

Occupational health

Vol 20 No 2 March/April 2014

SOUTHERN AFRICA

*The prevalence of HIV in
Pretoria's Medico-Legal
Laboratory cases, RSA,
in 2009*

*The impact of contact dermatitis:
a case series from the National
Institute for Occupational Health
(NIOH)*

*The story of the Asbestos Relief
Trust – Part 2*



MAPONYA 911 RESCUE

EMERGENCY MEDICAL SERVICES (EMS)

EMERGENCY CONTROL CENTRE: 0861 960 960



MAPONYA 911 RESCUE is a proudly South African 100% black owned and managed organization based and operating from Johannesburg, Gauteng. The company has in excess of thirty (30) bases distributed across the entire of South Africa. Maponya 911 Rescue is a close corporation, which was incorporated in 2005 to fill a need for a variety of medical-related services.

Maponya 911 Rescue holds a competitive advantage through the following:

- Company operates from nine (9) provinces, thus have a significant footprint in South Africa.
- Maponya have in excess of 100 ambulances and rapid response vehicles, thus it can afford to place some of its EMS vehicles on a client's site 24/7 without compromising service in other areas.
- Through its Level 1 Broad-Based Black Economic Empowerment (B-BBEE) contributor, status Maponya 911 Rescue will contribute towards the enhancement of the status of prospective customers.
- Maponya 911 has obtained a licence from the Department of Health to build a 130-bed private hospital, which is part of the company's long-term goal to offer integrated healthcare value chain solutions.
- The company has been in existence over eight (8) years, but was preceded by Leseding Ambulance (established in 1995), which translates to over twenty (20) years' experience in the emergency medical care environment.
- Department of Labour accredited first aid training organization offering Level 1 – 3.

#	Base Location	Province
1	Springs	Gauteng
2	Benoni	Gauteng
3	Kempton Park & Leondale	Gauteng
4	Meredale & Protea Glen	Gauteng
5	Midrand	Gauteng
6	East Lynne/Mamelodi	Gauteng
7	Mabopane & Soshanguve	Gauteng
8	Vereeniging/ Vanderbijlpark	Gauteng
9	Hammanskraal	Gauteng
10	Mokopane	Limpopo
11	Polokwane	Limpopo
12	Tzaneen	Limpopo
13	Phalaborwa	Limpopo
14	Makhado	Limpopo
15	Thohoyandou	Limpopo
16	Nelspruit	Mpumalanga
17	Durban Central	Kwazulu-Natal
18	Pietermaritzburg	Kwazulu-Natal
19	Umlazi & KwaMashu	Kwazulu-Natal
20	Bloemfontein	Free State
21	Welkom	Free State
22	Aliwal North	Eastern Cape
23	Carletonville	Gauteng
24	Rustenburg	North West
25	Kuruman	Northern Cape
26	Burgersfort	Limpopo
27	Lephalale	Limpopo
28	Brits	North West
29	Cape Town (expected Apr/May 2014)	Western Cape

Other services provided by Maponya 911 Rescue

- Occupational health service
- Mobile occupational health clinic

Website: www.maponya911.co.za
 Email: info@maponya911.co.za

Need an ambulance urgently? Call Maponya 911 Rescue

0861 960 960

Editors:

Gill Nelson PhD
Andrew Swanepoel PhD
 e-mail: occhealthsa@technews.co.za
 Please submit all correspondence and editorial to the above address.

Editorial Board:

Cas Badenhorst PhD (Occ Hygiene), CoM Cert. in MEC
 Johan Du Plessis BSc, BSc (Hons), MSc (Physiology), PhD (Occ Hygiene)
 Spo Kgalamono BCur, MBChB, DOH, FCPHM (Occ Med), MMed (Occ Med), DPH
 Daan Kocks MBChB, DPH, DOH, MMed (CommHealth), FFCH(CM)SA, MD, FCPHM(SA) (Occ Med)
 Charles Mbekeni MBChB, DOH, DipForMed, MSc Health Economics, PDG Epidemiology
 Vusumuzi Nhlapho MBChB, MSc, BA, ACBOM, DOccMed
 Karen Michell MSc (Nurs) UCT BSc (Nurs) UCT RN RM OHN
 Penny Orton M Nursing (Nursing Research), B Nursing (Honours) (Nursing Education), BA, RN, RM, Cert. OHN

Production by Technique Design

Jenny Gent
 Tel: +27 (0)31 764 0593
 Fax: +27 (0)31 764 0386
 e-mail: jennyg@dbn.technews.co.za

Advertising:

Anne Van Vliet
 Tel: +27 (0)11 462 5073
 Cell: +27 (0)82 775 0711
 e-mail: anne@communiquer.co.za

Subscription services:

Jenny Gent
 Tel: +27 (0)31 764 0593
 Fax: +27 (0)31 764 0386
 e-mail: jennyg@dbn.technews.co.za

Subscriptions:

Members: R267,00 per annum (includes VAT)
Non-members: R375,00 per annum (includes VAT)

Publisher:

Kevin Beaumont

Published by Technique (Pty) Ltd



3 Haygarth Road, Kloof, KwaZulu-Natal
 Box 626, Kloof 3640
 Tel: +27 (0)31 764 0593
 Fax: +27 (0)31 764 0386
 e-mail: jennyg@dbn.technews.co.za

www.occhealth.co.za

© Copyright: Material appearing in this issue may not be reproduced without the permission of the editors or publishers in any form whatsoever.

