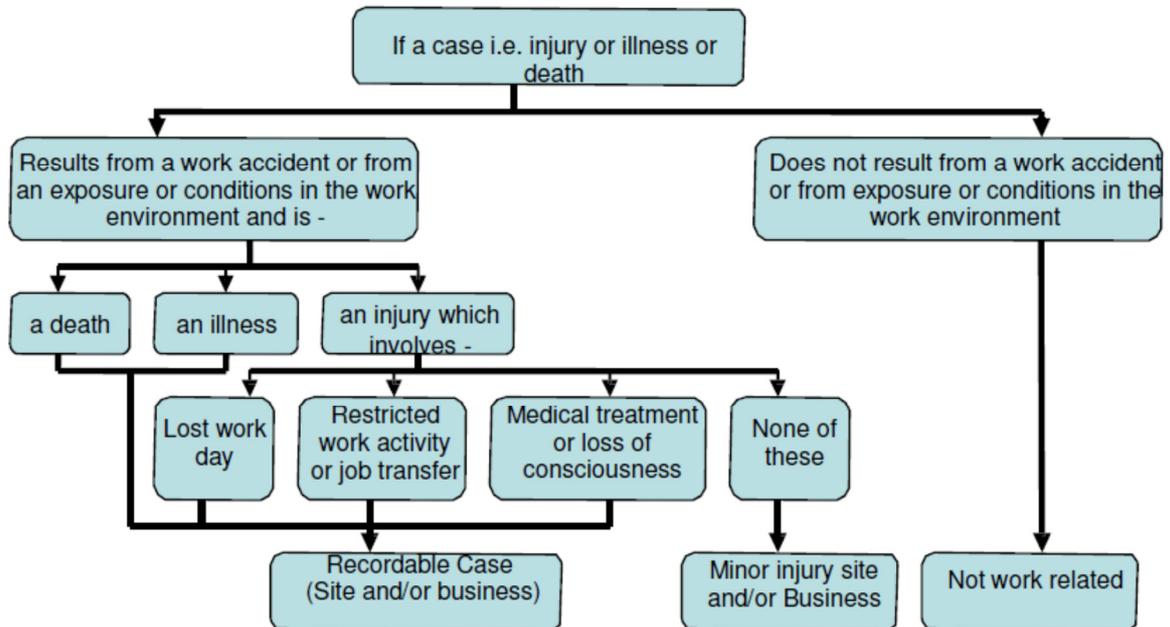
Whether the case is an injury or an illness is determined by the nature of the original event or exposure that caused the case, not by the resulting condition. **The concept of an instantaneous event is the important determinant.**

Injuries are caused by **instantaneous** events in the work environment. Cases resulting from anything other than instantaneous events are considered illnesses (except back cases as above).

The concept of illness includes acute illnesses which result from exposures or activities of short duration (but which are not instantaneous). Some conditions may be classified as either an injury or an illness (but not both) depending upon the event which caused the condition.

Where there are complications to an injury e.g. infection of a laceration, the determination of the case is based upon the original event i.e. an occupational injury.

### Illnesses



**Examples (all occurring within the work environment)**

1. A person develops loss of hearing from:
  - An explosion  
occupational injury
  - Long term exposure to excessive noise  
occupational illness
2. A person develops an inflamed tendon (tendonitis) in the arm from:
  - A direct blow  
occupational injury
  - Repetitive use of the arm  
occupational illness
3. A person develops:
  - A skin burn from a sulphuric acid splash  
occupational injury
  - Dermatitis from skin contact with an irritant  
occupational illness
  - A skin burn from wearing contaminated clothing  
occupational injury

Identification of occupational illnesses may be difficult. Many illnesses are not easily detected and it may be difficult to determine whether an illness is work related. Also some employees may not report illnesses because they think their illness is not serious or work-related.

It is sufficient for the exposure to be a continuing and / or aggravating factor for the case to be reportable as an occupational illness.

A diagnosable condition must be established for an occupational illness to be recorded. An occupational medical practitioner must make the diagnosis. Medical treatment however is not restricted to that received from or by a Company physician.

Where minor symptoms are reported which, following investigation, are considered to be caused or aggravated by work activities but which do not conform to a diagnosable illness (see 4.4.1 and Appendix A), they may be recorded in local systems as "Minor symptom cases".

Cases that require a once off medical treatment or result in either restricted work activity on any subsequent shift or lost-work days will not normally be included in this category but rather as Non-lost Time, Restricted or Lost Workday cases.

However, all potentially reportable occupational illness cases should be confirmed by the Group Medical Adviser, or an occupational medical practitioner delegated by the Group Medical Adviser.

#### **4.4.1 Classification of Occupational Illness (for further details refer Appendix A)**

##### **Skin diseases or disorders**

Skin diseases or disorders are illnesses involving the worker's skin that are caused by work exposure to chemicals, plants, or other substances.

Examples: Contact dermatitis, eczema, or rash caused by primary irritants and sensitizers or poisonous plants; oil acne; friction blisters, chrome ulcers; inflammation of the skin.

