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This journal focuses on Occupational Health, Medicine, Hygiene and Safety, Primary Health Care at the workplace, Environmental Health and other employee health benefits.

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Health care worker crisis

At a World Health Organisation/World Bank meeting held in Addis Ababa in January this year, attention was drawn to the emerging crisis of health manpower in Africa. The situation is considered threatening to the health improvement efforts of African governments, private health care providers, non-governmental organisations and donors, to combat AIDS, tuberculosis and malaria in Africa. The crisis, according to the speakers at the meeting, is occasioned by three problems: training programmes are unsuited to the changing health conditions, staff are lost to opportunities outside Africa putting Africa's health facilities at risk of barely being able to function and the AIDS epidemic further reduces the availability of trained health care workers (HCW).

In this issue, we look at another two factors which may worsen the crisis, viz. the inadequacy of occupational health services for HCW, and the risk from hazardous biological agents (HBA), which confronts HCW on a daily basis.

Are HCW neglected?

It is not uncommon that while most large employers promote the wellbeing and safety of their employees within the work place, this is not so for HCW. Although the consequences of uncontrolled exposure can be as serious as resulting in a forced career change (see article by Kgalamona in SORDSA News), managers of health care facilities seem not to take the responsibility for the protection of the health and safety of HCW.

Michell in her article traces this trend to as far back as 1945, and indicates that little has changed since then. This poses a challenge not only to the managers, but to the HCW themselves.

Hazardous biological agents

Apart from similar exposures facing other employees, one of the additional major risks to which HCW are exposed, is HBA. Jeebhay offers comment on the new regulations promulgated to control HBA and provides a logical sequence of the management steps necessary to achieve this control.

SASOHN salary survey

Differences in salaries of HCW are one of the factors mentioned in the loss of HCW to countries outside of Africa. Grainger reports on the preliminary findings of her research into salaries for occupational health nursing practitioners in South Africa. Perhaps as an extension to this survey, these salaries can be compared to those in the rest of Africa?

SORDSA News

Evidence of another serious risk facing HCW, that of latex allergy, is provided in SORDSA News. Management of South African hospitals is urged to report on latex-related conditions and I would like to echo the appeal to reporting members to overcome their "reporting fatigue" and step up their reporting of occupational respiratory diseases.

The World Health Organisation/International Labour Organisation Joint Effort

In the last issue of OcHSA, the first of a series of articles on the WHO/ILO Joint Effort on occupational health services in Africa appeared. Regular updates on this initiative will appear in the journal through generous sponsorship from the WHO. In this issue the strategies and areas for collaboration and the development of an action plan are discussed. Dr David W Stanton, on behalf of OcHSA, is working closely with Dr Marilyn Fingerhut of the WHO, to prepare these articles and have them approved by the WHO/ILO Joint Effort for publication.

New regular features

We welcome the contributions from the Office of the Compensation Commissioner and the Mine Medical Officers' Association, which will now be regular features, together with the Net Page and Legal Page.

Fiona Robinson
Editor

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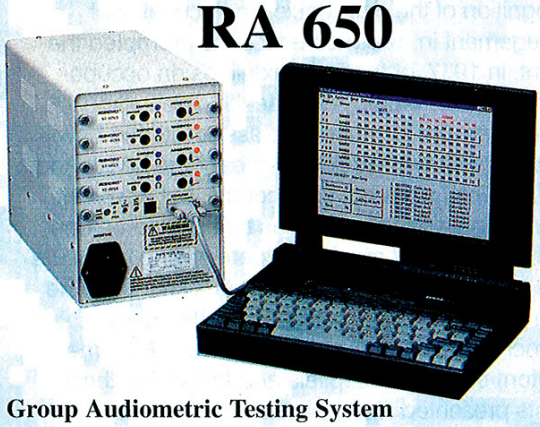

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THE HEARING HEALTH CARE SPECIALISTS

Health care workers - *a previously neglected and presently vulnerable occupational group*

Karen Michell, Senior Lecturer, Technikon Natal

In 1700 the first systematic works demonstrating the association between occupation and health were published in Bernard Ramazzini's works de Morbis Artificum[1]. Ramazzini described the effects hazards have on the health of over 50 categories of workers and suggested ways in which these effects could be reduced. Despite these early findings, there has been poor management internationally of occupational health with insufficient emphasis placed on the preservation of workers health[2,3,1].

Health care facilities as occupational settings

Health care settings are workplaces where health care is rendered to clients. These facilities have been identified among the most hazardous occupational settings as a result of the activities and the diverse nature of hazards encountered in these environments[4,5,6,7]. The numerous activities conducted in health care settings result in diverse hazards, many of which are obvious (i.e. radiation exposure), but also others which are not (i.e. the psychosocial hazards associated with shift work and stress)[8,9,6].

The health care workers (HCW) providing services within the health care industry have been identified as a neglected group with regard to the monitoring of their occupational health status.

As far back as 1945, Gieger[10] wrote of this neglect. Prior to the 1950s little serious research was conducted into the occupational hazards associated with health care settings[11]. This occurred despite references to adverse health effects experienced by HCW dating as far back as Ramazzini's classical works[1]. Felton[11] reports that in the beginning of the twentieth century HCW experienced a high morbidity and mortality rate as a result of the infections and diseases they were exposed to through the routine care of patients. The control of hazards was poor and little emphasis was placed on safety management, a situation that persisted late into the same century[12,13]. Wilkinson et al[7] consider this to be an ironic situation, as one would assume that a service geared to the maintenance and restoration of health would monitor its workers health, but this does not appear to have been the case. Many of the hazards to which the health professional was exposed remained unchallenged by investigation and control.

Reasons cited as contributing to this lack of investigation into the hazards of the health care setting include the following;

i. Health care workers are presumed to be safe from harm due to the knowledge they have regarding health[4];
ii. Health care settings are presumed to be safe places to work[7];
iii. There is a lack of awareness and co-ordination of occupational services within the hospital setting[12]; and
iv. Hospital management has focused attention on providing a safe environment for the patient and not the worker[8].

The recognition of the deficiencies in occupational health management in health care facilities prompted the development, in 1957, of the first guidelines on occupational health for those employed in health care settings[10,8]. These guidelines were formulated to assist with the development of programs that would provide for the health and safety of HCW. They were not enforceable, but were written as recommendations for activities that should be conducted within the context of a health care setting to ensure that the health care worker was protected. Other than the introduction of immunisation programs in 1964 they remained unchanged for many years. In 1964, Mammen (cited in Felton) surveyed hospitals and found that these environments presented many physical hazards to employees. The report of this survey suggested that the threat to health posed by these hazards could be corrected by, "an enlightened management which would procure for its employees the benefits to be derived from good occupational medicine, industrial hygiene engineering and a safety program"[10]. Despite the development of the guidelines and the subsequent works revealing the lack of organisation of occupational health programs, little was implemented to rectify the deficiencies in occupational health management for HCW.

The definitive study into occupational health in hospital settings was conducted in 1972 by the National Institute of Occupational Safety and Health (NIOSH)[10,8]. This survey conducted in 2600 hospitals of varying sizes, across the USA, revealed that 65% of the smaller hospitals lacked

occupational health and safety programs whereas only 30% of the larger hospitals lacked such programs. It was also found that only 39% of the hospitals implemented immunisation programs and only 18% of the surveyed hospitals offered employee in-service training on hazard awareness. The result of which is poor occupational health facilities for HCW. The findings of this survey led to the development by NIOSH of guidelines for the management of occupational health in health care settings[8]. These guidelines did not only focus on the activities which should be conducted to ensure that workers were not adversely affected by hazards within the health care setting, but included recommendations on how to identify and control the hazards to which the health care worker is potentially exposed[14].

With the introduction of the Occupational Safety and Health Act (1970) in the USA an increase in awareness in most industries regarding hazard control and the management of worker health was reported but not so in the hospital setting[10]. A similar situation to that which existed in the USA is reported by Litchfield[13] to have existed in the United Kingdom with the promulgation of the Health and Safety at Work Act 1974. He states that most large employers were promoting worker well being within the workplace but the National Health Service, which employed in excess of 800 000 workers, had not followed suit. A study conducted in South African hospitals in 2000 found that a similar situation exists to date in these hospitals i.e. little attention is given to the occupational health status of professional nurses[15]. It thus appears to be a common feature that managers of health care facilities are neglecting to ensure a healthy and safe working environment for the HCW employed in these facilities while they continue to concentrate on ensuring a safe environment for patients. Lunn and Waldron[12] believe that the service rendered by the health care worker is dependant not only on the professional expertise of these professionals but also on the maintenance of their health and safety. If this is the case then it would follow that a lack of health management of HCW would result in ill health in this group with a concomitant decrease in quality of service.

Health care workers as an occupational risk group

HCW are a diverse group of employees employed to render services in manifold settings. Their workplace environments are unique because the health care worker is exposed to hazards which are similar to those of other work settings as well as to hazards which are considered unique to the health care setting[16,10]. Studies conducted in hospital settings have identified a variety of hazards to which hospital workers are exposed to varying degrees at one time or another[8,17,10]. The adverse health effects include conditions such as adverse pregnancy outcomes, sprains and strains, back injury, leukemia and occupational asthma[18,19,7]. Harrington[15] reports that nurses comprise the largest subgroup of HCW and despite the known effects that exposure to these hazards may cause, few epidemiological studies of this group have been undertaken.

Authors have identified hazards that make the health care setting unique with regard to hazard exposure. Farnsworth, Cox T, Cox S and Ferguson[20] are of the opinion that the exposure to infectious agents, which are categorized as biological hazards, is what makes the HCW exposure unique compared to other work settings. Conant[10] shows support for Farnsworth et al's opinions. Conant goes further and describes the exposure to infections, the risk of needle stick injuries and the exposure to reagents as exposures that make the health care setting characteristically different to other workplaces. Lowenthal[21] supports these statements and goes on to state that hospitals are becoming more dangerous places to work because of the introduction of new technology, the emergence of new diseases and the re-emergence of old diseases due to resistance to available drugs.

Despite the documented hazards of working in a hospital, the implementation of adequate health and safety programs has not kept up with the increase in awareness of these hazards. Levy[6] and NIOSH[8] state that reasons for this lack of progress in developing programs specifically for hospital staff are;

i. Hospitals are traditionally orientated towards curative services and not preventive services and thus staff are not as cognisant of prevention strategies;
ii. It is believed that because hospital staff are health professionals they are capable of looking after their own health without assistance;
iii. The high turnover of staff in these environments;
iv. Health care professionals tend to seek corridor consultations when they are unwell; and
v. There is a belief that implementing such programs is expensive.

In 1988 Salvage and Rogers[5] were discouraged by the lack of information available for nurses regarding health and safety at work in British hospitals. This prompted the writing of a book entitled "Nurses at risk". Many changes have taken place in the provision of health care and nursing subsequent to the publishing of this book. Ten years later when the same authors conducted investigations in order to update the contents of the book they found the persistence of many of the previously acknowledged hazards (eg manual handling causing back injury) and an escalation of new hazards. Cited examples of new hazards within the hospital setting are: an increased use of gluteraldehyde and an increase in the incidence of latex allergies. Both of these hazards have developed as a direct result of improved technology and the emergence of new diseases[5]. These findings support Lowenthal's[21] belief that hospitals are becoming more dangerous places in which to work as a result of new technology. Rogers[17] is of the opinion that an increase in the number of occupational injuries and diseases in the health care setting is likely due to the increasing demands placed on HCW as a result of organisational structures. This is concerning as Harrington[15], has shown that there is already a high rate of both absenteeism and accidents within the health care worker population and, to date, neither of these problems has been adequately investigated.

The Minister of Health's Committee on Occupational Health[22] reported in 1996 that within the hospital setting occupational services for HCW were largely underdeveloped and to date remain underdeveloped. The large number of HCW employed in health care settings are thus not

provided with sufficient protection of their occupational health and safety. Through the author's personal experience and the reported experience of students and colleagues it appears that there is a lack in the provision of occupational health management for nurses and other HCW in the hospital setting. Many hospitals do have a facility providing for the health of their staff. However, the facilities are usually staffed by personnel who do not have a background in occupational health and services rendered are, from an occupational health point of view, rudimentary in nature. The services concentrate on the more obvious hazards such as manual handling of patients and immunisation programs for biological hazards. Implementation of occupational services for HCW has been a slow process. In South Africa as recently as 1999 the under development of these services was noted[23]. There is no doubt that employment in the health care industry can be hazardous.

Controlling exposure to hazards

Considering the detrimental effects that these hazards have been shown to cause in exposed workers, it is evident that there is a need to protect the health care worker. Protection of workers from exposure can be achieved through the development of stringent occupational health programmes and the implementation of recognised methods of control. There are numerous techniques that can be implemented to reduce the potential risks associated with hazards. Included in these control methods are engineering controls, administrative controls and personal protective equipment[24,17,25]. The OHS Act of 1993 is not prescriptive in determining which control method should be implemented. What the OHS Act does stipulate is that management has a duty to identify hazards within the workplace and that the most practicable method of control is implemented to reduce the associated risk.

Engineering controls and work practices

Engineering controls are the first choice of hazard reduction, as these are the most permanent methods for reducing the hazard[25,24,22]. They often require design adjustments and are generally expensive to implement, and in many situations not financially practicable. Techniques used include, automation, enclosure or ventilation[25]. Examples include:

i. scavenger devices which are placed onto anaesthetic machines to reduce the release of waste anaesthetic gases into the operating room[26];

ii. automatic washers used for cleaning instruments[27]; and

iii. mechanical aids for the lifting of patients[28].

Administrative controls

Where engineering controls cannot be implemented, administrative controls must be used. These reduce worker exposure through job rotation, work assignment, time away from the hazard and education and training about the hazard and the associated health effects of exposure[25,22]. A control method that may be implemented at an administrative level is a safe work procedure to ensure that activities are performed with the least risk to employees e.g. not leaving the lids off gluteraldehyde containers when not in use[27].

Personal protective equipment

Personal protective equipment (PPE) should be the last means chosen for controlling exposure to a hazard and should only be used when engineering and administrative controls do not reduce the risk posed by the hazards to an acceptable level[25]. PPE only provides a barrier between the person using it and the hazard. The motivation for resorting to PPE as a last means of hazard control is based on the fact that no matter how effective the PPE is at providing a barrier between the worker and the hazard, it will only be as effective as the person using it. Examples of PPE that may be used in the health care setting include;

- lead aprons for staff exposed to ionising radiation,
- gloves, gowns, aprons, face shields and eye protection to protect against biological hazards,
- laser goggles and glasses to protect against non ionising radiation.

Recommendations for employee health services in health care settings

In acknowledgement of the risk HCWs face in their working environment a number of organisations and committees established guidelines for the management of the occupational health of HCW[15,29,10]. As technology has developed and new diseases have emerged these guidelines have been revised to ensure the protection of the health care worker from the adverse health effects that are associated with these new hazards e.g. HIV and latex allergy. The guidelines set out minimum standards which should be applied and it is suggested that they be adjusted according to local risk factors such as prevailing disease rates and staff turnover[30]. Aspects included in these guidelines are indicated below.