Disclaimer: The publishers, editors, SASOHN, SASOM, SAIOH and MMPA are not liable for any damages or loss incurred as a result of any statement contained in this journal. Whilst every effort is made to ensure accuracy in this publication, neither the publishers, editors, SASOHN, SASOM, SAIOH or MMPA accept any responsibility for errors or omissions in the content and reserve the right to edit all contributions. The views expressed in this publication are not necessarily those of the publishers, editors, SASOHN, SASOM, SAIOH or MMPA, neither do these societies, publishers or editors endorse or guarantee the products advertised or claims made by the manufacturers. It is the author's responsibility to obtain the necessary permission to publish articles.



Contents

Scientific papers

- The prevalence of HIV in Pretoria's Medico-Legal Laboratory cases, RSA, in 2009 6
- The impact of contact dermatitis: a case series from the National Institute for Occupational Health (NIOH)11

Issues in Occupational Health

- The story of the Asbestos Relief Trust – Part 2..... 18

Other articles

- Health Surveillance Part 4: An aide memoire to Health Surveillance..... 20

Regulars

- Upcoming events 4
- MMPA: Professor Jill Murray 22
- SAIOH news 24
- SASOHN: Changes to SANS 10083 25
- SASOM news 26

This journal is also published online.
www.occhealth.co.za

Use your personal log-in to access past issues.
 Should you have any queries, e-mail jennyg@dbn.technews.co.za



The South African Society of Occupational Health Nursing Practitioners (SASOHN)
 Jenny Pitout, Tel: 0861 SASOHN (727646), Fax: 086 263 8757
sasohnoffice@mweb.co.za, www.sasohn.co.za



The South African Society of Occupational Medicine (SASOM)
 Jenny Acutt
 Tel: +27 (0)12 803 7418 or 0861 11 4417
info@sasom.org, www.sasom.org



The Southern African Institute for Occupational Hygiene (SAIOH)
 Bernd Oellermann, Tel: +27 (0)71 672 4916,
 Fax: +27 (0)86 631 6117, info@saioh.co.za, www.saioh.co.za



Mine Medical Professionals' Association (MMPA)
 Elaine Govender, Tel: +27 (0)11 498 7678
elaineg@mpas.org.za, www.mmpa.org.za

This journal is on the Department of Higher Education and Training's list of Approved South African Journals, and authors qualify for a subsidy for their affiliated tertiary institutions. It is also listed in African Index Medicus.



**Andrew Swanepoel,
Editor**

From the Editor . . .

In this second issue of 2014, we feature two papers that highlight important health issues affecting the workforce, as well as the second part of the ART story.

South Africa faces a Human Immunodeficiency Virus (HIV) burden of epidemic proportions. In a recent report, Statistics South Africa estimated that the total number of people living with HIV was approximately 5.26 million in 2013, and that around 15.9% of the population aged 15–49 years was HIV positive.¹ Neil Morris and colleagues from the University of Pretoria draw attention to a particular group of healthcare workers yet to be investigated adequately, viz. those working in mortuaries and related facilities. They examined HIV amongst decedents admitted to the Pretoria Medico-Legal Laboratory and showed that HIV rates have increased in the Laboratory since du Plessis et al. reported figures in 1999 from the same facility.² Morris et al. argue for the need to adapt occupational health and safety protocols implemented in the Laboratory to minimise the risk of accidental occupational exposure to HIV. As occupational health and hygiene researchers and practitioners working in a country with very high HIV incidence and prevalence rates, we should be encouraged to review HIV-related research and practice that can mitigate risks to our workforce.

Contact dermatitis is a commonly diagnosed disease caused by work-related exposures but rates are difficult to estimate, given that they vary considerably by occupation and industry. In South Africa, it has been reported that occupational contact dermatitis (OCD) is the third most common occupational disease outside of the mining industry (12%) and the second most common disease within the mining industry.³ Due to its negative impact on the physical, psychosocial and financial well-being of employees, it is a condition that is compensable. Previous research, however, has shown that complainants' experiences of compensation are far from ideal.⁴ André Rose and David Rees present the findings of the impact of OCD in a large series of sufferers, using mixed methods of analysis. They

comprehensively address the experiences of both contracting OCD, and the workers compensation process. They conclude that, while OCD has a significant impact on all aspects of affected people's lives, the compensation process is far from satisfactory. We hope that, in efforts to alleviate the effects of OCD on our workforce, we see an urgent translation of their recommendations into practice.