##### **Respiratory conditions**

Respiratory conditions are illnesses associated with breathing hazardous biological agents, chemicals, dust, gases, vapors, or fumes at work.

Examples: Silicosis, asbestosis, pneumonitis, pharyngitis, rhinitis or acute congestion; farmer's lung, beryllium disease, occupational asthma, reactive airways dysfunction syndrome (RADS), chronic obstructive pulmonary disease (COPD), hypersensitivity pneumonitis, toxic inhalation injury, such as metal fume fever, chronic obstructive bronchitis and other pneumoconiosis.

##### **Poisoning**

Poisoning includes disorders evidenced by abnormal concentrations of toxic substances in blood, other tissues, other bodily fluids, caused by the ingestion or absorption of toxic substances into the body.

Examples: Poisoning by lead, mercury, cadmium, arsenic, or other metals; poisoning by carbon monoxide, hydrogen sulfide, or other gases; poisoning by benzene, benzol, carbon tetrachloride, or other organic solvents; poisoning by insecticide sprays, such as parathion or lead arsenate; poisoning by other chemicals, such as formaldehyde.

In some cases employers voluntarily rotate employees from one job to another to reduce exposure to hazardous substances; job rotation is an administrative method of reducing exposure that is permitted. Removal (job transfer) of an asymptomatic employee for administrative exposure control reasons does not require the case to be recorded because no injury or illness exists.

##### **Hearing Loss**

Confirmed cases of noise induced hearing loss caused or aggravated by work on behalf of the company are reportable.

##### **Audiometry**

- a) Baseline audiograms are to be done on all employees prior to commencement of employment
- b) This will be the employees' baseline (initial) audiogram with the company – All future changes will be calculated from the baseline audiogram.
- c) Reporting of noise induced hearing loss (NIHL) cases: In cases where occupational noise exposure is the probable cause of the PLH shift; report the NIHL case as follows:
  - If PLH shift more than 3.2% report internally as minor illness cases.
  - If PLH shift more than 10% request a diagnostic audiogram from an audiologist and if confirmed then report as a recordable case.

### **All other occupational illnesses**

Examples: Heatstroke, sunstroke, heat exhaustion, heat stress and other effects of environmental heat; freezing, frostbite, and other effects of exposure to low temperatures; decompression sickness; effects of ionizing radiation (isotopes, x-rays, radium); effects of nonionizing radiation (welding flash, ultra-violet rays, lasers); anthrax; bloodborne pathogenic diseases, such as AIDS, HIV, hepatitis B or hepatitis C; brucellosis; malignant or benign tumors; histoplasmosis; coccidioidomycosis.

#### **4.4.2 Prescription Medications**

Prescription medications constitute medical treatment except as a single dose administered on a first visit for minor injury or discomfort.

Prescription medications shall be considered medical treatment unless the use of those medications for that condition falls outside generally acceptable medical standards of treatment for that condition (as determined by the Group Medical Adviser), or is given only for prevention of complications not already present at the time of commencement of treatment.

#### **Non - Prescription Medications**

Non-prescription medicines at non-prescription strength, whether in ointment, cream, pill, liquid, spray, or any other form are considered first aid.

Non-prescription medicines are first aid regardless of the way in which they are used.

#### **4.4.3 Physiotherapy, Chiropractic and other Physical Therapies**

The principle of treatment is firstly to prevent progression of the symptoms or condition and to facilitate improvement. Physiotherapy, chiropractic and other physical therapies directed toward this objective are considered medical treatment (except at first visit).

Interventions directed solely towards prevention of complications or future occurrences e.g. a back education programme would be considered preventative and would not be considered medical treatment.

#### **4.4.4 Decision on Work Capability**

The decision on work capability for classification and recording purposes rests with the employer (line management). Where line management is concerned about the appropriateness of recommendations on fitness for work by a person's treating physician, the Company Occupational Physician may be consulted and shall determine work capability for classification and recording purposes.

This approach is enshrined within the OSHA system upon which our illness and injury recording system is based. Adoption of this principle is important to ensure that our classifications as closely as possible reflect the severity of the injury and that a consistent approach is applied throughout the Company.

For example, if in the view of a Company Occupational Health Practitioner, it would have been medically reasonable for an ill or injured person to return to work on normal duties or meaningful restricted duties, it would not be classified as a lost work day case. This would occur even if the person had lost a workday based upon their treating doctor's advice.

From time to time people may be certified as unfit for work due to factors not directly reflecting the severity of the injury or illness e.g. as a precautionary measure, due to unfamiliarity with the Company's processes, or sometimes because of the time of day the injury occurred. Whilst the application of sound rehabilitation programmes will minimise inconsistencies between the Company's and the treating doctor's view, it is important that in the uncommon situation where there is an inconsistency the Company view prevails for classification purposes. In such cases, it is particularly important to communicate the rationale behind the classification to build and maintain confidence in the integrity of the process.