1. Pre-placement and periodic health assessment of all employees by a professional knowledgeable about the hazards to which workers may be exposed. Pre-placement medical examinations should be tailored to collect health information from the worker specific to the hazards to which the worker will be exposed[29].
2. Infection control through immunization programs for biological hazards including diphtheria, polio, tetanus, measles, mumps, hepatitis B, rubella and influenza. The program should include an annual review of the health of those workers who are regularly exposed to infectious patients[34].
3. Prompt diagnosis and treatment of occupational illnesses and injuries to reduce disability and lost time associated with these conditions[29].
4. Periodic environmental surveillance should be conducted in order to provide an on-going evaluation of the health and safety hazards which are encountered in the environment. Environmental surveillance must identify potential hazards, evaluate the nature and extent of exposure, and recommend effective control measures[35].

Health education should be given to each worker regarding exposure risk, safe work practises and accident and incident reporting. If the records and training are coordinated through the employee health service the education can be reinforced at each subsequent visit[10].

Individual and confidential health and safety records

should be kept for each health care worker. These records should record all exposures, health assessment reports, treatments, immunisations, investigations and injuries and illnesses reported[35].

Conclusion

The responsibility for the protection of health and safety at work must not be left solely to management. There is dual responsibility between workers and management. HCWs need to be involved in the management of their occupational health status as they are the front line users of the hazards. The occurrence of accidents, incidents and occupational disease are symptoms of uncontrolled hazards in the workplace. Why should one wait for such negative events to occur before initiating corrective action? In order to adequately protect themselves from exposure HCWs should be fully informed of the hazards that are present in the workplace; the consequences of uncontrolled exposure; and how they themselves may contribute to the reduction of risk associated with hazards. This can be achieved through the development of a comprehensive occupational health program for the HCW. In South Africa this is an activity that is long overdue.

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An approach to hazardous biological agents in the workplace -

legal provisions and practical considerations

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The recent promulgation of the Regulations for Hazardous Biological Agents in December 2001, brings South African health and safety legislation on hazardous biological agents (HBA) more in line with international standards. The lack of specific guidance in relation to HBA under the Occupational Health and Safety Act (OHSA) in the past has been responsible for the lack of adequate preventive strategies to protect the health of workers exposed to these agents. This article will present an approach to manage HBA in the workplace setting, taking cognisance of international standards and specific local considerations in eliminating, controlling or minimising exposure to HBA.

What constitutes a hazardous biological agent (HBA)?

A biological agent may be defined as any micro-organism, cell of plant (vegetable), animal, human origin, cell culture, human endoparasite, including those that have been genetically modified, which may cause an infection, allergy, inflammation, toxic reaction, malignancy or otherwise create a hazard to human health.[1,2,3,4]

Major biological agents and their active constituents

The three main sources of biological agents arise from microbes, animal and plant tissue (Table 1).[1,4] The biologically active agents of microbial origin may include the organism itself (eg. viruses, bacteria, fungi), toxins (eg. endotoxins produced by gram negative bacteria, mycotoxins produced by fungi), cell wall constituents such as β(1→3)-glucans produced by moulds, or enzymes produced by genetic modification of microorganisms.[2]

CATEGORY	Examples
Micro-organisms	
• Viruses	Hepatitis, HIV, Influenza, Rubella, Herpes
• Bacteria	Legionella, Mycobacteria, Leptospira, Thermophilic bacteria
• Fungi	Aspergillus, Alternaria
Plants	
• Lower plants	Lichens, liverwarts, ferns
• Higher plants	Wood, grain, cotton, coffee, tobacco, spices
Animals	
• Invertebrates	Amoebae, Shistosoma, Plasmodium, Anisakis, Sponges, Sea-squirts
• Arthropods	Crustaceans, Arachnids (spiders, storage mites, ticks), Insects (cockroaches, weevils, moths, bees)
• Vertebrates	Fish, Amphibians, Reptiles, Birds, Mammals

Table I. *Major categories of biological agents of natural origin*

Among *plant* tissue, processed plant proteins (eg. grain, coffee, soya), vegetable gums or resins (eg. latex, guar), toxins, wood compounds (eg. plicatic acid, tannins, colophony), proteolytic enzymes and organic dust from processing have been shown to be biologically active.[3,5,6] In the *animal* group, exposure to arthropods such as crustaceans, arachnids (eg. storage mites) and insects (eg. weevil) have been commonly associated with adverse health effects.[3,5] Furthermore, invertebrates other than arthropods eg. endoparasites (eg. *Shistosoma, Anisakis*) and proteins present in urine, hair, dander, feathers, saliva and feces of vertebrate animals are also a common source of infectious agents or protein allergens.[5,7]

Biological agents are ubiquitous in ambient air, contaminated water supplies and diseased animals. They enter the human body by inhalation (airborne, droplet spread), ingestion

SECTOR	Examples
Agriculture	Cultivating, harvesting, forestry Breeding and tending animals, fishing
Agricultural products	Abattoirs, food processing plants Storage facilities: grain silos, tobacco Processing animal hair, leather, silk Textile plants, sawmills, paper-mills
Animal care	Veterinary facilities, pet shops
Biotechnology/research labs	Production of enzymes, microbiology, animal units
Mining	Gold and coal mining
Health care	Patient care in hospitals, clinics, nursing homes
Pharmaceutical	Production of drugs, herbal products
Sewage and waste disposal	Waste removal, treatment plants

Table II. *Common occupational settings with exposure to hazardous biological agents*

PATHOLOGICAL MECHANISM	Examples of causative agents
Microbial infection • Infectious material • Opportunist pathogens • Zoonoses	*Hepatitis (A/B/C), Leptospira, Mycobacterium TB* *Legionella Pneumophilia* *B. Anthracis, C.Psittaci*
Allergic response • Micro-organisms • Proteinaceous material • Chemical compounds	*Actinomycetes, Aspergillus* Pollen, dust, animal secretions Plicatic acid, gums, resins
Toxic/inflammatory response • Endotoxins (gram neg. bacteria) • Mycotoxins (fungi) and β(1→3)-glucans	Stored grain, hay, cotton, swine and poultry confinement units Stored fodder, grain, nuts
Carcinogenic • Wood dust • Mycotoxins (aflatoxin)	Hardwood (Beech, oak), Softwood Stored nuts

Table III. *Major pathological mechanisms for health effects associated with hazardous biological agents*

or through faecal-oral route, percutaneous innoculation and by direct contact with plants or animals (eg. zoonosis).[8] The extent to which they become hazardous to human health will depend on the occupational context, the circumstances surrounding exposure and the health status of the host (worker).

Common occupational settings with exposure to HBA

Although biological agents are commonly found in most domestic and workplace environments, there are certain high-risk occupational settings that constitute hazardous exposure since they result in adverse health outcomes (Table II). These settings include health care and laboratory workers threatened by human pathogens causing infection and among agricultural workers who are at risk from organic dust-borne biological allergens, toxins and parasitic worm infestations especially in warm climates.[9,10,11,12] In South Africa, mining activities which are associated with tuberculous infection are an added high-risk setting.

Health effects associated with exposure to HBA

HBA mediate their adverse health effects through four main pathological mechanisms. These include infection, allergic, toxic/inflammatory and carcinogenic mechanisms (Table III). The most common non-infectious diseases affect the lungs and skin, with a large proportion of these diseases or syndromes being on a general inflammatory or immune basis (Table IV).[2,3,5]

Laws and standards governing HBA in the workplace

Although the traditional emphasis of health and safety regulations and occupational health activities have been on microbes causing infection in occupational settings, the toxic/inflammatory, allergic and carcinogenic potential of HBA is becoming increasingly important.

Some of the well known regulatory initiatives include the comprehensive European directive No. 2000/54/EC on the protection of workers from risks related to exposure to biological agents at work.[13] Other well-cited standards include the US OSHA Regulations (Hepatitis B vaccination, blood-borne pathogens, TB) and the NIOSH criteria documents for animal handlers and health care workers exposed to latex.[14,15,11,9]

In the South African context there are various laws that deal with or have a bearing on HBA (Table V).[16]

Occupational health and safety legislation

The preventive laws dealing with HBA are primarily the OHSA and to a certain extent the MHSA (Table V). Under the former law, the Hazardous Chemical Substances Regulations deals indirectly with substances due to plant/vegetable origin such as grain, cotton, wood and rubber (possibly latex). However, it does not provide adequate and appropriate guidelines for evaluating exposure to specific allergens causing allergenic and inflammatory effects.[5,17] Furthermore, the exposure standards stipulated for these agents are not sufficiently protective in preventing sensitisation to these allergens. Of more direct relevance is the recently promulgated Regulations for Hazardous Biological Agents (HBA) which deals specifically with eliminating, controlling or minimising exposure to HBA.[18]

PATHOLOGICAL MECHANISM	Examples of occupational syndromes or disease entities
General constitutional symptoms	Inhalation fever (fever, myalgia, fatigue)
Infection of any body organ/system	Infections (including zoonosis) eg. TB, Brucelloisis
Allergic/Toxic inflammatory *lung* reactions	• Toxic pneumonitis • Organic dust toxic syndrome (fever, myalgia, headache, respiratory symptoms) • Rhinitis, conjuctivitis, urtcaria • Asthma • Asthma-like syndrome (acute functional response) • Hypersensitivity pneumonitis (extrinsic allergic alveolitis) • Chronic bronchitis • Chronic obstructive lung disease
Allergic/Toxic inflammatory *skin* reactions	• Contact irritant dermatitis • Contact allergic dermatitis • Protein contact dermatitis
Cancer	Carcinoma (eg. nasopharynx, liver, lung)

Table IV. *Occupational syndromes or disease entities associated with hazardous biological agents*

South African Regulations for Hazardous Biological Agents

These Regulations which became enforceable on the 27th December 2001, apply to every employer and self-employed person where:

- HBA is deliberately produced, processed, used, handled, stored or transported
- Incident or high risk exposure to a HBA in the following work situations (Annexure A):
  - food production plants
  - where there is contact with animals and/or products of animal origin
  - health care, including isolation and post mortem units
  - clinical, veterinary and diagnostic laboratories
  - sewage purification installations
  - general workplace

The Regulations define HBA as "micro-organisms, including those that have been genetically modified, pathogens, cells, cell cultures and human endoparasites that have the potential to provoke an infection or toxic effects." (Annexure B)

The HBA Regulations have specific and direct relevance to the following:

a) Information, Education and Risk Assessment

- Every employer is to provide information and training to employees on potential risks of HBA and risk reduction measures.
- Employees are to follow safe procedures for HBA disposal and decontamination and to report all incidents of accidental exposure to a HBA, whereupon such incident should be investigated by the employer.
- A risk assessment should be done every 2 years and a record kept thereof. Biological risks are to be categorised (Grades 1-4) according to specified guidelines (Table VI)

In conducting a risk assessment due consideration needs to be given to:

- Name of the HBA and its biological properties
- Where HBA might be present and its physical form
- Nature of the work process and effectiveness of existing controls to minimise exposure
- Route of exposure (some routes eg. respiratory and skin are more important than others)
- Dose/level and period of exposure
- Potential health effects (eg. infection, toxic, allergenic, carcinogenic)

b) Exposure monitoring and/or medical surveillance

- Regular exposure monitoring is to be conducted using sensitive and effective procedures.
- Medical surveillance of employees should be based on risk assessment or presence of an occupational disease directly related to exposure. Initial (within 14 days) and periodical health evaluations should be done according to a written medical protocol.
- Occupational health practitioners should submit a protocol containing procedures dealing with abnormal results to the health and safety committee for approval.
- All incidents resulting in infections or death should be investigated.
- All risk assessment, exposure monitoring and medical surveillance records to be kept for 40 years

c) Risk Management and control measures

- Sets out a hierarchy of control measures using standard and transmission-based precautions (Annexure C).
- Personal protective equipment should be appropriate to the route of transmission eg. respirators, impermeable gloves, supply, selection, training, separate storage, decontamination or sterilisation.
- Testing of engineering control measures should be conducted every 24 months by an approved HBA inspection authority (retaining records for at least 3 years).
- Labeling, packaging, transporting and storage in special containers marked with the biohazard sign (Figure 1)

Figure 1. *Bio-Hazard sign*

- Written procedures for disposal of HBA to designated site in terms of the Environmental Conservation Act and decontamination or disinfection of all containers.
- Special control measures are indicated for HBA in category 2-4 for:
  - health and veterinary isolation facilities, labs, animal rooms for human/animal materials to use control measures in Annexure E (containment levels) and Annexure C (precautions)
  - industrial processes to use control measures in Annexure F (containment levels) and Annexure C (precautions)

The major deficiency of HBA Regulations relates to the very narrow definition of HBA. The primary focus appears to be on preventing and controlling microbial infections since it excludes the primary allergic, inflammatory and malignant health effects associated with cells of plant and animal origin in its definition. It also omits special mention of incidents or exposure involving work in agriculture and the processing of plant products in its scope of application. Most of the following major biological categories (and their species) such as fungi/moulds, arthropods, vertebrates, vegetable/plant proteins and invertebrates therefore do not appear in its classification system for biological agents (Annexure B). The lack of emphasis on protein allergens causing allergic diseases in the absence of microbial infections may point to the need for the development of specific regulations in the future that deal adequately and effectively with allergens of biological (protein) origin.