The continuation of the story of the ART is well-timed in view of the recent International Commission on Occupational Health (ICOH) Mid-term Meeting which was held in conjunction with the International Conference on Monitoring and Surveillance of Asbestos-Related Diseases in Helsinki, Finland, in February. The goal of the conference was to highlight problem areas in the management of surveillance of asbestos-exposed individuals, as well as to discuss sources of new exposures to asbestos.⁵ At the conference, a vote was passed to adopt "The Helsinki Declaration on Management and Elimination of Asbestos-Related Diseases" which will effectively ban asbestos throughout the world. The press release is available at: <http://news.cision.com/tyoterveysslaitos/r/only-a-total-ban-of-asbestos-will-end-asbestos-related-deaths,c9536489>. Please also keep a lookout for the summary of the Helsinki Criteria Update that is due to be published soon in the *Scandinavian Journal of Work, Environment & Health*.

There is interesting news from our societies. The MMPA honours Professor Jill Murray, former Head of the Pathology Division at the National Institute for Occupational Health, for her outstanding contribution to the field of occupational health. She serves as an inspiration to all of us involved in occupational health – whether it be research, policy development, or practice. Please join us in congratulating Professor Murray on her admirable achievements. SASOM reports on the recent achievements of two of its members: Dr Frank Fox was elected a Fellow of the Faculty of Occupational Medicine (FFOM) in the United Kingdom, and Dr Murray Coombs was elected Chairman of Medichem. Please also note the relocation of the African Regional Association on Occupational Health (ARAOH) Congress in June, from Nairobi to Johannesburg. SAIOH recently relocated to their new offices on 36 Gazelle Street in Midrand. We wish them well in their new home. SASOHN published its latest amendments to the

all-important SANS 10083 regulation which highlights hearing conservation as opposed to noise induced hearing loss. We thank the societies and associations for their continuing support of the Journal.

In this issue, we introduce an exciting addition called "People on the move in Occupational Health". The first person to be featured is Dr Pieter de Jager who was the first author of the article on the development of clinical guidelines on IPT for patients with silicosis, published in the Jan/Feb 2014 issue of the Journal. We encourage you to nominate other people that you consider to be 'on the move' to be featured in future issues.

As always, we encourage you to send us your research papers, and any relevant information on occupational health about which you think other readers would like to hear. As summer seems to have been prematurely ushered out by an unusually wet March, I wish you well in your preparation for the fast approaching winter months.

REFERENCES

1. Statistics South Africa. Statistical release P0302. Mid-year population estimates 2013. Pretoria: Stats SA; 2013. Available at: <http://beta2.statssa.gov.za/publications/P0302/P03022013.pdf>. Accessed 20 Mar 2014.
2. du Plessis R, Webber L, Saayman G. Bloodborne viruses in forensic medical practice in South Africa. *Am J Forensic Med Pathology*. 1999; 20(4):364-368.
3. Jeebhay M, Jacobs B. Occupational health services in South Africa; *South African Health Review*. 1999. 29(19): 257-276. Available at: <ftp://apollo.hst.org.za/pubs/sahr/1999/chapter19.pdf>. Accessed 20 Mar 2014.
4. Carman HA, Fourie A. The problem of compensation for occupational skin disease in South Africa. *Occup Health Southern Afr*. 2010; 16:12-21.
5. Asbestos Disease Awareness Organization. ADAO Joined FIOH Helsinki Asbestos Conference Attendees in a Vote to Adopt the "The Helsinki Declaration on Management and Elimination of Asbestos-Related Diseases". 13 Feb 2014. Available at: <http://www.asbestosdiseaseawareness.org/archives/25465>. Accessed 20 Mar 2014.



People on the move in occupational health – Pieter de Jager

P ieter de Jager completed his medical training at the University of the Free State in 2006. He is currently a final year Public Health Medicine registrar at the University of the Witwatersrand and works at the National Institute for Occupational Health in Johannesburg. Pieter's current projects include assisting the National Department of Health in setting up occupational health services and conducting a survey to determine nanotechnology industry standards for risk assessment in South Africa. He has previously worked with the World Health Organization in costing occupational health services in South Africa. Pieter has recently co-authored revised guidelines for the treatment of latent tuberculosis in persons with silicosis in South Africa, that were published in the Jan/Feb 2014 issue of *Occupational Health Southern Africa*. He has published several peer-reviewed papers and was recently awarded the Novartis Vaccine Award for Epidemiology of Infectious Disease for a paper entitled "An outbreak of New Delhi Metallo- β -Lactamase-1 producing Enterobacteriaceae: a case-control study", to be presented at the 16th International Congress on Infectious Diseases in April 2014.



Upcoming events

LOCAL MEETINGS

DATE	MEETING	TOPIC	PLACE	MORE INFORMATION
13–15 May 2014	OSH EXPO Africa 2014	Bringing the health and safety sector together in one venue at OSH EXPO Africa 2014	Gallagher Convention Centre, Midrand	Website: www.oshexpoafrika.com/EN/Content/Pages/Home
24 May 2014	MMPA academic symposium	The expectations and challenges of medical inspections in the mining industry	Da Vinci Hotel, Sandton, Johannesburg	Ellen Garvie/Elaine Govender E-mail: ellen@e-conference.co.za
10-13 June 2014	4th SA TB conference	Working together to eradicate TB	Durban International Convention Centre	E-mail: info@tbconference.co.za
1-3 August 2014	International ARAOH/SASOM Congress	Occupational Health and Safety in a rapidly changing work environment in Africa	Emperors Palace, Johannesburg	Jenny Acutt E-mail: info@sasom.org
3-6 September 2014	10th PHASA Conference	Dignity, rights and quality: towards a healthcare revolution	Protea Ranch Resort, Polokwane, Limpopo	E-mail: deon.salomo@mrc.ac.za Website: www.phasaconference.org.za/
21–24 October 2014	12th International Mesothelioma Interest Group Conference	The ongoing quest for cure	Cape Town International Conference Centre	Website: http://imig2014.org/
30 October – 1 November 2014	SAIOH Annual Conference	Occupational Hygiene: Beyond dust and noise	North-West University, Potchefstroom Campus	Johan du Plessis E-mail: Johan.DuPlessis@nwu.ac.za Tel: +27 (0)18 299 1053