However line management shall not under any circumstances require a person to perform work duties against medical advice.

## **5. RECORD KEEPING**

### **Illnesses and Injuries**

The following information shall be recorded for each reportable case:

- 1) Date of injury or onset of illness
- 2) Occupation (regular job title or brief description of duties)
- 3) Business, site and location
- 4) Description of injury or illness
- 5) Number of workdays lost or days of restricted work activity
- 6) Summary of the preventative action taken to prevent a recurrence

### **Injuries**

Injuries should be classified under one of the following categories of severity:

- 1) Fatality
- 2) Lost workday case
- 3) Non-lost workday case

### **Illnesses**

Illnesses shall be recorded under the relevant illness type (refer 4.4.1) and one of the following categories of severity:

- 1) Fatality
- 2) Lost workday case
- 3) Restricted work case
- 4) Non Lost Time case
- 5) Minor Illness case

### **Disputed cases**

Injuries or illnesses should be recorded under the category of greater severity. The order of increasing severity is:

- Non Lost Time case
- Restricted work case
- Lost workday case
- Fatality.

Non-lost Time illnesses include (for recording purposes only):

- Illnesses resulting in loss of consciousness
- All other reportable occupational illnesses, e.g. noise induced hearing loss, fibrotic lung disease, or allergic disorders, which do not result in lost workdays or days of restricted work.

## **6. REPORTING**

It is re-emphasised that all injuries and minor symptom cases should be reported at least at a local level. All incidents including near misses should be investigated and corrective actions assigned and implemented. Learning from these incidents should be transmitted to others so actions can be taken towards the Company's objective of preventing all work-related injuries and illnesses.

## **APPENDIX A**

### **Diagnosing of Occupational Illnesses**

A diagnosable condition must be established for an occupational illness to be recorded. An occupational medicine practitioner must make the diagnosis. All potentially reportable illness cases should be confirmed by the Group Medical Adviser, or an occupational medical practitioner delegated by the Group Medical Adviser. All diagnosed occupational illnesses are reportable.

#### **Criteria:**

- Clinical assessment and diagnosis of the medical condition.
- Exposure relationship: The reasonable likelihood that a worker is or was subject to some effect, influence or hazard; or in contact with a hazardous chemical or physical agent AT sufficient concentration and duration to produce a work related illness. Are there possibly any other similar cases in the same work environment?
- Underlying condition and work aggravation. Each new occurrence of an occupational illness should be reported separately. Certain illnesses may have prolonged effects that recur over time. However, where a pre-existing illness is worsened by a new exposure e.g. further noise exposure resulting in worsening hearing loss, asthma worsened by exposure to irritants, these should be recorded as new cases. It is sufficient for the exposure to be a continuing and/or aggravating factor for the case to be reportable as an occupational illness.

#### **Diagnosis of Occupational Illnesses:**

There are two principal steps in establishing the diagnosis of an occupational illness:

- Detection and diagnosis of the illness
- Determining occupational relationship.

When an occupational illness is suspected, diagnosis will depend upon consideration by an occupational medicine practitioner of all relevant aspects of the medical history supplemented where indicated by clinical assessment and relevant tests.

In determining occupational causation the following questions should be considered:

- Has an illness clearly been diagnosed?
- Does it appear that the illness resulted from, or was aggravated by suspected agents or other conditions in the work environment?
- Are those suspected agents or conditions present (or have they been present) in the work environment?
- Was the person exposed to those agents or conditions in the work environment?
- Was the exposure to a sufficient degree and / or duration to result in the illness or exacerbation of the illness?
- Was the illness attributable solely to a non-occupational exposure?

#### **Leading and Lagging Indicators**

Similarly to International companies we have to make a distinction between leading and lagging indicators. In the past we mainly focused on the reporting of occupational illness cases (after the event/exposure-lagging indicators). We have added leading indicators i.e. adding criteria prior to the occupational illness occurring. In order to do this we have set certain actionable limits prior to removal

limits in cases such as chemical exposure removals and for NIHL cases. We will report these as early detection incidents classifiable as minor occupational illness case incidents (refer Standard for Classification of SHE Incidents – AS2).

**Leading indicators:**

**Action levels requiring management alert and formal incident investigation.**

- Chemical exposure cases:
 

Organophosphates:	Fall of 20% from baseline on RBC ChE.
Lead exposure cases:	Males-Blood lead level of 40ug/dl or above. Females-Blood level above 30 ug/dl.
- NIHL cases: PLH shift from baseline of 3,2% or more.

**Lagging Indicators:**

**All occupational illness cases with specific reference to the following levels:**

- Chemical exposure cases:
 

Organophosphates:	Fall of 30% from baseline on RBC ChE (reference: OSHA Hazardous Chemicals Regulations-table 3)
Lead exposure cases:	Males-Blood lead level of 60ug/dl or above. Females-Blood level of 40 ug/dl or above.
- NIHL cases: PLH shift from baseline of 10% or more.  
(reference: COID Circular Instruction 171)