In more recent years industrial hygiene and analytical capabilities have been refined for evaluation of bioaerosols and their protein allergens making surveillance technically feasible. Clear evidence is also emerging in the current literature for exposure intensity response relationships for occupational allergens of plant, animal or microbial origin, illustrating the renewed emphasis on this group of agents. Allergen exposure levels below determined exposure limit values have been associated with a decreased risk of sensitisation and allergic health outcomes such as asthma. Some examples include wheat flour (1-2.4 mg/m^3), fungal alpha-amylase (0.25 ng/m^3), natural rubber latex (0.6 ng/m^3), western red cedar (0.4 mg/m^3) and rat allergens (0.7 ug/m^3) and wood dust (2 mg/m^3). Stipulating legally binding occupational exposure limits is therefore an essential strategy in preventing exposure to allergens and should be the focus of future local legislation.[17,19]

SCOPE	ACT (and specific Regulation)	Examples of HBA covered
Occupational Health and Safety	1. Occupational Health and Safety Act (OHSA) • Hazardous Chemical Substances Regulations • Regulations for Hazardous Biological Agents	Grain, cotton, wood, rubber (?latex) Micro-organisms, cells pathogens, cell cultures human endoparasites
	2. Mine Health and Safety Act (MHSA)	TB
Workers Compensation	1. Compensation for Occupational Injuries and Diseases Act (COIDA)	*Infections* TB, Brucella, Anthrax, Q-fever, Bovine TB, Rift Valley Fever, (HIV, Hepatitis) *Lung diseases* Occupational asthma, lung fibrosis, extrinsic allergic alveolitis (organic dust, moulds, proteins/enzymes, animals/insects) *Skin diseases* Allergic contact dermatitis (dust, liquids)
	2. Occupational Diseases in Mines and Works Act (ODMWA)	TB associated with risk work in mines and quarries
Other	1. Labour Relations Act (LRA)	Deals with unfair discrimination in relation to disability
	2. Food-related (consumer-oriented) • Foodstuffs, Cosmetics & Disinfectants Act, Abattoir Hygiene Act, Health Act • Standards Act	Deals with food hygiene and safety Deals with medical surveillance of workers in order to protect food safety
	3. Environmental Conservation Act	Deals with disposal of biological waste
	4. Health Act	Deals with compulsory notification of infectious diseases

Table V. *Major South African laws relating to hazardous biological agents*

Compensation-related legislation

These include laws dealing with compensation of occupational diseases in the general workplace (Compensation for Occupational Injuries and Diseases Act - COIDA) and in the mines (Occupational Diseases in Mines and Works Act) (Table V). In its expanded schedule of occupational diseases (schedule 3) under COIDA, all compensable diseases, including those due to HBA are listed. Tuberculosis (associated with silica exposure in gold/coal mines and foundries, among health care workers) and occupational asthma (due to grain cereals and latex) are commonly reported under COIDA and the voluntary Surveillance of Occupational Respiratory Diseases in South Africa (SORDSA) programme.[20,21] Although HIV/AIDS and Hepatitis are not specifically listed under Schedule 3 of COIDA, the Compensation Commissioner is known to accept liability for these diseases should they shown to be occupationally acquired.[22]

Other related legislation

Other legislation having a bearing on HBA relate to the various legislative requirements for food hygiene and safety enforced unevenly by a multitude of different governments departments (Table V).[23] These laws are geared primarily towards fulfilling consumer needs, while none deal explicitly with the occupational health concerns of workers exposed to these foods. This is confirmed by our research into the seafood processing industry that revealed inadequate surveillance programs and preventive strategies for workers in the industry.[24]

Principles in the management of occupational health risks and diseases due to HBA

1. Remove from exposure and/or isolate individual

After discussion with the patient, the medical practitioner should write a motivating letter to have the person moved to a job that has no or minimal exposure, or declare the person temporarily unfit to work in the presence of acute infection. The various options should be discussed with the worker and due consideration needs to be given to the worker's rights under the LRA code of good practise.

2. Institute appropriate treatment where possible

Institute appropriate treatment of infection/allergy and preventive measures such as post-exposure prophylactic treatment or vaccination for as yet unaffected workers. The treatment of occupational diseases from HBA is no different from treatment of these conditions from non-occupational causes.

3. Submit a claim for worker's compensation

Submission of a claim under the COIDA requires First, Progress and Final Medical reports (specific for occupational diseases) with supporting documentation. Few published criteria currently exist that outline the basis for the Compensation Commissioner's decisions.[16,21,22,25] For mineworkers with TB, different procedures need to be followed under ODMWA for submission to the Medical Bureau for Occupational Diseases (MBOD).

4. Notify the case to the Chief Inspector in the Department of Labour and/or the Department of Health

Medical practitioners are required by the OHSA to notify all cases of suspected occupational disease to the Chief Inspector, Department of Labour (Fax: 012-309 4382). This should also be done on form WCI 22 (see section 3 above). If the worker has a notifiable disease, the case should also be notified to the Department of Health as required under the Health Act.

5. Investigate and treat the workplace

The diagnosis of an occupational disease in a worker implies that measures at the workplace are inadequate and pose a potential health risk

CATEGORY	DEFINITION	Examples
Group 1	- unlikely to cause human disease	***E Coli K10, yeast***
Group 2	- can cause severe human disease - might be a hazard to workers - unlikely to spread to community - effective prophylaxis/treatment	*Legionella pneumoniae, Leptospira, Neisseria meningitidis* (V), *Rubella, Influenza A/B* (V), *Hepatitis A* (V), *Herpes simplex, Ascaris* (A)
Group 3	- can cause severe human disease - serious hazard to workers - may spread to community - effective prophylaxis/treatment	*Mycobacterium TB* (V), *Bacillus anthracis* (V), *Shigella dysenteriae Type I* (T), *Plasmodium falciparum, Rabies* (V), *Hepatitis B* (V), *Human immunodeficiency virus*
Group 4	- causes severe human disease - serious hazard to workers - high risk of spread to community - no effective prophylaxis/treatment	*Congo haemorrhagic Fever, Ebola pox*

Symbols: A-allergenic, T-toxic effects, V-vaccine available

Table VI. *Risk group categories according to the South African Regulations for Hazardous Biological Agents, 2001*

to co-workers similarly exposed. The incident requires investigation and prompt action. The exposure should be evaluated by an approved inspection authority (AIA) for HBA, (list obtainable from the Department of Labour). This evaluation will identify sources of high-risk exposure and provide recommendations for controlling the hazards either through substitution, body substance isolation, engineering controls (e.g. exhaust ventilation) and/or administrative controls (e.g. universal infection control precautions). Special care should be taken when instituting preventive measures that one hazard is not replaced by another hazard (e.g. using latex containing rubber gloves in preventing skin transmission of blood-borne pathogens). Exposure monitoring using industrial hygiene surveillance programmes can evaluate the effectiveness of control measures in decreasing the risk of infection and/or allergic sensitisation of other, as yet unaffected, workers.

The employer should also make use of the expertise of an occupational medical practitioner in designing appropriate medical surveillance programmes for the workforce as an adjunct to industrial hygiene evaluation and control measures. Various early sub-clinical biomarkers (eg. skin prick testing, serum antibodies, target organ tests) can be used to identify signs of early infection, inflammation or allergic sensitisation before overt symptoms and clinical disease manifest. These tests can also be used to assess the effectiveness of control measures instituted. Finally, education and training programmes are essential in informing and educating workers about the health effects of hazardous agents they are exposed to so that they may take the necessary precautions when working with these agents.

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SASOHN Salary Survey

December 2001

Professor Linda Grainger Department of Community Nursing, Technikon Natal

A survey of the salaries paid to Occupational Health Nursing Practitioners (OHNP) is undertaken on a three yearly basis to determine market-related salaries for OHNP in the industrial and mining sectors. In 2001, the Department of Community Nursing at Technikon Natal conducted the survey on behalf of the South African Society of Occupational Health Nursing Practitioners (SASOHN). The results of the survey will be made available to OHNP to negotiate improved working conditions, benefits and salary packages. It is intended that the survey results be used as a guideline and utilized in terms of a company's individual job evaluation system, i.e. Peromnes/Patterson or any other grading scale used.

SASOHN will use the results of the survey as a marketing exercise to promote occupational health services in South Africa to the various occupational sectors. Included in these targeted areas will be selection and recruitment agencies to ensure that the OHNP receives a salary package that is commensurate with the qualifications, experience and competency she/he brings to a position. Other publications, viz. "Finansies en Tegniek" and the "Business Times", will be targeted in order to promote occupational health at management level.

SASOHN would like to extend their appreciation and thanks to Professor Linda Grainger and the B Tech: Nursing (Occupational Health) students from the Technikon Natal for the hours of work that they put into the survey. They have researched and produced a report on a critical issue pertaining to occupational health nursing practice. These results are supported by SASOHN as the results are based on scientific data analysis.

Any queries relating to this information can be forwarded to the SASOHN National Office PO Box 18793, Sunward Park, 1470, Tel/Fax: 011 892 3174 E-mail: sasohn@mweb.co.za

The South African Society of Occupational Health Nursing Practitioners (SASOHN) commissioned the Department of Community Nursing at Technikon Natal to conduct a national salary survey of Occupational Health Nursing Practitioners (OHNPs), in order to advise members and employers on salaries. The objectives of the survey were to establish the influence of the following factors on the salaries of OHNPs in South Africa:

- qualifications;
- geographical area;
- size of company;
- working hours;
- grading systems;
- gender;
- experience in OH;
- age;
- employment status;
- employment sector;
- job title;
- race.

This document contains a summary of the results in respect of some of the objectives. The basic or net salary, gross salary (fringe benefits included) and hourly rates are presented. There were 274 respondents in the survey, however 47 of them did not include details of their salary.

Respondents who work in more than one province have been excluded, except in respect of the national figures. Extreme outliers have also been removed.

1. Basic and gross monthly salary

The basic salary excludes any fringe benefits, whilst the gross monthly salary was calculated by the addition of the value of the fringe benefits to the basic monthly salary. There was a wide variation in the salaries of part-time and contract employed OHNPs, and therefore the rates in Table 1 were calculated after excluding these respondents. The respondents in this table are all full-time employees in permanent positions.

Region	No. of incumbents	Basic monthly salary			Gross monthly salary		
		Ave	Min	Max	Ave	Min	Max
Gauteng	58	9445	4726	19600	11692	5454	33097
Mpumalanga	17	8576	5594	16800	10145	6594	22917
Northern Province	5	8350	6224	10489	13514	9482	21426
North-West Province	5	7982	6500	9800	10137	6701	14390
Free State	10	10003	6879	14000	11846	7363	16628
Kwa-Zulu Natal	49	8129	5100	13716	10186	5525	21100
Western Cape	30	8277	5240	14799	9871	6670	16152
Eastern Cape	5	6815	5445	8500	7906	6271	11096
Northern Cape	-	-	-	-	-	-	-
National	186	8686	4726	19600	10712	5454	33097

Table 1. Basic and gross monthly salary for full-time, permanent OHNPs according to geographic region

Region	No. of incumbents	Hourly rate of remuneration A			No of incumbents	Hourly rate of remuneration B		
		AVE	MIN	MAX		AVE	MIN	MAX
Gauteng	73	56.75	29.5	122.50	58	57.75	29.5	122.5
Mpumalanga	18	54.75	35	105	17	53.25	34.75	105
Northern Province	5	48.5	34.5	63.25	5	48.5	34.5	63.25
North-West Province	4	49	40.5	61.25	5	49	40.5	61.25
Free State	10	58.75	42.75	80.5	10	58.75	42.75	80.5
Kwa-Zulu Natal	67	54.75	31.75	85.75	49	50.25	31.75	85.5
Western Cape	48	64	27	92.5	30	50.75	27	92.5
Eastern Cape	6	41	31	53	5	41	31	53
Northern Cape	1	-	-	-	-	-	-	-
National	233	60.5	20.75	122.5	186	53	20.75	122.5

Table 2. Gross hourly rate of remuneration according to geographic region

Categories	Average basic monthly salary	Average gross monthly salary
1 (1 – 499)	8023	9857
2 (500 – 999)	8203	9606
3 (1000 – 1499)	8469	9968
4 (1500 – 1999)	9503	13205
5 (2000 or more)	9729	12240

Table 3. Remuneration in relation to OHNP category

Location	Gross hourly rate	Basic monthly salary			Gross monthly salary		
		AVE	MIN	MAX	AVE	MIN	MAX
Gauteng	50.5	8193	5420	14905	10067	5454	20541
Mpumalanga	43.25	7079	6900	7259	10458	10458	10458
Northern Province	49	8390	6645	10135	15455	9483	21426
North-West Province	40.5	6500	6500	6500	8810	8810	8810
Free State	54.25	9625	7000	12200	10701	8534	13100
Kwa-Zulu Natal	47.5	7672	5872	12842	8634	5906	14876
Western Cape	49.25	7919	7000	8800	10005	8554	15000
Eastern Cape	37.5	6000	6000	6000	6534	6534	6534
Northern Cape	-	-	-	-	-	-	-
Combined	46	8490	8490	8490	10024	10024	10024
National	49	8023	5420	14905	9857	5454	21426

Table 4. OHNP category 1 (1-499 employees) in relation to region

Location	Gross hourly rate	Basic monthly salary			Gross monthly salary		
		AVE	MIN	MAX	AVE	MIN	MAX
Gauteng	55.5	8963	4726	15000	10402	6016	16284
Mpumalanga	49.5	7924	7267	8505	8641	8034	9848
Northern Province	58.25	10489	10489	10489	12127	12127	12127
North-West Province	-	-	-	-	-	-	-
Free State	66	10599	10599	10599	16337	16337	16337
Kwa-Zulu Natal	48.25	7882	5100	11172	9322	5525	13982
Western Cape	50	8253	6686	10445	9426	7186	11433
Eastern Cape	42	7018	5445	8500	8249	6271	11096
Northern Cape	-	-	-	-	-	-	-
Combined	-	-	-	-	-	-	-
National	50	8203	4726	15000	9606	5525	16337

Table 5. OHNP category 2 (500 - 999 employees) in relation to region

2. Gross hourly rate of remuneration

The gross hourly rate of remuneration has been calculated by dividing the gross monthly salary of each respondent by the number of hours that each of them worked. This is regarded as the more useful hourly rate to be recommended as contract, self-employed and temporary OHNPs will need to earn sufficient income to make provision for medical insurance and retirement cover in particular. The rates for the full sample are reflected as A in Table 2. However, because of the wide variation in the salaries of part-time and contract employed OHNPs, rates were also calculated after excluding these respondents, shown as B.

3. Remuneration in relation to occupational health nursing practitioner category

Rates have been calculated in relation to the category of OHNP, based on the number of employees in the company. These have been calculated for the OHNPs in full-time employment.

Location	Gross hourly rate	Basic monthly salary			Gross monthly salary		
		AVE	MIN	MAX	AVE	MIN	MAX
Gauteng	58.5	9609	8340	12000	10100	6260	12667
Mpumalanga	43.5	6951	5594	9600	8209	6595	10298
Northern Province	-	-	-	-	-	-	-
North-West Province	-	-	-	-	-	-	-
Free State	-	-	-	-	-	-	-
Kwa-Zulu Natal	55.5	8899	7787	9700	12996	10983	14969
Western Cape	44.75	7155	5915	9500	8991	7369	11126
Eastern Cape	-	-	-	-	-	-	-
Northern Cape	-	-	-	-	-	-	-
Combined	62	9916	9916	9916	9925	9925	9925
National	52.25	8469	5595	12000	9968	6260	14969

Table 6. OHNP category 3 (100 - 1499 employees) in relation to region

Location	Gross hourly rate	Basic monthly salary			Gross monthly salary		
		AVE	MIN	MAX	AVE	MIN	MAX
Gauteng	86.75	13900	13900	13900	27834	27834	27834
Mpumalanga	61.25	9780	9000	10440	11902	9009	16570
Northern Province	-	-	-	-	-	-	-
North-West Province	-	-	-	-	-	-	-
Free State	63.75	10200	10200	10200	12351	12351	12351
Kwa-Zulu Natal	47.25	7743	7520	7966	15187	9273	21100
Western Cape	56.75	9431	9178	9895	11770	9254	16152
Eastern Cape	-	-	-	-	-	-	-
Northern Cape	-	-	-	-	-	-	-
Combined	36.5	6446	6446	6446	6480	6480	6480
National	58.25	9503	6446	13900	13205	6480	27834

Table 7. OHNP category 4 (1500 - 1999 employees) in relation to region

Location	Gross hourly rate	Basic monthly salary			Gross monthly salary		
		AVE	MIN	MAX	AVE	MIN	MAX
Gauteng	64	10522	5500	19600	13038	5525	28618
Mpumalanga	63.25	10144	5860	16800	11949	6759	22917
Northern Province	43	7242	6224	8260	12266	9859	14673
North-West Province	52	8476	7000	9800	11021	9313	14390
Free State	43.25	6916	6879	6953	8169	7363	8975
Kwa-Zulu Natal	56.25	9120	6900	13716	12064	8176	17925
Western Cape	59.5	10019	5240	14799	10752	6670	14833
Eastern Cape	-	-	-	-	-	-	-
Northern Cape	-	-	-	-	-	-	-
Combined	75	12009	12009	12009	18850	18850	18850
National	59.25	9729	5240	19600	12240	5525	28617

Table 8. OHNP category 5 (2000 or more employees) in relation to region

Department of Health

SORDSA NEWS

Surveillance of Work-Related and Occupational Respiratory Diseases in South Africa

WHO/SA Technical Cooperation Programme

Volume 5, No. 2 July - December 2001

In this Issue:

Editorial

As those of you who report to SORDSA will soon notice, there has been a slight change to SORDSA's reporting forms. From 2002 you will no longer be required to submit "nil" reports in the months when you do not see any new cases. There will be a new category for reporting tentative associations between workplace exposure and disease, as well as a space to record any unusual exposures or presentation of disease. When tentative or unusual associations are reported, we may encourage the reporting member to write up the case/s for the SORDSA News. In this way you will be able to share interesting information with your colleagues.