HEALTH AWARENESS DAYS, WEEKS AND MONTHS

APRIL 2014

7	World Health Day
17	World Haemophilia Day
25	World Malaria Day
24-30	Global/African Vaccination Week

MAY 2014

Anti-Tobacco Campaign Month	
6-12	Burns Awareness Week
12	World Chronic Fatigue and Immune Dysfunction Syndrome Day
31	World No Tobacco Day

INTERNATIONAL MEETINGS

DATE	PLACE	MEETING	MORE INFORMATION
24–25 April 2014	Rotterdam, The Netherlands	5th International Conference on the History of Occupational and Environmental Health	E-mail: history2014@yellowfactory.org
4–5 May 2014	Dallas, Texas	2nd Global Summit on Occupational Health Nursing	E-mail: leslie.long@internationalamc.com Website: www.aaohn.org/conference/2014-global-summit.html
1–6 June 2014	Taranto, Italy	DUST 2014: International Conference on Atmospheric Dust	Website: www.dust2014.org
15–19 June 2014	Ceske Budejovice, Czech Republic	2nd International Symposium on Ethics of Environmental Health	E-mail: contact@iseeh2014.org Website: www.iseeh2014.org/
17–20 June 2014	Milan, Italy	9th International Conference on Workplace Bullying and Harassment	E-mail: ergomania@unimi.it Website: www.bullying2014.unimi.it
24–27 June 2014	Chicago, Illinois, USA	The 24th International Conference on Epidemiology in Occupational Health	E-mail: Istayner@uic.edu Website: http://epicoh2014.uic.edu
31 May – 5 June 2015 *	Seoul, South Korea	31st International Congress on Occupational Health	E-mail: icoh2015@kosha.or.kr Website: www.icoh2015.org

* Note: in the Jan/Feb 2014 issue this conference was incorrectly listed as being held in 2014.

MAKROSAFE issues Health & Safety alert



The winning Clover SA (Pty) Ltd team. From left to right: Hendrik Mare, Safety Officer; Mike Joyner, General Manager, Inland Region; Ruan Rossouw, Group Risk Manager; Graham Edwarson, Stock Controller/Safety Officer

MAKROSAFE calls on employers to be extra alert regarding health and safety now that employees are back at work and production is in full swing again. As operational demand and stress levels will soon rise to high levels, it is likely that employees will fall back into the habit of taking short-cuts or being neglectful. This can cause incidents which could be prevented; something that will reflect negatively when MAKROSAFE evaluates submissions for its Health & Safety Excellence awards.

The competition has been established to encourage employers to be more health and safety conscious. "In this tough economic climate, companies tend to focus on the financial bottom line. But our data, which are supported by input from the Department of Labour, show that more than 160 000 health and safety incidents were reported last year. The total cost was estimated at R 480 million, while an additional R 800 million was paid out by the Compensation Fund, partly for permanent disabilities and fatalities. Much of that could have been saved and used in a better way," says Johnny Terblanche, General Manager Health & Safety Services at MAKROSAFE Holdings.

The MAKROSAFE Health & Safety Excellence Awards consider various aspects of health and safety compliance, in different industry categories. Cut-off date for submission

of entries to the awards is 1 July 2014. "From 1 July, data that have been collected over several months by qualified MAKROSAFE consultants, will be assessed. Awards for top-performers will be handed out later this year to the best performing company in 15 different categories. With only five months to go before the cut-off date, companies cannot afford to suddenly see an increase in incidents now that the holiday period has come to an end."

With the competition, MAKROSAFE aims to speed up health and safety compliance in the country. "An effective health and safety management system is a central component of a modern organisation's corporate social responsibilities. There is also considerable evidence of the financial benefits to be gained from effective health and safety management, including increased productivity, reduced insurance premiums and better staff retention and morale," Terblanche continues. "Avoiding the costs associated with poor health and safety management also ensures that an organisation's reputation and assets are protected."

Winners of the 2014 Health & Safety Excellence awards will be announced in November 2014.

For more information contact: Johnny Terblanche, MAKROSAFE General Manager Health & Safety Services, 0861 444 777 or johnnyt@makrosafe.co.za

ABOUT MAKROSAFE

MAKROSAFE Holdings is the trendsetter in the areas of education, implementation and administration of health and safety in South Africa. The company has been at the forefront of creating healthier and safer workplaces in South Africa for over two decades. MAKROSAFE Holdings head office is located in Johannesburg, the heart of South Africa's economic activity. Other areas of the country are serviced through a network of provincial and regional offices.