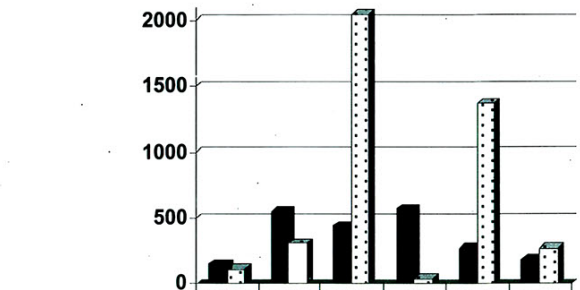
This issue focuses on latex allergy and occupational asthma caused by latex. This is a serious problem among sensitised health professionals, who may have to make a choice of career change. Dr Spo Kgalamono from NCOH Occupational Medicine section has illustrated this potential dilemma using a case example in this issue.

Tonya Esterhuizen
SORDSA News Editor

SORDSA REPORTING RESULTS

To date (October 1996 to November 2001), 6316 cases of occupational respiratory disease have been reported to SORDSA by participating occupational medicine practitioners, pulmonologists and occupational health nurses. In 2001, 463 cases were reported, 187 from the non-mining sector. Figure 1 compares the overall number of cases reported per year. There has been a decrease in reported cases in 2001, both in ex-miners and non-mining cases.

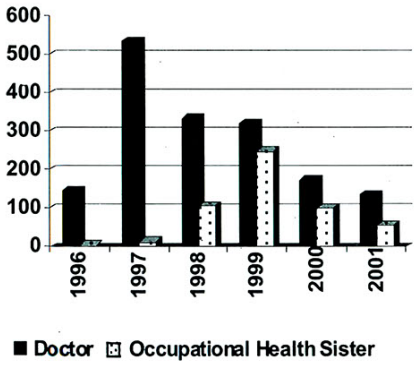
Figure 1: SORDSA cases per year



	1996	1997	1998	1999	2000	2001
■ Non-mining cases	148	549	436	567	270	187
⊡ Ex miners	114	312	2047	39	1371	276

Occupational health sisters have been reporting to SORDSA since 1998. Figure 2 shows that the number of cases reported by occupational health sisters has increased steadily to peak in 1999, when they reported almost as many non-mining cases as doctors. Since then, nurse's reports have decreased, while doctor's cases started decreasing after a peak in 1997.

Figure 2: Cases per year (non-mining) by reporting source



This graph (figure 2) suggests that the decrease is due to "reporter fatigue", which has been about since 1998 in doctors and since 2000 amongst occupational health nurses. I would like to appeal to the reporting members to change this trend by making a special effort to report all new cases of occupational respiratory disease as they occur. Only through your support and interest will we get an accurate picture of the distribution and magnitude of occupational respiratory diseases in South Africa.

Table 1 shows the number of cases by disease group reported to SORDSA overall and in 2001. Column percentages are shown. The 463 cases reported in 2001 only constitute 7.3% of the total reported cases in the 5 years of SORDSA reporting. The order of frequency of the top 4 reported diseases has not changed in 2001. Pneumoconiosis was still the most frequently reported disease, followed by inhalation accidents and the combinations of pneumoconiosis with TB or COPD. Diseases which constitute a higher proportion of reported cases in 2001 compared with the other reporting years include inhalation accidents, bronchitis, asthma induced by irritants and latex allergy.

Table 1: SORDSA cases reported overall and in 2001 (January – November) by disease group.

Disease	Total (%)	2001 (%)
Pneumoconiosis	3664 (58.0)	231 (49.9)
Inhalation accident	564 (8.9)	103 (22.3)
Pneumoconiosis and TB	433 (6.9)	30 (6.5)
COPD and pneumoconiosis	353 (5.6)	21 (4.5)
Occupational asthma with latency	303 (4.8)	10 (2.2)
TB	162 (2.6)	9 (1.9)
Bronchitis	157 (2.5)	18 (3.9)
Non malignant pleural disease	156 (2.5)	8 (1.7)
COPD	109 (1.7)	3 (0.7)
Asthma induced by irritants	97 (1.5)	9 (2.0)
Latex allergy	91 (1.4)	10 (2.2)
Mesothelioma	70 (1.1)	6 (1.3)
Rhinitis	47 (0.7)	3 (0.7)
Other	35 (0.6)	1 (0.2)
Lung cancer	31 (0.5)	1 (0.2)
Irritant reaction	24 (0.4)	0
Byssinosis	20 (0.3)	0
Total	**6316**	**463**

REPORTED CASES DUE TO LATEX

Occupational asthma due to latex, and latex allergy are the most frequently reported conditions due to exposure to latex protein. SORDSA has recorded 156 cases of occupational respiratory disease due to latex since 1997. Table 2 shows these cases by disease group and year of reporting. The number of cases of occupational asthma due to latex has decreased since 1997. This is contrary to the findings of the SWORD (Surveillance of Work-related and Occupational Respiratory Diseases) surveillance scheme in the UK, where a trend of increasing reports of occupational asthma due to latex has been demonstrated since this was first reported in 1991. In 1997 latex was the fourth most commonly reported causal agent for occupational asthma in the UK, and rates were highest among laboratory workers, followed by healthcare practitioners (1).

Table 2: SORDSA cases due to latex (Oct 1996 – Nov 2001) by disease and year

Year	Occupational asthma	Latex allergy	Other	Total
1997	39	19	0	58
1998	9	33	0	42
1999	5	22	1 (inhalation accident)	28
2000	3	7	7	17
2001	0	10	1 (rhinitis)	11
Total	56	91	9	156

SORDSA's cases of occupational asthma due to latex, and latex allergy are mainly (94%) from one source, a large teaching hospital in Cape Town where a survey for latex allergy was carried out. The prevalence of latex allergy among staff at this particular hospital was found to be between 9.2% and 11.2% (2). The situation in other South African hospitals and clinics is likely to be similar, with about 10% of the staff exposed to latex gloves becoming sensitized and developing symptoms. Why are these cases not reported to SORDSA? Only one of SORDSA's latex cases was reported from Kwa-Zulu Natal province, 6 from Gauteng and none from the other provinces. There seems to be gross under-reporting of these conditions. In spite of this, latex is SORDSA's most frequently reported agent causing occupational asthma (19% of the cases).

Most of SORDSA's cases due to latex occurred in females (82.7%). In 97% of cases, the exposure industry was healthcare. Specific occupations of the affected individuals are shown in Table 3. Although many varied occupations were reported, healthcare practitioners were the most frequently affected.

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1. Ross D. J. Ten years of the SWORD project. *Clin Exp Allergy* 1999; 29: 750 –753.
2. Potter P. C, Crombie I, Marian A, Kosheva O, Maqula B, Schinkel M. Latex allergy at Groote Schuur Hospital – prevalence, clinical features and outcome. *S Afr Med J* 2001; 91: 760-765.

Table 3: Occupations of SORDSA cases due to latex

Occupation	n	%
Nurse	94	60.3
Doctor	17	10.9
Laboratory worker	12	7.7
General assistant	11	7.0
Radiographer	3	1.9
Unknown	3	1.9
Artisan/operator	3	1.9
Cleaner	2	1.3
Physiotherapist	2	1.3
Medical student	2	1.3
Dentist	1	0.6
Hairdresser	1	0.6
Social worker	1	0.6
Packer in latex glove factory	1	0.6
Security officer	1	0.6
Pharmacist	1	0.6
Catering assistant	1	0.6
Total	156	100

LATEX ALLERGY – DETERMINING OUR FUTURE CAREERS

Dr Spo Kgalamono

Occupational latex allergy is increasingly becoming a public health problem especially in our hospitals. Health care workers, particularly those in specialized areas, are at a high risk of developing latex allergy since they receive ongoing and significant exposure to latex gloves. The staff in these departments is highly specialized and it becomes a problem if relocation of a latex allergic person is the ultimate solution. The following case scenario illustrates the difficulties surrounding this issue.

A 37-year-old nursing sister who works in a specialized unit in one of the academic hospitals was referred to the NCOH clinic for suspected latex allergy. Her first contact with gloves was in 1988 when she started nursing. Since 1992, she has been working in specialized departments where she had to use latex gloves on a daily basis. Her medical problems started in 1995 with conjunctivitis every evening of a working day. Over the weekends and holidays she never experienced any problems. As time went on, the conjunctivitis got worse and she started to experience chest tightness and an itchy rash over the hands whenever she was at work, even worse when she worked long shifts. Later, the conjunctivitis persisted even at home, over the weekends. It would only clear over long holidays. It was clear that she needed to avoid latex at all costs.

After a long debate with management, she was eventually given latex-free gloves. This helped for the rash but not for the other problems as the other staff members were still using powdered latex gloves. After about 2 weeks of using non-latex gloves, she developed the rash all over the body every time she entered the ward. At this time she had started to consult for chest tightness and conjunctivitis almost thrice every week and her colleagues were starting to complain about her frequent absenteeism. She was being called "the latex girl".

She was then relocated from the unit to OPD where the use of gloves is supposedly low. She still experienced problems and was now moved from department to department until she landed up in admin, which she didn't like at all, but her symptoms cleared. It was evident that she was going to end up doing administration for as long as she was employed at this hospital. She was admitted for depression after realizing that she had to change her career.

Blood was taken for IgE to latex (RAST), which gave a very high result (51.89 kV/l) and she was not allowed to work in a latex environment. This meant leaving clinical nursing altogether. Unfortunately this didn't end here. She developed allergy to bananas, kiwifruit, paw-paw, tomatoes and avocadoes. She can't even wear pantyhose anymore and she gets a bad reaction on contact with balloons. She is now being trained for human resources management. This is one of the many cases of our specialized staff leaving the hospitals because of latex allergy. In future compensation costs will be so high and staff members will start suing their employers for not providing a safe working environment. We don't want to be faced with such a situation. Proactivity and strategic planning should be our choice now.

SOUTH AFRICAN PUBLICATIONS ON OCCUPATIONAL LUNG DISEASE IN 2001

Medline and Pubmed database searches using "South Africa" and "occupational lung disease" as keywords, together with a list of relevant articles published by NCOH staff members in 2001 revealed the following references (in alphabetical order):

1. Bartie C, Venter SN, Nel LH (2001). Evaluation of detection methods for Legionella species using seeded water samples. Water SA 27 (4): 523-527.
2. Davies JCA. Silicosis and tuberculosis among South African gold-miners - an overview of recent studies and current issues. *S Afr Med J* 2001; 91(7):562 - 566.
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4. Esterhuizen TM, Hnizdo E, Rees D, Lalloo UG. Setting the scene for SORDSA - The importance of occupational respiratory disease surveillance in South Africa. Editorial. *S Afr Med J* 2001; 91(6):498-499.
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8. Jones K, Garfitt SJ, Calverley A, Channa K, Cocker J. Identification of a possible biomarker for colophony exposure. *Occup. Med (Lond)* 2001; 51(8): 507-9.
9. Potter P. C, Crombie I, Marian A, Kosheva O, Maqula B, Schinkel M. Latex allergy at Groote Schuur Hospital – prevalence, clinical features and outcome. *S Afr Med J* 2001; 91: 760-765.
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12. White NW, Steen TW, Trapido ASM, Davies JCA, Mabongo NM, Monare N, Mqoqi NP, Williams BG. Occupational lung diseases among former goldminers in two labour sending areas. *S Afr Med J* 2001; 91(7): 599 - 604.

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Directory of Occupational Health and Hygiene Practitioners

The World Health Organization (WHO)/ International Labour Organization (ILO) Joint Effort on Occupational Health and Safety in Africa:

Update 2 - Areas of Collaboration

A WHO/ILO planning meeting on occupational health and safety (OHS) for the African Region was held in Harare, 7-8 March 2001. The meeting was organised by the WHO and ILO, and included participants from Regional Offices and Headquarters of both organizations, and experts from research centres in the region, as well as experts from the host country Zimbabwe.

The background of this meeting is the urgent need for strengthening OHS in the African Region, responding to the hazardous work environments and the huge burden of occupational injuries and diseases. Co-ordination between WHO and ILO is necessary in order to be more effective and because workplace health and safety efforts take place under both Ministry of Health and Ministry of Labour in many countries. In a previous consultation meeting the idea of an African Effort on Occupational Health was developed, to serve as an umbrella for actors and activities in the area, to develop a common framework and objectives, and to serve as a fundraising platform.

The outcomes of the WHO/ILO Harare meeting in March 2001 are described below:

Strategies for Collaboration

The Joint Effort takes place within the framework of the UN inter-agency co-operation through the ILO's Global Occupational Safety and Health Technical Co-operation Programme and the WHO's Global Strategy on Occupational Health.

The strategy development was started with a discussion to agree upon the common ground between WHO and ILO in terms of the focus of the project. The report of the Committee on the Twelfth Session of the Joint ILO/WHO Committee on Occupational Health was taken as the basis for discussion. This document defines the needs and opportunities for collaboration between WHO and ILO particularly to achieve the following objectives:

1. the maintenance and promotion of workers' health and working capacity
2. the improvement of working environment and work to become conducive to safety and health
3. the development of work organisations and working cultures in a direction, which supports health and safety at work and in doing so also, promotes positive social climate and smooth operation and may enhance productivity of the undertaking.

This common ground was accepted as being the context of the WHO and ILO collaboration in Africa.

Following, there was a discussion on the name of the co-operation between the WHO and ILO that would recognize the long history of ILO ongoing activities in the African Region in OHS as well as the importance of including safety in the name, as it was agreed that both WHO and ILO conduct activities related to occupational safety.

The consultation agreed upon the name:

The WHO/ILO Joint Effort on Occupational Health and Safety in Africa.