The prevalence of HIV in Pretoria's Medico-Legal Laboratory cases, RSA, in 2009

N Morris¹, L du Toit-Prinsloo¹, L Webber², G Saayman¹

¹ Department of Forensic Medicine, University of Pretoria, South Africa

² Department of Medical Virology, University of Pretoria, South Africa

Correspondence: Mr Neil Morris, Department of Forensic Medicine, University of Pretoria, PO Box 2034, Pretoria, South Africa, 0001. e-mail: neil.morris@up.ac.za

ABSTRACT

The purpose of this study was to determine the prevalence of Human Immunodeficiency Virus (HIV) amongst decedents admitted to the Pretoria Medico-Legal Laboratory (MLL). The study was designed as a cross sectional study. It is not standard procedure for the pathologist to do a HIV test at autopsy. Post mortem (PM) blood samples were obtained from all bodies admitted to the Pretoria MLL during one month in 2009. Analysis of the blood samples was performed using standardised laboratory procedures. Two hundred and thirty-eight PM blood samples were collected. In 43 cases (17%), the test results were invalid. Of the 195 valid test samples, 51 (26.2%) were HIV-positive. The prevalence of HIV in this study was 15% higher than that reported in a similar study done 10 years previously.

Keywords: post mortem, HIV prevalence, medico legal laboratory, occupational health and safety, autopsy

INTRODUCTION

Infection with Human Immunodeficiency Virus (HIV) has risen to the status of a global pandemic. According to the World Health Organization (WHO), in 2008, 33.4 million people were living with the disease globally and there were two million deaths due to HIV.¹ The WHO report documents the global scale of HIV and the influence that the pandemic has on specific continental regions. Sub-Saharan Africa carries the largest burden of the disease with 22.4 million

people living with HIV and 1.4 million deaths associated with the disease in 2008.¹

South Africa had a population of 49.3 million in mid-2009 with a stated HIV prevalence of 17.0% in the 15-49 year-old age group and 10.6% in the entire population.² According to the 2008 WHO report on the global AIDS epidemic there were 5.7 million adults and children living with HIV in South Africa and 350 000 HIV-related deaths in 2007.³ South Africa is at the forefront of the pandemic and should be taking a leading role in the battle against HIV. Based on these very high numbers, it is clear that thorough and ongoing research is required pertaining to the incidence and impact of HIV in our society.

Pretoria is the capital city of South Africa with an estimated population of 1.338 million people in 2008.⁴ The Pretoria Medico-Legal Laboratory (MLL) serves the greater Pretoria region and is responsible for admission of external causes of death cases for medico-legal investigation. Approximately 2 500 cases are admitted per year, accounting for 10.5% of all deaths in the greater Pretoria area.⁵

There are very little data available regarding the prevalence of HIV amongst deceased individuals undergoing medico-legal autopsy in South Africa. A thorough literature review revealed only one study that has addressed this issue, conducted by du Plessis et al. in 1999.⁶ They tested a total of 265 peripheral blood samples and calculated the prevalence of HIV in the Pretoria MLL as 11% overall

Table 1. Total cases analysed and validity of the samples in the Pretoria MLL

Result of HIV test	Bodies		Blood samples collected		Valid blood samples	
	n	%	n	%	n	%
Invalid	43	16.7	43	18.1	-	-
Negative	144	56.0	144	60.5	144	73.8
Positive	51	19.8	51	21.4	51	26.2
No Sample	19	7.4	-	-	-	-
Total	257		238		195	

Table 2. Gender analysis of collected blood samples

Sex	Bodies		Valid samples		HIV+		HIV-	
	n	%	n	%	n	%	n	%
Female	52	20.2	38	36.8	14	36.8	24	63.2
Male	200	77.8	156	23.7	37	23.7	119	76.3
Undeterminable	5	1.9	1	0	0	0	1	100.0
Total	257		195		51		144	

and 19% in the 15 to 49 year age group.⁶ Those results were in accordance with the HIV prevalence estimates at that time.¹⁻⁴ Subsequently, there has been little research on the prevalence of HIV in the South African autopsy population.

The objective of this study was to determine the prevalence of HIV amongst decedents admitted to the Pretoria MLL during 2009. With the changing profile of HIV in South Africa, it is imperative to assess the occupational risk of HIV-infection to the forensic pathology staff. Knowledge about the prevalence of HIV in the forensic medical setting will facilitate the adaptation of the occupational health and safety (OHS) protocols implemented in Pretoria MLL in an attempt to minimise the risk of accidental occupational exposure to HIV. The study was designed as a prospective cross sectional study as it is not standard operating procedure for the pathologist to do a HIV test at autopsy.

METHODS

Post mortem (PM) blood samples were obtained from all bodies admitted to the Pretoria MLL during one month in 2009. The investigation of these deaths is provided for by the Inquests Act 58 of 1959, which prescribes that inter alia a post mortem examination can be conducted. The blood samples were obtained by a medical practitioner following standard procedures at the Pretoria MLL at the time of the autopsy.