The discussion on the structure for the Joint Effort concluded that cooperation would occur among partners at different levels, i.e. at Regional/Subregional level, and at National level. The Regional level coordination will be between ILO and WHO, and the National level can have a tri-partite nature, including social partners. Ministries of Health and Labour will always be part of the National Coordination mechanism. The nature of the coordination will greatly depend on the activities that will be chosen for implementation by the partners.

Areas of Collaboration

The following general objective was accepted:

The WHO/ILO Joint Effort on Occupational Health and Safety in

Africa will improve conditions and environment of work in Africa, thus reducing the burden of occupational diseases and injuries, through intensified co-ordination of occupational health and safety activities.

In preparation for the meeting, a survey had been undertaken by WHO/AFRO in 46 countries, and 50% of countries responded. The objectives of the survey were to make an inventory of the current situation, to identify needs, and to determine the type of support that can be supplied. Priorities for 2000-2001 were identified by the countries as:

- Development of human resources
- Standards, reinforcement, decentralisation of services
- Data collection
- Development and implementation of policy
- Information, education, awareness raising
- Inter-sectoral collaboration
- Fight against AIDS in the workplace
- Others

These country priorities provided the context within which the areas of collaboration of the Joint Effort were discussed. **The areas of collaboration that were chosen for the WHO/ILO Joint Effort were:**

1. **Capacity building focused on human resource development**
2. **National policies, programmes and legislation**
3. **Information, research and awareness raising**
4. **Promotion of OHS in particularly hazardous occupations, vulnerable groups (including informal sector workers and children) and in newly transferred technologies**

The Joint Effort is intended to create worldwide awareness of the dimensions and consequences of work-related accidents, injuries and diseases. In addition, it will also promote the goal of basic protection for all workers in conformity with international labour standards and enhance the capacity of both member states and industry to design and implement effective preventive and protective policies and programmes.

The Joint Effort also aims at showing that occupational health has an important role in the social effort to eliminate instability for family and for society.

Plan of Action

The discussion on the Plan of Action introduced the concept of working in stages. It was agreed that the first stage would involve a Joint Effort Phase 1 Workplan, with a limited number of concrete activities, that build on existing and ongoing efforts of ILO and/or WHO and partners. The implementation of Phase 1, which began in June 2001, would have a duration of one year.

The long-term action plan will be developed later for presentation to donors. It is expected that the activities from Phase 1 will give tangible results in a short period of time, since they are based on ongoing activities. This will increase visibility and credibility of the Joint Effort.

Examples of the types of activities to be included in the Phase 1 Workplan were identified and are presented below within each of the four areas of collaboration:

1. Capacity building focused on human resource development

- Skills audit/harmonization workshop
- Training of Occupational Health and Safety Professionals
  - basic
  - specialized (e.g. by distance education: occupational medicine and occupational hygiene)

2. National policies, programmes and legislation

- Develop guidelines on development and implementation of National Policies and Programmes
- Develop guidelines on updating legislation
- Establish technical support units

3. Information, research and awareness raising

Establishment of:

- Information centres
- A Web site and List server to improve circulation of information at national and international level
- A WHO/ILO Joint Effort Newsletter on the development and implementation of the effort

4. Promotion of OHS in particularly hazardous occupations, vulnerable groups (including informal sector workers and children) and in newly transferred technologies

- Implementation of Pilot project in the Informal Sector (vulnerable groups)
- Joint programme on OHS in Mining with a special focus on the elimination of silicosis

The final Phase 1 Workplan was to be further developed prior to a WHO/ILO meeting in May 2001 in the Ivory Coast.

This is the second of a series of articles on the WHO/ILO Joint Effort on OHS in Africa. In the third article the Joint Effort Meeting on the Informal sector in Francophone Countries, Abidjan, Ivory Coast, 28-30 May 2001.

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Challenges inherent in the compensation system of South Africa

Dr Mmuso Ramantsi, Chief Medical Officer, Compensation Fund, Department of Labour

Introduction

The compensation system in South Africa continues to draw criticism from all stakeholders. As part of the information drive from the Office of the Compensation Commissioner, an article will appear in each issue of this publication. This is the first in the series and it aims to provide facts about the Compensation for Occupational Injuries and Diseases Act (Act 130 of 1993), indicate areas of misinterpretation, highlight some of the complexities of working in the compensation field, increase awareness of the challenges facing the Office of the Compensation Commissioner and share what is being done to improve the system. Secondly, it is hoped that through these articles, discussion with all parties, but occupational health service-providers in particular, will be stimulated, which will assist policy- and key-decision-makers in their efforts to improve the compensation system.

The Act

Since 1990, South Africa has witnessed fundamental changes to numerous government policies and legislation, including the compensation system legislation. In 1993, the new act containing the changes and entitled "Compensation for Occupational Injuries and Diseases Act, (COIDA)" replaced the "Workmen's Compensation Act (Act 30 of 1941)", which had been in place since the introduction of the compensation system in South Africa in 1941.

COIDA governs the reporting of, and compensation for all occupational injuries and diseases (excluding miners with occupational lung diseases). The purpose of the Act is to provide for compensation for disablement caused by occupational injuries or diseases sustained or contracted by the employees in the course of their employment, or for death resulting from such injuries or diseases. The employees are compensated for their occupational injuries or diseases, NOT for the loss of the job or the inability to continue a particular job. Payment for pain and suffering is also excluded.

The compensation system functions on the "no fault principle" for providing benefits to employee with work-related injuries and diseases. Broadly speaking, the employee exchanges his common law right to sue the employer for a guaranteed payment from the Compensation Fund.

Criticisms

The changes introduced by the new act, along with a myriad of amendments and circular instructions, have occasioned criticism of the act, with those against it suggesting that the act:

- protects the employers rather than serving the interests and needs of injured workers;
- has no preventive focus, nor ensures the safety and health of employees in the workplace;
- does not guarantee that employers will take responsibility for their employees who have sustained work-related injuries or diseases.

Those in favour of COIDA, who view it as a better act than the Workmen's Compensation Act, level their criticism at the failure of the Office of the Compensation Commissioner to perform its statutory functions.

Misinterpretations

The no fault principle is interpreted incorrectly in many sectors. A notion commonly held is that there is a win-win situation as a result of an employee's unfortunate injury. This is occasioned by the following commonly propagated half-truths:

- the employee receives a "big settlement"
- service providers (doctors, hospitals and other providers) collect "large fees" for services
- attorneys can benefit from "substantial fees"
- the Commissioner pays, so the employer "scores" and can also not be sued for civil claims.

Ironically, however, no one wins, as disability from an occupational injury or disease, has significant personal, economic, occupational and social implications for the injured employee, places an increased burden on the service provider and increases the levy which the

employer must pay into the fund. This is to say nothing of all the other costs associated with disability.

Complexities

Although the compensation system continues to be a controversial industrial relations and public policy issue in the Republic of South Africa, with the system becoming far more politicized, few recognise the complexities of compensation medicine, policy and law. Those working within any compensation system must have up-to-date knowledge of various fields including medical, legal and policy issues. There must also be an awareness of the development not only in the area of workers' compensation, but also in the related fields of human rights, occupational health and safety, labour relations and tort law. Given this complexity and political demands to do more with less, the question is how should the compensation system be structured to face its current challenges?

Challenges facing the Office of the Compensation Commissioner

Various issues, some of which have been brought about by the changes that have occurred in South Africa, impact the work of the Office of the Compensation Commissioner. These are listed below:

- Changing labour force and work environment.
- Increased collaboration between the occupational health and safety and compensation systems.
- The changing relationship between compensation system with social security measures in catering for occupational injuries and diseases.
- Attempt to achieve a balance between equity in benefits and affordability in terms of compensation costs to employers.
- Escalating medical costs.
- An increase in the number of legal cases, with the concomitant costs.

Other needs, regarding the service provided by the Office of the Compensation Commissioner and detailed below, are a challenge for staff and management and need to be addressed:

- Objective and standard impairment assessment.
- Speedy benefit delivery to claimants.
- A reduction in the delay in payment to medical providers.
- The poor quality and/or duplication of documents which are submitted to the office.
- The non-compliance of employers in reporting accident and diseases.

Improvements to meet the Challenges

The Compensation Commissioner has realised the need to develop in accordance with these challenges and has done so by involving the staff in the changing climate and introducing improvements in various fields, including:

Technology:

Applying new technology resulting in the launch of the FYI "For Your Information" system. The FYI system is an electronic system of recording documents to overcome the issue of lost files and facilitate speedy processing of claims.

Structure:

The Compensation Board has appointed a Technical Committee on Occupational Diseases (TCOD) which comprises Government, Organised Labour and Organised Business, to investigate and report on the various aspects of occupational diseases as well as the functionality and future of Regional Medical Advisory Panels in terms of both the COIDA and ODMWA.

The Office of the Compensation Commissioner has established an occupational diseases section to set up standard procedures for handling of occupational diseases, trying to ensure the optimal basis for making decisions within the shortest possible period of time

The Director General of the Department of Labour has appointed an Interim Committee on post-traumatic stress disorder (PTSD), which comprises of psychiatrists from private and academic institutions, to investigate the assessment and evaluation of PTSD claims.

Instructions:

The Office of the Compensation Commissioner has already published the Instructions on Noise Induced Hearing Loss (NIHL).

The Office will publish instructions on mesothelioma and byssinosis in May 2002.

The draft circular instruction on PTSD will be published for public comment.

Encouragement of interaction with stakeholders:

As no organisation can successfully make significant change alone, it needs the support and inputs of key stakeholders (employers, employees, medical providers, legal profession and unions). To look at how to further meet the challenges an open invitation for constructive suggestions has been issued.

In addition, the Office of the Compensation Commissioner will endeavour to improve services and offer explanations for any decisions.

Future Issues

In the next edition, more information will be provided on the structure, constitution and function of the Technical Committee on Occupational Diseases.

Mine Medical Officers' Association Newsletter

What is the Mine Medical Officers' Association (MMOA)?

The MMOA consists of medical and dental members of the Health Professional Council of South Africa (HPCSA), whose work and/or interest, is in the field of mining. It is a well-established forum, which has been in existence since 1921.

Who belongs to the MMOA?

Originally, only doctors working in the mining industry were admitted as members. About a year ago, this was changed to include any doctor or dentist registered with the HPCSA, who works in, or has an interest in this sector.

Does the MMOA have specific objectives?

Yes! Originally there were only two:

- To study and discuss all problems of special interest relating to the work of mine medical officers.
- To promote and foster friendly intercourse and the exchange of views among members of the association and with other organisations connected with the mining industry.

These have been expanded to the following:

- To study, discuss and to bring to the attention of its members any matters of medical and general interest pertaining to the mining industry.
- To promote the interests of the medical profession in the mining industry.
- To formulate and review guidelines for a desirable standard and scope of medical practice within the mining industry.
- To promote and organise continuing medical education.
- To promote medical research by members.
- To foster a friendly relationship of exchange of views among members of the Association and with the other organizations connected with the mining industry.

What's in it for me? - Why should I join the MMOA?

You will derive the following benefits:

- You will belong to a unique forum and share clinical, occupational, statutory and management information and expand your knowledge in these areas
- You will have a say and some influence in the development of protocols, policies, Acts, regulations and guidelines, which govern the way you work.
- You will enjoy a close liaison with other centres, associations and societies with interests that are similar to your own, e.g. National Centre for Occupational Health (NCOH), South African Society of Occupational Medicine (SASOM), South African Society of Occupational Health Nursing Practitioners (SASOHN) and Southern African Institute for Occupational Hygiene (SAIOH).
- You will obtain up-to-date information relating to research through the association with Safety in Mines Research Advisory Committee (SIMRAC) and their supporting services, SIMRAC Project Support Services (SIMPROSS).
- You will be part of an association that promotes and supports the approach of a multidisciplinary team in occupational health within and beyond the medical fraternity, through newsletters, congresses and work shops.
- You will receive notification of events of interest to you, and concessions on certain congress fees, e.g. the MMOA Annual Congress
- You will receive this journal (Occupational Health Southern Africa).

How do I join?
Contact Ms Maureen Mason on:
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Fifth Annual MMOA Congress

The Fifth Annual Congress will be held at the Malaga Hotel, Waterval Boven, Mpumulanga.

The venue has been carefully chosen and offers delegates, partners and families the opportunity to relax in tranquil surroundings and, as can be seen from the attached provisional programme, the Congress itself will be of interest and great benefit to all practising health care professionals.

It is anticipated that the Congress will be well subscribed, therefore it may be necessary to utilise nearby accommodation, however, if this proves necessary, delegates will take lunch and dinner at the Malaga. Rooms in the Malaga Hotel will therefore be allocated on a first-come, first-served basis.

Additional information, draft programme and registration forms are available at http://www.mmoa.org.za/NewsEvents.htm , or by contacting Ms Maureen Mason.

This page has been generously sponsored by Pfizer

Health Care Sites

This NetPage (fourteenth) provides a listing of sites providing health and safety information on the Health Care Sector. Further links are included on the Health Care page of ASOSH.ORG (World Links – Sectors) and its mirror site ASOSH.TRIPOD.COM.

Links

Health Care Sector (http://europe.osha.eu.int/good_practice/healthcare/) European Agency for Safety and Health at Work (OSHA-EU), Spain
Health Care Sector: Information Providers (http://europe.osha.eu.int/good_practice/healthcare/index2.php)

Health Care Workers (http://www.cdc.gov/niosh/healthpg.html) NIOSH, USA

OSHA Alphabetic Site Index (http://www.osha.gov/html/subject-index.html) OSHA, USA

General

Are You Prepared? An AFSCME Guide to Emergency Planning in the Workplace (http://www.afscme.org/health/bio-chem.htm) American Federation of State, County and Municipal Employees (AFSCME)

Case Studies: Health and Hospital Professions (http://www.etuc.org/tutb/uk/pdf/2001-15p50-52.pdf) European Trade Union Technical Bureau for Health and Safety (TUTB), Belgium
Health and Hospital Professions (http://www.etuc.org/tutb/uk/conference200064.html)

Frontline Healthcare Workers Safety Foundation, Ltd. (http://www.frontlinefoundation.org/) USA

Guidelines for Protecting the Safety and Health of Health Care Workers (http://www.cdc.gov/niosh/hcwold0.html) DHHS (NIOSH) Publication No. 88-119, NIOSH, USA

Hazards at Work - health services (http://www.hse.gov.uk/pubns/healdex.htm) HSE, UK. Majority of relevant HSE publications only available at cost.

Health and Community Services (http://www.safetyline.wa.gov.au/sub46.htm) WorkSafe Western Australia

Hospitals & Occupational Health in the EU (http://www.hope.be/07publi/leaflet/occup/frame.htm) Standing Committee of the Hospitals of the European Union (HOPE), Belgium

Occupational Health (http://www.cdc.gov/ncidod/hip/Occhealt/ochealth.htm) CDC, USA

Publications (http://www.natn.org.uk/pages/framebooks.html) National Association of Theatre Nurses (NATN), UK. H&S posters and other publications available at cost.

Report of the Advisory Committee on Health Services Sector (http://www.hsa.ie/pub/publications/healtser.pdf) Health and Safety Authority, Ireland

Safe Jobs Now: An AFSCME Guide to Health and Safety in the Workplace (http://www.afscme.org/health/safetc.htm) AFSCME

Sustainable Hospitals (http://www.sustainablehospitals.org/) USA

Discussion Group

Health Care Sector (http://europe.osha.eu.int/good_practice/forums/) OSHA-EU, Spain. Deals with all relevant topics and problems related to safety and health of workers in the health care sector

Bloodborne Pathogens

AIDS/HIV Infected Health Care Workers: Guidance on the Management of Infected Health Care Workers and Patient Notification (http://www.doh.gov.uk/aids.htm) Department of Health, UK

AIDS/HIV Disease (http://www.afscme.org/health/faq-aids.htm) AFSCME
Hepatitis B (http://www.afscme.org/health/faq-hepb.htm)
Hepatitis C (http://www.afscme.org/health/faq-hepc.htm)

An Integrated Protocol to Manage Health Care Workers Exposed to Bloodborne Pathogens (http://www.hc-sc.gc.ca/hpb/lcdc/publicat/pathogns/) Health Canada

Bloodborne Pathogens (http://www.osha-slc.gov/SLTC/bloodbornepathogens/index.html) OSHA, USA

Bloodborne Pathogens Worker Protection (http://www.cdc.gov/ncidod/hip/BLOOD/worker.htm) CDC, USA
Viral Hepatitis (http://www.cdc.gov/ncidod/diseases/hepatitis/index.htm)
Immunization of Health-Care Workers: Recommendations of the Advisory Committee on Immunization Practices (ACIP) and the Hospital Infection Control Practices Advisory Committee (HICPAC) (http://www.cdc.gov/epo/mmwr/preview/mmwrhtml/00050577.htm)

Guidelines On Infection Control Measures For HIV Infection (http://www.ino.ie/news_detail.php3?nNewsId=553&nCatId=119) Irish Nurses Organisation (INO)

Healthcare Workers and HIV/AIDS (http://www.thebody.com/whatis/carework.html) The Body, Body Health Resources Corporation, USA

Health Care Workers: Avoiding infections at work (http://familydoctor.org/handouts/246.html) American Academy of Family Physicians
Occupational Infections in Health Care Workers: Prevention and Intervention (http://www.aafp.org/afp/971200ap/swinker.html)

Hepatitis B and the Health Care Worker. CDC answers frequently asked questions about how to protect health care workers (http://www.immunize.org/catg.d/2109hcw.htm) Immunization Action Coalition, USA

Human Immunodeficinecy Virus and Hepatitis B in the Workplace [NOHSC:2010(1993)] (http://www.nohsc.gov.au/PDF/Standards/Codes/HivHepB.pdf) NOHSC, Australia

Position Statements/Guidelines: HIV and AIDS in the Workplace (http://www.acoem.org/position/statements.asp?CATA_ID=42) American College of Occupational and Environmental Medicine (ACOEM)

Reducing the impact of HIV/AIDS on Nursing and Midwifery Personnel (http://www.icn.ch/AIDSguidelines.pdf) International Council of Nurses (ICN), Switzerland

Sharps

Best Practices in Injection Safety (http://www.icn.ch/Leaflet7Sept2001.pdf) ICN

Facts About Needlesticks and Bloodborne Pathogens (http://www.nursingworld.org/needlestick/nshome.htm) American Nurses Association (ANA)

Health care workers. AIDS & prevention (http://www.avert.org.uk/needlestick.htm) AVERT, UK

Needle Points: An AFSCME Guide to Sharps Safety (http://www.afscme.org/health/needletc.htm) AFSCME
Needlestick Prevention (http://www.osha-slc.gov/SLTC/needlestick/index.html) OSHA, USA
OSHA Subject Page for Needle Sticks (http://www.osha-slc.gov/needlesticks/)
Preventing Needlestick Injuries in Health Care Settings (http://www.cdc.gov/niosh/2000-108.html) NIOSH, USA
What *Every Worker* Should Know: How to Protect Yourself From Needlestick Injuries (http://www.cdc.gov/niosh/2000-135.html) Leaflet
Resources (http://www.med.virginia.edu/medcntr/centers/epinet/) International Health Care Worker Safety Center, University of Virginia
Sharps (http://www.eucomed.be/?x=4&y=46&z=118) Eucomed, Belgium

Ergonomics

Accidents leading to over-exertion back injuries among nursing personnel (http://www.niwl.se/ah/1999-20.html) National Institute for Working Life (NIWL), Sweden
Back in Care - Preventing Back Pain and Back Injuries in Caregivers (http://www.osh.dol.govt.nz/order/catalogue/29.html) Safety Net, New Zealand
Back in Care - Preventing Musculoskeletal Injuries in Staff in Hospitals and Residential Care Facilities (http://www.osh.dol.govt.nz/order/catalogue/261.html) Safety Net, New Zealand
Back Injuries, Musculoskeletal Disorders and Ergonomics (http://www.nursingworld.org/dlwa/osh/ergon.htm) ANA
Do It By Design: An Introduction to Human Factors in Medical Devices (http://www.fda.gov/cdrh/humfac/doit.html) FDA, USA
Make Sure the Medical Device You Choose Is Designed for You (http://www.fda.gov/cdrh/useerror/you_choose_checklist.html) FDA, USA
Strategies to Reduce the Risk of Back Strain in Nursing Homes (http://www.safetyline.wa.gov.au/pagebin/pg005754.htm) WorkSafe Western Australia

Ethylene Oxide

Control Technology for Ethylene Oxide Sterilization in Hospitals (http://www.cdc.gov/niosh/89-120.html) NIOSH, USA
Ethylene Oxide (http://www.ccohs.ca/oshanswers/chemicals/chem_profiles/ethylene_oxide/) CCOHS
Ethylene Oxide (http://www.osha-slc.gov/SLTC/ethyleneoxide/index.html) OSHA, USA
Ethylene Oxide Sterilizers in Health Care Facilities: Engineering Controls and Work Practices (http://www.cdc.gov/niosh/89115_52.html) NIOSH, USA

Facilities

Health Care Facilities (http://www.osha-slc.gov/SLTC/healthcarefacilities/index.html) OSHA, USA
Nursing Homes (http://www.osha-slc.gov/SLTC/nursinghome/index.html)

Formaldehyde

Controlling Formaldehyde Exposures During Embalming (http://www.cdc.gov/niosh/hc26.html) NIOSH, USA
Formaldehyde (http://www.afscme.org/health/faq-fah.htm) AFSCME
Formaldehyde (http://www.osha-slc.gov/SLTC/formaldehyde/index.html) OSHA, USA

Glutaraldehyde

Glutaraldehyde (http://www.afscme.org/health/faq-glut.htm) AFSCME
Glutaraldehyde (http://www.ccohs.ca/oshanswers/chemicals/chem_profiles/glutaraldehyde/) CCOHS
Glutaraldehyde Occupational Hazards in Hospitals (http://www.cdc.gov/niosh/2001-115.html) NIOSH, USA
Working with Glutaraldehyde (http://www.ino.ie/view_categories.php3?nCatId=123) INO

Hazardous Drugs

Hazardous Drugs Cytotoxic Anti-Neoplastic Drugs (http://www.afscme.org/health/faq-cyto.htm) AFSCME
Hazardous Drugs (http://www.osha-slc.gov/SLTC/hazardousdrugs/index.html) OSHA, USA
Reproductive Hazards (http://www.osha-slc.gov/SLTC/reproductivehazards/index.html)

Homecare

Caring Till It Hurts: How Nursing Home Work Is Becoming the Most Dangerous Job in America (http://www.seiu.org/nursing/dignity/caring.pdf) Service Employees International Union (SEIU), USA
Health and Safety Guidelines for Home Based Health Care Services (Draft) (http://www.osh.dol.govt.nz/order/catalogue/901.html) Safety Net, New Zealand
Homecare – Providing community & continuing care at home (http://www.ohsah.bc.ca/pdf-files/homecare-fact-sheet.PDF) Occupational Health and Safety Agency for Healthcare in BC, Canada

Ionizing Radiation

Electronic Products - Ionising Radiation (http://196.36.153.56/doh/department/radiation/code.html) Department of Health, South Africa
Ionizing Radiation (http://www.osha-slc.gov/SLTC/radiationionizing/index.html) OSHA, USA

Lasers

Laser/Electrosurgery Plume (http://www.osha-slc.gov/SLTC/laserelectrosurgeryplume/index.html) OSHA, USA
Laser Hazards (http://www.osha-slc.gov/SLTC/laserhazards/index.html)
Lasers - in Health Care (http://www.ccohs.ca/oshanswers/phys_agents/lasers.html) CCOHS

Latex Allergy

Latex Allergy (http://www.nursingworld.org/dlwa/osh/latex.htm) ANA
Latex Allergy (http://www.osha-slc.gov/SLTC/latexallergy/index.html) OSHA, USA
Latex allergy in the workplace (http://www.ino.ie/view_categories.php3?nCatId=122) INO
Latex Allergy: Prevention and Management in the Workplace (http://www.asosh.org/Programmes/SORDSA/Latex_allergy.htm) SORDSA, South Africa
Latex and you (http://www.hse.gov.uk/pubns/indg320.pdf) HSE, UK

Latex – An increasingly common allergy (http://www.ohsah.bc.ca/pdf-files/latex-fact-sheets.PDF) Occupational Health and Safety Agency for Healthcare in BC, Canada

Other WWW Sites: Latex Allergy (http://www.cdc.gov/niosh/latexall.html) NIOSH, USA

Medical Gases

Avoiding The Hazards Of Medical Gases (http://www.fda.gov/fdac/features/2000/400_gas.html) FDA, USA

FDA Public Health Advisory: Potential for Injury from Medical Gas Misconnections of Cryogenic Vessels (http://www.fda.gov/cdrh/safety/medical-gas-misconnect.html)

Control of Nitrous Oxide During Cryosurgery (http://www.cdc.gov/niosh/hc29.html) NIOSH, USA

Controlling Exposures to Nitrous Oxide During Anesthetic Administration (http://www.cdc.gov/niosh/noxidalr.html)

Waste Anesthetic Gases (http://www.osha-slc.gov/SLTC/wasteanestheticgases/index.html) OSHA, USA

Mercury

Mercury (http://www.noharm.org/index.cfm?page_ID=12) Health Care Without Harm, USA

Mercury Reduction (http://www.sustainablehospitals.org/HTMLSrc/IP_Mercury.html) Sustainable Hospitals, USA

Pollution Prevention

Incineration (http://www.noharm.org/index.cfm?page_ID=10) Health Care Without Harm, USA

Pollution Prevention (http://www.noharm.org/index.cfm?page_ID=18)

PVC (http://www.noharm.org/index.cfm?page_ID=6)

RNnoharm/Pollution Prevention (http://www.nursingworld.org/rnnoharm/) ANA

Risk Assessment/Inspections

Ponderosa Lodge Pot: Washing, An Ergonomic Assessment (http://www.ohsah.bc.ca/ergonomic-assessment.htm) Occupational Health and Safety Agency for Healthcare in BC, Canada

Risk assessment at work: practical examples in the NHS (http://www.had-online.org.uk/downloads/pdfs/risk_assment_examples.pdf) Health Development Agency, UK

Workers Health & Safety Centre Hazard Assessment Guide for health & social services sector workplaces (http://www.whsc.on.ca/healthguide.PDF) WHSC, Ontario, Canada

Worksite Inspections: Union Representatives as Detectives (http://www.afscme.org/health/faq-insp.htm) AFSCME

Stress

Intervention studies in the health care work environment. Lessons learned (http://www.niwl.se/ah/2000-10.html) National Institute for Working Life (NIW), Sweden

Psychosocial Hazards (http://www.cdc.gov/niosh/healthpg.html#psychosocial) NIOSH, USA

Stress management - Is the world weighing heavily on your shoulders? (http://www.ino.ie/news_detail.php3?nNewsId=1472&nCatId=228) World of Irish Nursing, INO

Struggling with stress in Accident and Emergency (http://www.ino.ie/news_detail.php3?nNewsId=1929&nCatId=303)

Tuberculosis

ACOEM Guidelines for Protecting Health Care Workers Against Tuberculosis (http://www.acoem.org/position/statements.asp?CATA_ID=27) ACOEM

Division of Tuberculosis Elimination (http://www.cdc.gov/nchstp/tb/default.htm) CDC, USA

International Union Against Tuberculosis and Lung Disease (http://www.iuatld.org/) IUATLD, France

Guides for low income countries (http://www.iuatld.org/html/body_guides.htm)

Protect Yourself Against Tuberculosis — A Respiratory Protection Guide for Health Care Workers (http://www.cdc.gov/niosh/tb.html) NIOSH, USA

Stanford Center for Tuberculosis Research (http://molepi.stanford.edu/) Stanford University, USA

Stop TB (http://www.stoptb.org/) USA

The Prevention and Control of Tuberculosis in the United Kingdom (http://www.doh.gov.uk/pub/docs/doh/tbuk.pdf) Department of Health, UK

Tuberculosis (http://www.cdc.gov/niosh/tbinfopg.html) NIOSH, USA

Tuberculosis (http://www.nursingworld.org/dlwa/osh/tb.htm) ANA

Tuberculosis (http://www.osha-slc.gov/SLTC/tuberculosis/index.html) OSHA, USA

Tuberculosis and Health Care Workers (http://www.lungusa.org/occupational/tuberculosis_workers.html) American Lung Association

Tuberculosis – Strategy & Operations (http://www.who.int/gtb/) WHO, Switzerland

Violence at Work and Sexual Harrassment

Other WWW Sites: Violence (occupational) (http://www.cdc.gov/niosh/violence.html) NIOSH, USA

Physical Hazards: Violence (http://www.cdc.gov/niosh/healthpg.html#violence)

Sexual Harassment at Work (http://www.ino.ie/view_categories.php3?nCatId=124) INO

Stopping Violence Against Staff Working in the NHS (http://www.nhs.uk/zerotolerance/intro.htm) Department of Health, UK

Violence at Work (http://www.hsa.ie/pub/publications/violwork.pdf) Health and Safety Authority, Ireland

Violence: A World-wide epidemic (http://www.icn.ch/matters_violence.htm) ICN

Guidelines on coping with violence in the workplace (http://www.icn.ch/guide_violence.pdf)

Workplace Violence (http://www.afscme.org/health/faq-viol.htm) AFSCME

Workplace Violence (http://www.nursingworld.org/dlwa/osh/violence.htm) ANA

Workplace Violence (http://www.osha-slc.gov/SLTC/workplaceviolence/index.html) OSHA, USA

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South African SHE Law Update

Dr David Stanton, Chamber of Mines

This third SHE Law Update covers in general the period from the first and second SHE Law Updates published in 2000. Full text of many of the documents listed can be obtained via the links on the Legislation page of asosh.org (Southern African component), Law page of saioh.org and Guidelines, Regulations and Standards page at COMInfo (http://www.cominfo.org.za/). Please let the author know of any missing items in this SHE Law Update.