Analysis of the blood samples was performed using standardised testing procedures of the National Health Laboratory Service (NHLS), Tshwane Academic Division, Department of Virology. Abbot Determine™ HIV -1/2 rapid qualitative immunoassay (South Africa) test kits were used. Negative results on the Abbot immunoassay were recorded as such with no further investigation. Confirmatory testing was done on a selection (25%) of positive test samples to screen for possible false positive results. The confirmatory test was AxSYM HIV Ag / Ab Combo Micro-particle Enzyme Immunoassay (MEIA) from Abbot AxSYM System, South Africa. The selection of the specific tests for the study was done on the basis of research done by Ly et al. (2004).⁷

The demographic details, case histories and procedure-related information for each case were collected. Confidentiality was ensured by allocating a unique study reference number to each case.

The statistical analysis was done in conjunction with the Department of Statistics at the University of Pretoria. The null hypothesis was that the prevalence of HIV in the Pretoria MLL population would not differ significantly from that of the prevalence of HIV in the general population of Gauteng. Significance was determined at 95%, using chi square analysis. The statistical program SAS® was used for analysis of data. The use of race (black, white, coloured

and Asian) is not scientifically or anthropologically accurate or relevant but serves to inform forensic experts on the traditionally utilised characterisation of social and ethnic groups that, to this day, persist in the South African context, albeit from a historical perspective.

Approval for the study was obtained from the University of Pretoria's Faculty of Health Sciences Research Ethics Committee (clearance certificate no. S104/2009).

RESULTS

A total of 257 cases were admitted to the Pretoria MLL for investigation during the month. PM blood could not be obtained in 19 (7.4%) of the cases due to factors such as decomposition, skeletonisation and charring (Table 1). In 43 of the 238 cases in which PM samples were collected (18.1%), the test results were invalid. Of the remaining 195 valid test samples, 51 were positive, constituting a HIV prevalence of 26.2% in the study population.

Demographic characteristics

As shown in Table 2, the majority of decedents were male (77.8%). The prevalence of HIV was higher in females than in males (36.8% and 23.7%, respectively). The racial

On-site Occupational Health X-rays





ON-SITE
OCCUPATIONAL
HEALTH
-RAYS

Level 5 BBEE
contributing company

For mobile services please contact
Adri Martin: 083 627 3111/083 310 5523
Margot Ferreira: 083 237 0923.
 Witbank office: 013 656 5426
 Durban office: 083 310 5523
 Richards Bay office: 035 797 3780
 Fax: 086 618 1988
 e-mail: a3@yebo.co.za / margot@osohxrays.co.za
www.osohxrays.co.za

Regions: Gauteng, Mpumalanga, Cape Town, Eastern & Western Cape,
Free State, KwaZulu-Natal, Northern Province and neighbouring countries

For all your mobile chest X-ray requirements.
All our X-rays are digital.

Table 3. Race analysis of collected blood samples

Race	Bodies		Valid samples		HIV+		HIV-	
	n	%	n	n	%	n	%	
Asian	3	1.2	3	0		3	100.0	
Black	196	76.3	147	47	32.0	100	68.0	
Coloured	5	1.9	3	0		3	100.0	
White	47	18.3	41	4	9.8	37	90.2	
Undetermined	6	2.3	1	0		1	100.0	
Total	257		195	51		144		

“The current study shows a prevalence of 26.2% HIV sero-positivity in the entire test population and 30.0% sero-positivity in the 15 to 49 year age group”

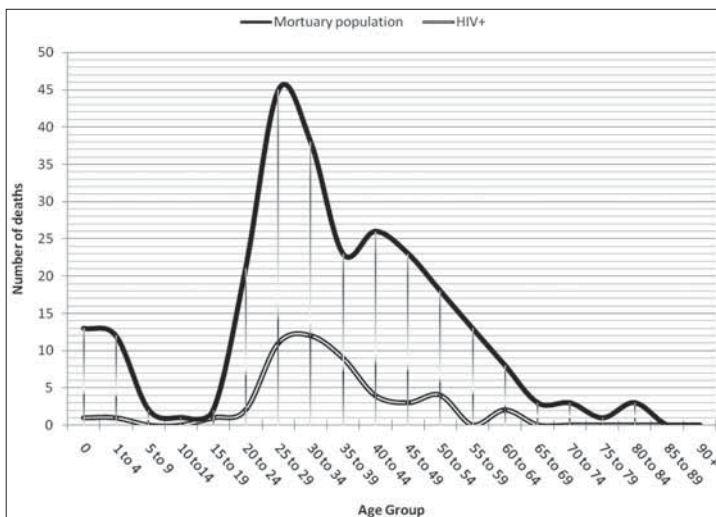


Figure 1. Age distribution of HIV-infected cases compared to that of the entire mortuary population