Acts

Gas Act (No. 48 of 2001)
Department of Minerals and Energy (DME), Government Gazette (GG) No. 23150, 21 February 2002
To promote the orderly development of the piped gas industry; to establish a national regulatory framework; to establish a National Gas Regulator as the custodian and enforcer of the national regulatory framework. Annual reporting by the Gas Regulator must include the position regarding health and safety in the industry. Any person who applies for a gas licence must include the plans and ability of the applicant to comply with all applicable labour, health, safety and environmental legislation.

Unemployment Insurance Act (Act No. 63 of 2001)
Department of Labour (DoL), GG No. 23064, 28 January 2002
To establish the Unemployment Insurance Fund; to provide for the payment from the Fund of unemployment benefits to certain employees, and for the payment of illness, maternity, adoption and dependant's benefits related to the unemployment of such employees; to provide for the establishment of the Unemployment Insurance Board and the designation of the Unemployment Insurance Commissioner.

South African Maritime and Aeronautical Search and Rescue Act, 2001
Department of Transport (DoT), GG No. 22509, 7 September 2001
To incorporate the International Convention on Maritime Search and Rescue, 1979, and Annex 12 to the Convention on International Civil Aviation, 1944, into South African Law; and to establish a South African Search and Rescue Organisation.

National Health Laboratory Service Act (No. 37 of 2000)
Department of Health (DoH), GG No. 21879, 13 December 2000
To provide for the establishment of a juristic person to be known as the National Health Laboratory Service; to provide for the abolition of the South African Institute for Medical Research, the National Institute for Virology, the National Centre for Occupational Health, certain forensic chemistry laboratories and all Provincial health laboratory services.

Council for the Built Environment Act (No. 43 of 2000)
Department of Public Works, GG No. 21818, 1 December 2000
To provide for the establishment of a juristic person to be known as the Council for the Built Environment; to provide for the composition, functions, powers, assets, rights, duties and financing of such a council. The objects of the Council include the promotion of appropriate standards of health, safety and environmental protection within the built environment.

Bills

Publication of Explanatory Summary of the National Railway Safety Regulator Bill
DoT, GG No. 23100, 6 February 2002
The National Railway Safety Regulator Bill seeks to provide for the establishment of a Railway Safety Regulator so as to regulate safe railway operations; to promote its objects and functions so as to provide for the manner in which they are to be managed; to provide for its staff matters; and to further provide for safety standards and regulatory practices for the protection of persons, properly and the environment.

Disaster Management Bill, 2002
Ministry for Provincial and Local Government, GG No. 22937, 14 December 2001
To provide for an integrated and co-ordinated disaster management policy that focuses on preventing or reducing the risk of disasters, mitigating the severity of disasters, emergency preparedness, rapid and effective response to disasters and post-disaster recovery; - the establishment of national, provincial and municipal disaster management centres; - disaster management volunteers.

Mineral Development Draft Bill
DME, GG No. 21840, 18 December 2000
To give effect to the principle that mineral resources are the common heritage of all South Africans, provide for the recognition of the State as the custodian of the nation's mineral resources; provide for a legislative framework within which the nation's mineral wealth can be developed to its fullest potential; to promote economic growth through the development of mineral resources within a framework of sustainable development, co-operative governance and national environmental policy; to regulate orderly prospecting for and mining of mineral resources, to regulate the possession, trade in and processing of diamonds, and to provide for the exploration and production of petroleum.

Draft National Health Bill
DoH, 9 November 2001
Bills of the South African Parliament – 2001 (http://www.polity.org.za/govdocs/bills/2001/)
Purpose: to establish a national health system which encompasses public, private and non-governmental providers of

health services; and provides the population of the Republic with the best possible health services that available resources can afford; and to set out the rights and duties of both health care providers and users.

Draft Petroleum Products Amendment Bill and Regulations to be Promulgated in terms of the Draft Bill
DME, GG No. 22593, 24 August 2001
To establish a national regulatory framework for petroleum pipelines, to establish a Petroleum Pipelines Regulator as the custodian and enforcer of the national regulatory framework, to provide for the issuing of licenses relating to the construction and operation of petroleum pipelines and the delivery of certain commercial services in connection therewith, to provide for the registration of offloading facilities, storage facilities and certain commercial services related thereto. Includes section on health, safety and environment.

Regulations

Lead Regulations, 2001, OHS Act (No. 85 of 1993)
DoL, GG No. 23175, 28 February 2002
Lowers the BEI for lead in blood to 60 μg/100 ml.

Asbestos Regulations, 2001, OHS Act (No. 85 of 1993)
DoL, GG No. 23108, 15 February 2002
Occupational exposure limit of 0,2 regulated asbestos fibres per milliliter of air averaged over any continuous period of four hours.

Diving Regulations, OHS Act (No. 85 of 1993)
DoL, Government Gazette No. 22991, 7 January 2002
Applies to all diving operations and all persons engaged in diving operations in the Republic of South Africa or the territorial waters thereof.

Incorporation of the Health and Safety Standards in the Diving Regulations, OHS Act (No. 85 of 1993)
DoL, GG No. 22991, 7 January 2002

Regulations for Hazardous Biological Agents, OHS Act (No. 85 of 1993)
DoL, GG No. 22956, 27 December 2001
Applies where a hazardous biological agent (HBA) is deliberately produced, processed, used, handled, stored or transported or an incident occurs that does not involve a deliberate intention to work with a HBA but may result in persons being occupationally exposed to a HBA.

Electrical Installation Regulations, 1992, Notices of Exemption in Terms of Section 40 of the Occupational Health and Safety Act, 1993
DoL, GG No. 22822, 16 November 2001
The issuing of Certificates of Compliance in the form of Annexure 1 of the Regulations is being phased out and the official use thereof shall be discontinued as from 1 July 2002.

Withdrawal of Government Notice No. R. 1847 and Incorporation of Health and Safety Standard: General Safety Regulations
DoL, GG No. 22565, 1 September 2001
From 1 September 2001 all respiratory protective equipment shall be submitted to the South African Bureau of Standards, Pretoria, for homologation.

Major Hazard Installation Regulations, OHS Act (No. 85 of 1993)
DoL, GG No. 22506, 30 July 2001
These regulations apply to employers, self-employed persons and users, who have on their premises, either permanently or temporarily, a major hazard installation or a quantity of a substance which may pose a risk that could affect the health and safety of employees and the public.

Control of Vehicles in the Coastal Zone, National Environmental Management Act (Act No. 107 of 1998)
Department of Environmental Affairs and Tourism (DEAT), 2001 (http://www.environment.gov.za)
The regulations impose a general prohibition on the recreational use of vehicles in the coastal zone.

Plastic Bag Regulations, Environment Conservation Act (No. 73 of 1989)
DEAT, 2001 (http://www.environment.gov.za)
The primary aim of the regulations is to restrict the production of non-reusable plastic bags, and unnecessary use of excessive amounts of disposable thin plastic film for packaging.

Chapter 23 Accidents and Dangerous Occurrences, Regulations Under the Mine Health and Safety Act (Act No. 29 of 1996)
DME, GG No. 22055, 9 February 2001
Covers accidents and dangerous occurrences to be reported.

Appointment of Members of Tripartite Institutions
GG No. 22068, 23 February 2001
Persons appointed as members of tripartite institutions for a period of three years with effect from 1 July 2000.

Regulations on Fluoridating Water Supplies, Regulations Under the Health Act, 1977 (Act No. 63 of 1977)
DoH, GG No. 21533, 8 September 2000
The Minister of Health has, under section 37, read with section 40(1), of the Health Act, 1977 (Act No. 63 of 1977), and after consultation with the Minister of Water Affairs and Forestry, made the regulations on fluoridating water supplies in the Schedule.

Amendment to the General Regulations Made in Terms of the Medical Schemes Act, 1998 (No. 131 of 1998)
DoH, GG No. 21256, 5 June 2000
Provides for the regulating of applications for membership to medical schemes and for the regulating of medical scheme brokers.

Amendment to the Vessels Under Pressure Regulations, 1996, OHS Act (No. 85 of 1993)
DoL, GG No.19657, 8 January 1999
Amendment of Regulation 13 on Inspection and test. Includes the proviso that no person shall perform internal and external inspections and hydraulic pressure tests contemplated in subregulation (1) (b) unless he or she is a holder of a certificate of registration issued by an organisation approved by the chief inspector.

Draft Regulations

Draft Explosives Regulations, OHS Act (No. 85 of 1993)
DoL, GG No. Gazette 22899, 14 December 2001
To be applicable to employers, self-employed persons and users who operate an explosives workplace for the purpose of manufacturing, test, store or use of explosives.

Draft General Administrative Regulations, OHS Act (No. 85 of 1993)
DoL, GG No. 22549, 10 August 2001
To replace the General Administrative Regulations, 1996.

Draft noise induced hearing loss regulations, OHS Act (No. 85 of 1993)
DoL, GG No. 22499, 3 August 2001
Apply to an employer or a self-employed person who carries out work at a workplace that may expose any person at that workplace to noise at or above the 8 hour occupational exposure limit for noise of 85 dB(A). To replace Regulation 7. Noise and hearing conservation, Environmental Regulations for Workplaces, 1987.

Draft Regulations in terms of Act 101 of 1965, as amended, Medicines and Related Substances Control Act (No. 101 of 1965), as amended
DoH, GG No. 22235, 1 June 2001
Provides for regulating access to medicines through generic substitution or parallel importing, the regulation of clinical trails and the regulation of all provisions dealing with licensing, prescribing, storing and handling of medicines.

Draft Merchant Shipping (Eyesight and Medical Examination) Regulations, Merchant Shipping Act (No. 57 of 1951).
South African Maritime Safety Authority, GG No. 21684, 3 November 2000
The draft regulations revise and consolidate the existing medical standards for seafarers serving on board vessels of 25 gross tonnage or more licensed or registered in South Africa set forth in the Eyesight and Medical Examination Regulations, 1977.

Draft Merchant Shipping (Small Vessel Safety) Regulations
South African Maritime Safety Authority, GG No. 21549, 15 September 2000
Revise and consolidate the existing safety requirements for (a) commercially operated small vessels and (b) pleasure (sport and recreation) vessels under 100 tons gross tonnage, set forth in the Standards of Seaworthiness, Manning and Licencing of Vessels Regulations, 1986, and the Regulations Regarding Ships or Small Vessels Used Solely for Sport or Recreation, 1985.

Regulations under the Mine Health and Safety Act (No. 29 of 1996) – To be gazetted in 2002

Regulations for Occupational Hygiene
DME. Approved by the Mine Health and Safety Council (MHSC) in October 2001
Schedules include an extensive listing of occupational exposure limits for airborne pollutants, occupational exposure limits for physical agents (noise and thermal stress) and requirements for potable water quality.

Occupational hygiene regulations (to be repealed)
DME. Approved by the Mine Health and Safety Council (MHSC) in February 2002

Reporting on dust, noise and thermal stress measurements
DME. Approved by the MHSC in October 2001

General environmental engineering regulations
DME. Approved by the MHSC in October 2001

Illumination Regulation (including regulations to be repealed)
DME. Approved by the MHSC in March 2002

Regulations for Respiratory protection equipment
DME. Approved by the MHSC in October 2001

Regulations for Self-contained Self-rescuers
DME. Awaiting Ministerial decision on personal use

Self-contained Self-rescuers (Regulations to be repealed)
DME. Approved by the MHSC in February 2002

Noise (medical surveillance)
DME. Approved by the MHSC in October 2001

General falls of ground regulations
DME. Approved by the MHSC in August 2001 (additional regulation, No. 1.5, approved in December 2001)

"Minerals Act falls of ground regulations" to be repealed
DME. Approved by the MHSC in December 2001

Regulations for Medical Surveillance on Exposure to Asbestos, Silica and Coal Dust
DME. Presently under review by the Legal Drafting Committee (LDC)

Instructions

Compensation for Occupational Injuries and Diseases Act (130/1993): Compensation Board: **Circular Instruction No. 171: Determination of permanent disability resulting from exposure to excessive noise and trauma in industry.**
DoL, GG No. 22296, 16 May 2001
Instruction No. 171 Supplement: Transitional arrangements between Instruction No. 168 and No. 171: Conducting and recording of a baseline audiogram.
GG No. 22834, 16 November 2001

Codes of Good Practice

Code of Good Practice for Employment and Conditions of Work for Special Public Works Programmes, Basic Conditions of Employment Act, 1997
DoL, GG No. 23045, 25 January 2002
A SPWP is a short-term, non-permanent, labour intensive programme initiated by government and funded, either fully or partially, from public resources to create a public asset. The Code provides guidelines for the protection of workers engaged in SPWP's, taking into account the need for workers to have basic rights, the objectives of the programmes and the resource implications for government.

Code of Good Practice: Key aspects of HIV/Aids and employment
Labour Relations Act, 1995 (Act No. 66 of 1995) and Employment Equity Act, 1998 (Act No. 55 of 1998)
DoL, GG No. 21815, 1 December 2000
The Code's primary objective is to set out guidelines for employers and employees to implement so as to ensure individuals with HIV infection are not unfairly discriminated against in the workplace. The Code will be accompanied by Technical Assistance Guidelines on Managing HIV/AIDS in the Workplace.

Codes of Practice Electronic Products - Ionising Radiation
Directorate Radiation Control, DoH
(http://196.36.153.56/doh/department/radiation/code.html)

Limits for Human Exposure to Time-Varying Electric, Magnetic, and Electromagnetic Fields (Up to 300 GHz)
Directorate Radiation Control, DoH 2002
Based on the 1998 ICNIRP (International Non-Ionizing

Radiation Committee) guidelines and specifies the limits for human exposure to time-varying electric, magnetic and electromagnetic fields (up to 300 GHz) in order to provide protection against known adverse health effects.

Draft Code of Good Practice

Draft Code of Good Practice on Key Aspects of Disability in the Workplace
DoL, GG No. 22209, 19 April 2001
The Code is a guide for employers and employees on key aspects of promoting equal opportunities and fair treatment for people with disabilities as required by the Employment Equity Act (the Act).

Guidelines for the Compilation of a Mandatory Code of Practice

Guideline for the Compilation of a Mandatory Code of Practice for an Occupational Health Programme (Occupational Hygiene and Medical Surveillance) on Personal Exposure to Airborne Pollutants
DME. Issued on 1 March 2002

Guideline for the Compilation of a Mandatory Code of Practice for an Occupational Health Programme (Occupational Hygiene and Medical Surveillance) on Thermal Stress
DME. Issued on 1 March 2002

South African Mines Occupational Hygiene Programme (SAMOHP) Code Book
DME. Issued on 1 March 2002
Includes: Definitions and Acronyms, Mandatory Reports and Generic Codes (Mine, Main Commodity, Activity area, Occupation and Pollutant).