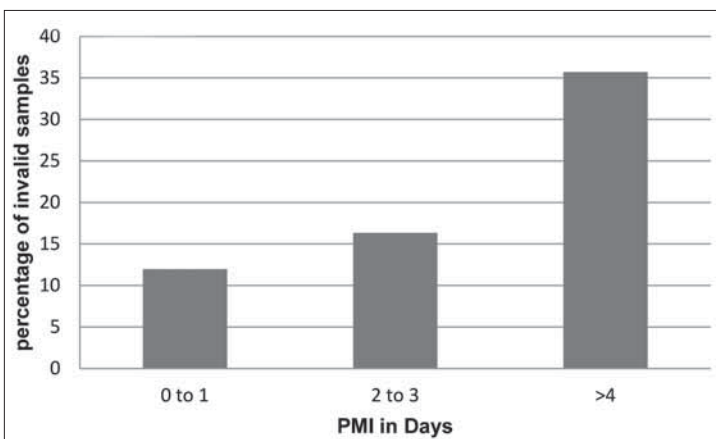


Figure 2. Graph of invalid samples (represented as a percentage of the total samples collected) by post mortem interval (PMI) (Chi square test, p= 0.0034)

distribution is depicted in Table 3. Seventy-six percent of decedents were classified as black, 18.3% as white, 1.9% as coloured and 1.2% as Asian. These percentages were in keeping with provincial population figures at that time.² HIV prevalence was 9.8% in the white population and 32.0% in the black population, with no HIV positive cases reported for Asian or coloured decedents.

The age distribution in the study population ranged from younger than 0 (foetuses) to 83 years. Data were grouped into younger than 0 (nonviable products of conception) and then into 5-year age groups, viz. 0-4 years, 5-9 years, 10-14 years, etc. Overall, in the 0-83 year range, the HIV prevalence was 26.2%. The HIV prevalence in the 15 - 49 year age group was 30.0% (Figure 1).

Invalid test results

The large number of invalid samples (n = 43; 16.7%) warranted further analysis. PM interval (PMI) was determined from incident data and PM information on the National Injury Mortality Surveillance System (NIMSS) data collection forms. The data were then compared to the percentage of invalid test results obtained in specific PMI period categories (0-1 days, 2-3 days and >4 days). The number of invalid HIV test results increased with PMI. By corollary, samples tested closer to the time of death were less likely to be invalid (Figure 2).

DISCUSSION

This study has important implications for occupational health and safety in the mortuary setting. It has been documented that HIV-2 can be cultured in blood for up to 16 days after death.⁸ The invalid results pose an interesting conundrum with regard to the testing procedures of PM samples and the reliability of using such results to make treatment decisions for accidental blood exposure. It is possible that PM haemolysis of blood samples may affect the transportation of samples through the test matrix. Alternatively, the PM interval may allow an inhibiting agent to be produced. In either scenario, the efficacy of the test is reduced, resulting in a large number of invalid test results as the PMI increases. This observation necessitates a review of the treatment guidelines and standard operating procedures related to PM exposure to body fluids. The testing of the samples needs to be expedited and antiretroviral (ARV) treatment needs to be administered even if the test result is invalid.

In 2008, the Pretoria MLL admitted 2 742 decedents for investigation and was the fifth largest MLL in South Africa.⁵ An earlier study conducted in 1999 by du Plessis et al., at the same MLL, estimated an 11% prevalence in the Pretoria MLL population which was similar to the prevalence of HIV in the general population at that time.⁶ The current study shows a prevalence of 26.2% HIV sero-positivity in the entire test population and 30.0% sero-positivity in the 15 to

49 year age group. In the general Pretoria MLL population, this corresponds to a 15.2% increase over a 10-year period. These figures are in contrast to current HIV prevalence data available for the South African population. The Statistics South Africa 2009 report states that the HIV prevalence for the entire population was 10.6% and increased to 17% in the 15 to 49 year age group.² A 2008 WHO study reported 5.7 million cases of HIV in South Africa, which translates to a prevalence of 11.6% in the entire population and 18.1% in the 15 to 49 year age category.³ The higher HIV prevalence in the current study may be attributed, in part, to the small sample size, the demographics of Pretoria (which are not representative of the general population), or to the possible increased risk-taking behaviour associated with an urban MLL population.

The data suggest that there has been a dramatic increase in HIV prevalence in cases admitted to the Pretoria MLL. Such an increase would suggest that risks of HIV infection for mortuary personnel and those handling deceased individuals (such as emergency care workers, forensic pathology service personnel and funeral undertakers) have increased. This emphasises the importance of people employed in these professions using personnel protective equipment correctly and taking universal precautions. The implementation of OHS compliance and monitoring systems needs to be expedited in high risk environments. This is essential as occupational exposure to HIV becomes more prevalent and the associated risk to the employees increases.

The HIV prevalence in females was 36.8% which is higher than expected.⁵ In previously published reports, the HIV prevalence in women was reported as 19.7% by Statistics South Africa in 2009² and 13.9% by the Human Science Research Council (HSRC) in the same year.⁹ This difference in reported prevalence cannot only be explained by the increased risk-taking behaviour in the female autopsy population alone.⁵ The discrepancy raises concerns about the accuracy of the information being disseminated and demonstrates a need for different approaches to collecting and correlating information on HIV in South Africa.