Guideline for the Compilation of a mandatory Code of Practice for the Prevention of Flammable Gas and Coal Dust Explosions in Collieries
DME. Issued on 1 March 2002

Guideline for the Compilation of a Mandatory Code of Practice for the Prevention of Flammable Gas Explosions in Mines Other than Coal Mines
DME. Issued on 1 March 2002

Guideline for the compilation of a mandatory Code of Practice to combat rockfall and rockburst accidents in tabular metalliferous mines
DME. Issued on 1 March 2002

Guideline for the Compilation of a Mandatory Code of Practice for an Occupational Health Programme (Occupational Hygiene and Medical Surveillance) for Noise
DME Draft 2002

Guidelines

Hearing Conservation Programme Modules
DME Draft 2002. Covers: Noise measurement for risk assessment; Education, motivation and training; Noise control engineering; Administrative measures to limit noise exposure; Personal protection; Risk-based medical examinations; Medical surveillance and audiometry.

Guidelines for Good Practice in the Conduct of Clinical Trials in Human Participants in South Africa.
DoH, September 2000
(http://196.36.153.56/doh/docs/policy/trials/trials_contents.html)
Reference text for researchers, research sponsors, the general public and all those who have an interest in clinical trials research in South Africa. They provide guidance on minimum standards that are acceptable for conducting clinical trials in South Africa.

A Guide On How To Create A Smoke-Free Workplace
DoH (http://196.36.153.56/doh/issues/tobacco/smoke-contents.html)

Notice

Notice Relating to Smoking of Tobacco Products in Public Places
DoH, GG No. 21610, 29 September 2000
The Minister of Health has, in terms of section 2 of the Tobacco Products Control Act, (No. 83 of 1993), as amended, declared the public places specified in the Schedule as permissible smoking areas, subject to the conditions also specified in the Schedule.

Notice Relating to the Maximum Permissible Yield of Tar, Nicotine and Other Constituents in Tobacco Products.
DoH, GG No. 21610, 29 September 2000
The Minister of Health has, in terms of section 3A of the Tobacco Products Control Act (No. 83 of 1993), as amended, declared the amount of tar and nicotine in tobacco products, as set out in the Schedule.

Directions

Directions in terms of Section 20(5)(b) of the Environment Conservation Act, 1989 (Act 73 of 1989) With Regard to the Control and Management of General Communal and General Small Waste Disposal Sites
Department of Water Affairs and Forestry, GG No. 23053, 1 February 2002

Ambient Air Standard

Invitation for Public Comments on the Technical Background Document for the Development of a National Ambient Air Quality Standard for Sulphur Dioxide
DEAT, GG No. 22134, 1 June 2001
The new ambient air quality guideline, once adopted, will be enforceable in terms of the Atmospheric Pollution Prevention Act (No. 45 of 1965) and therefore repeal the current South African Guideline for Sulphur Dioxide.

SADC

Managing the impact of HIV/AIDS in SADC, August 2000
DoH (http://196.36.153.56/doh/aids/docs/sadc-aug00.pdf)
This Strategic Framework aims at strengthening the response to the HIV/AIDS epidemic in the Southern African Development Community (SADC).

Protocol on Health in the Southern African Development Community
DoH, GG No. 21409, 28 July 2000
Ratified by South Africa on the 4th July 2000.
Article 24 Occupational Health - In order to cater for the cross-sectoral nature of occupational health, State Parties shall assist each other in the development and delivery of integrated occupational health services and cooperate in reducing the prevalence of occupational injuries and diseases.

The Handbook of Occupational Health Practice in the South African Mining Industry

A successful launch

At a successful interactive seminar held on 13 February 2002, at the CSIR Conference Centre in Pretoria, SIMRAC launched their handbook to 320 delegates, mainly from the mining industry, and covering the spectrum of interested parties - doctors, nurses, hygienists, health and safety personnel, corporate and mine management, Department of Minerals and Energy and labour.

In his opening address, the SIMPROSS Research Manager, Paul van der Heever, said that a Safety Handbook was now also included in the SIMRAC research programme for 2002. He informed delegates of the changed SIMRAC structure (available at http://www.simrac.co.za) that is replacing the previous unwieldy committee system.

Haggis Guild, of Advantage Consulting, provided delegates with an overview of the structure and content of the handbook and briefly discussed legislation, management systems and risk assessment and control. He referred to current weaknesses in occupational health management and stated "ongoing improvement and successful occupational health interventions are only possible when underpinned by a comprehensive management system". He added that success was also dependent on establishing all system elements. A diagram of the system elements is available in the handbook.

Dave Stanton, of the Chamber of Mines, informed delegates of Internet URL's to access databases relevant for occupational health practitioners in SA. He said that the SIMRAC Website http://www.simrac.co.za contains the largest repository of downloadable and freely accessible final mining health and safety research reports.

For additional information, including chapter headings, you can visit http://www.asosh.org/WorldLinks/Sectors/SimracHandbook.htm

The response to the handbook has been very positive and over 2000 books have been distributed since the launch. Copies of the handbook are available at no cost to South Africans. See http://www.asosh.org/WorldLinks/Sectors/SimracHandbook.htm for the national collection points. Copies can also be ordered by mail, with a charge for packaging and postage, by contacting Ray Strydom at:

Tel: +27 12 654 8349

E-mail: raysaf@mweb.co.za

Comments from launch attenders and readers

"I enjoyed Dr. Haggis Guild's presentation. It was well structured, informative and he was quite knowledgeable."

Dr Nomonde Mabuya (SASOM and MMOA)

"I have found the publication very user friendly and informative."

Ms Bev Hoggins - Occupational Health Nursing Practitioner (SASOHN)

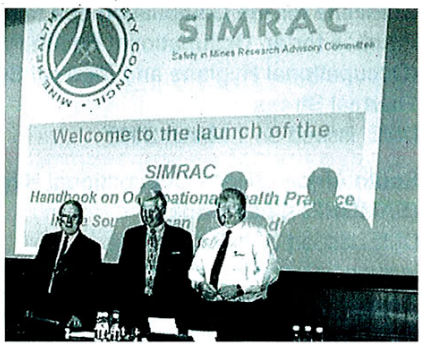
"I have found the book quite interesting as it touches on the most important aspects relating to Occupational Health. It has become an easy, handy reference tool for me and it will definitely assist me in improving the standard and quality of service I am delivering. Thank-you."

Ms Jacqueline Demas - Occupational Health Nursing Practitioner (SASOHN)

"I recently visited our local Audiologist when I first saw your Handbook of Occupational Health Practice in South African Mining Industry. I could not believe my eyes. Here in my hand I've got all the information I work with every day."

Ms Zoempie Minne - Occupational Health Nursing Practitioner

The launch, held at the CSIR Conference Centre, was well attended.



Dr John Johnston (Editor of Handbook), Mr Paul van der Heever (Research Manager of SIMRAC who initiated the idea of the project within SIMRAC) and Dr Haggis Guild (Editor of Handbook), at the opening session.

Mr Steve Geier (Xexxis), Dr Danie Viljoen (Human Capital Corporation), Dr Fiona Robinson (Editor of OcHSA) and Dr Nomonde Mabuya (Private Practitioner) discuss the merits of the handbook after lunch

Gail Todd preparing for her lecture

Audiometer calibration
Some important information!

In terms of legislation, audiometers must be calibrated on site annually by qualified personnel using special equipment for which a valid certificate has been issued by an approved calibration authority. Furthermore, calibration equipment itself must be certified every twelve months and issued with a new valid certificate. (Where a mobile facility is concerned, audiometer calibration requirements are more frequent).

In the event of a claim for hearing damage, you will almost certainly be required to produce documentary evidence that there has been compliance with the above requirements. Consider the following:

1) Calibration personnel must have successfully completed the course in Noise Measurement and Audiometer Calibration and must be in possession of a valid certificate issued by an accredited Technikon in Association with the South African Bureau of Standards. SABS 0154-1:1996 covers the method for the on-site verification of all types of pure-tone air conduction audiometers for compliance with IEC 645-1 and the relevant parts of ISO 389. It states the following:

   a) The calibrating organisation should have personnel with the necessary education, training, technical knowledge and experience for their assigned functions, including at least one registered Professional Engineer, Scientist or Technologist.

   b) Have the necessary facilities with properly maintained and calibrated instruments, and

   c) Implement and maintain a Quality Management System in accordance with SABS 0259.

2) The calibration equipment used to check your audiometer must be tested annually to SANAS specifications by one of the three South African accredited SANAS calibration authorities to strict IEC regulations. A valid certificate of compliance must be issued.

3) Before placing your order for annual audiometer calibration, ask to be provided with a certified copy of the calibrator's qualification and a certified copy of the equipment's compliance to the required standard. If the calibrator cannot provide these, do not go ahead. Do not accept uncertified photostats.

4) Once your audiometer has been calibrated, insist on a Compliance Certificate.

The following information shall appear on any certificate issued in accordance with SABS 0154:

a) a statement that

   1) the air conduction calibration of the audiometer has been checked in accordance with SABS 0154 and has been found to be in agreement with the recommended limits,

   2) the certificate of calibration is valid for a period of one year, and

   3) the certificate becomes invalid if either the audiometer or earphones or inserts are

   i) subjected to any misuse or rough handling, or

   ii) subjected to repairs, including replacement of an earphone or insert or

   iii) moved from the site of calibration by road, rail or air, unless the procedures in annex A of SABS 0154-1 are followed;

b) the date of calibration;

c) the site of calibration;

d) the make, model number and serial number of the audiometer;

e) the type and serial number of the earphones/inserts;

f) the calibration certificate numbers and dates of calibration of all equipment used to check the audiometer;

g) the name and address of the calibrating laboratory/organisation; and

h) the name and signature of the person conducting the calibration.

This short article cannot possibly cover all the regulations pertaining to this subject and does not attempt to do so. It is a reference guide only.

For more information, phone the Audiometer Advisory Service on 0832 40 40 74.

HIV Tests for employees approved by Labour Court

This article appeared in the November 2001 issue of De Rebus.

The Labour Court has consented to companies wanting to carry out voluntary HIV testing on present and future employees for purposes of assisting companies with future workforce planning and assisting employees with appropriate medical aid benefits, amongst other non discriminatory purposes.

Robert Krautkramer, a Pretoria attorney, writes in the November issue of De Rebus, the SA attorneys' journal that on July 10 2001 the Labour Court consented to the Ndebele Mining Company's application for consent to conduct voluntary HIV tests on its present and future employees. It would appear that this application was the first of its kind under the provisions of the Employment Equity Act 55 of 1998.

Section 7 (2) states that 'testing of an employee's HIV status is prohibited unless such testing is determined justifiable by the Labour Court in terms of section 50 (4) of the Employment Equity Act.

Mr Krautkramer writes that it is debatable whether the section should be interpreted literally to apply in every case or only where HIV testing is a job requirement. Unfortunately the Act did not provide an answer, and there was no case law.

Ndebele Mining Company, a small concern in Ekangala, Mpumalanga had introduced an HIV/Aids training and education programme for its employees. In the process of preliminary discussions, the possibility was raised whether staff would adopt HIV testing if the applicant would pay towards the cost. The primary reasons for offering voluntary tests were, among others, to provide appropriate employee benefits to those employees living with HIV (for example, by assisting the infected employees with advice from trained medical personnel, regarding lifestyle management and to reassess medical aid benefits and to assess the impact of HIV in the workplace by planning medium and long-term workforce requirements).

Before the tests could be conducted an AIDS specialist had advised the company to seek permission from the Labour Court. The Court made an order condoning all other HIV tests that had been carried out by the company and any future tests subject to very strict conditions that had to be followed to the letter. The court emphasized that no discriminatory practices could be allowed after knowing the HIV status of an employee and that the results of these tests be used exclusively for the purposes stated above. The company would have to include the set conditions in an AIDS policy, which should subsequently be handed in at the Department of Mineral and Energy Affairs for its scrutiny and records.

Announcement on medical certificates for sick leave

Released by Corporate Communications, S A Medical Association: tel 012 481 2052/2043 on 13 March 2002

The South African Medical Association (SAMA) wishes to notify employers that doctors will not be issuing detailed sick leave certificates on behalf of the ill or incapacitated employees.

This change has come about because of the constitutional right to privacy and the ethical duty of doctors to preserve patient confidentiality. In May 2001 the Health Professions Council of SA (HPCSA) ruled that a doctor may only indicate a description of the illness or disorder on the sick certificate with the permission of the patient. If the patient does not want to give permission, the doctor should indicate that in his/her opinion and based on the examination, the 'patient is not fit for work'. The HPCSA ruling is in line with international accepted norms.

An increasing number of doctors are receiving calls and sometimes threats from employers, demanding to know the diagnoses of their employees. Doctors are bound to maintain confidentiality and may only divulge information on the health of their patients to a third party if the patient consents.

To simplify this process SAMA developed a pro forma sick certificate form for doctors that includes a section for the patient to give written consent for a diagnosis to be included. This medical certificate is based on the requirements set by the Basic Conditions of Employment Act, the Labour Relations Act and the Employment Equity Act. Doctors only recommend sick leave. Employers should deal with absenteeism in terms of their sick leave policy and the relevant legislation.

There is no general rule that says the employer is entitled to know the health status of his/her employee. Disclosure should take place with specific objectives in mind and within the limited circumstances of the provision. However, certain disclosures are authorized by specific laws such as traffic legislation. For example, a doctor may disclose the status of an employee who is a driver, who is epileptic and therefore is not medically fit to continue with his/her duties as a driver. The reason for this law is the possible risk to the public.

If an employer thinks that a doctor has acted unprofessionally in any manner, or suspects that fraud has been committed, the employer may lodge a written complaint against the medical practitioner with the HPCSA or nearest SAMA branch.

Chamber of Mines/ASOSH Noise Seminar

The Chamber of Mines/ASOSH Noise Seminar (Indaba Hotel 26th February 2002) on all the new legislative developments was attended by over 300 delegates.
Associated documents and papers presented can be located via:

http://saioh.org/Law/noise_seminar.htm

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A special booklet for the safety of senior citizens and those about to retire. Also available in Afrikaans

On the Road
Aims to make motoring a safe and enjoyable activity both on and off the job

Safety is Teamwork
An easy to read induction booklet not only for new workers in industry but for all employees

Safety and Health in the Food and Beverage Industry
For all those concerned with food and drink - that means everyone.

Safety is Smart
Safety in and around the home is the topic of this booklet which is also available in Afrikaans.

First Aid for family and friends
Gives advice on how to handle everyday emergencies. Also available in Zulu and Afrikaans

Office Safety
Makes the nine to five office worker aware of hazardous situations which exist in the workplace.

For further information about these booklets and other publications contact the Safety First Association, Marketing and Promotions
Tel/Fax: (011) 883-9907
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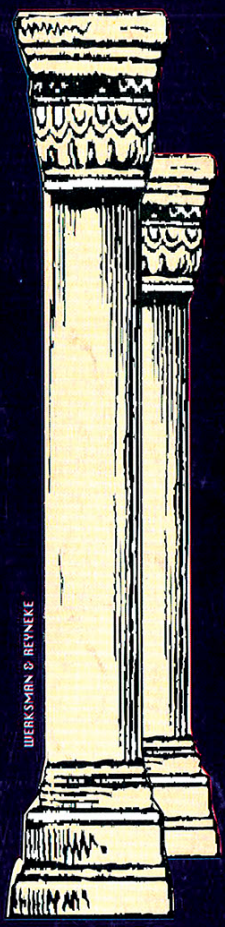

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