The racial profile for South Africa was as follows in 2009: the black, white, coloured and Asian communities represented 79.3%, 9.1%, 9.0% and 2.6% of the population, respectively.² HIV distribution by racial group is not well documented in various reports.^{1,2,5} In 2008, the HSRC documented the HIV prevalence in the black and white communities at 13.3% and 0.6%, respectively.⁹ The results of the current study show increases across the white and black demographic profiles when compared to findings of du Plessis et al. and other available data published at that time.^{1,2,5,6,9} In addition, this study documents the epidemiological change of HIV associated with race in the Pretoria MLL. Therefore, the current research is essential

to documenting the changes in the profile of infection in the Pretoria MLL which could be used to formulate or adapt specific response plans for South African urban settings. This research can be modelled and the risk profile quantified in order to provide a reliable, evidence-based source of HIV prevalence information.

The case profile in the Pretoria MLL is consistent with what is documented in other urban MLLs in South Africa.⁵

“... necessitates a review of the treatment guidelines and standard operating procedures related to PM exposure to body fluids”

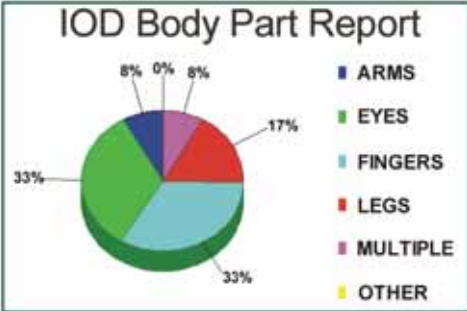
Worth mentioning is the fact that there were a number of HIV-infected cases in the cohort that were older than 50 years (n=6; 11.7%). This may reflect a changing profile with regard to age, which could be attributed to the current treatment regime and roll out of ARVs in South Africa. The value of this change is that it is in contrast with the commonly held beliefs of forensic pathology staff in relation to the age group of cases that is infected with HIV. Continued vigilance and implementation of universal precautions in the forensic medical setting is warranted. The beliefs regarding



Clinsys

Clinic Management System

IOD Body Part Report



Body Part	Percentage
ARMS	8%
EYES	0%
FINGERS	8%
LEGS	17%
MULTIPLE	33%
OTHER	33%

- Windows-based Computer Software Program
- For Occupational Health/Primary Health Clinic
- Daybook as central program feature
- Injury/Disease on Duty
- Audio and Lung Function
- Drug Stock Control
- Comprehensive records, reports, graphs, statistics
- User friendly – designed for clinic sister

For more information contact :

Caroline Mathew : 084 580-4016

e-mail : clinsys@twinsolutions.co.za

Medical Consultant : Dr. Greville Wood



the demographics (age, race and gender) of HIV infected individuals need to be expressly documented, updated and addressed in the occupational health and safety strategies and training of forensic pathology staff.

CONCLUSION

The HIV prevalence in Pretoria MLL is, at 26.2%, significantly higher than in the general population. The HIV prevalence in this study was also 15.2% higher than that reported in a similar study done 10 years previously. The occupational risk profile has significantly changed for mortuary personnel and those handling deceased individuals (such as emergency care workers, forensic pathology service personnel and funeral undertakers).

A longer PMI compromises the results of post mortem testing. The longer the PMI, the greater the chances are of obtaining an invalid test result. The testing methods of post mortem blood samples need to be adapted to provide more accurate results and fewer invalid test results.

PM testing of other than natural deaths still holds a wealth of information that can be extracted with minimal invasion of a person's rights and in an appropriate environment, with the necessary safeguards. The data will ultimately play an invaluable role in the monitoring and management of HIV, as well as in formulating new intervention strategies and safe guarding employees who are exposed to the pandemic in the course of their duties.

Personal protective equipment and universal precautions

need to be strictly adhered to and enforced for the safety of all forensic pathology and funeral service industry employees. The implementation of OHS compliance and monitoring systems needs to be expedited in high risk work environments in order to ensure the safety of personnel.

LESSONS LEARNED

1. Complacency surrounding past observations needs to be guarded against.
2. The assumption that the risk profile for the PM population had not changed has facilitated stagnation in the adaptation of the OHS strategies.
3. Continued training, monitoring and evaluation of the OHS systems and the data on which they were founded will keep at-risk personnel safer.

CONFLICT OF INTEREST

None of the authors has a conflict of interest.

FUNDING

Funding was sourced from the National Health Laboratory Service for sample testing. Additional funding was provided for by the University of Pretoria, Department of Forensic Medicine.

REFERENCES

1. World Health Organization. HIV/AIDS. AIDS epidemic update 2009. Geneva: WHO; 2010 Available at: <http://www.who.int/hiv/pub/epidemiology/epidemic/en/> (Accessed 7 Dec 2010).
2. Statistics South Africa. P0302 - Mid-year population estimates 2009. Available at: <http://www.statssa.gov.za/publications/statsabout.asp?PPN=p0302&SCH=4437> (Accessed 7 Dec 2010).
3. UNAIDS Joint United Nations Programme on HIV/AIDS. 2008 Report on the global AIDS epidemic. Geneva: UNAIDS, 2008. Available at: http://whqlibdoc.who.int/unaid/2008/9789291737116_eng.pdf (Accessed 11 Mar 2014).
4. UN-HABITAT. The State of the African Cities Report 2008. A framework for addressing urban challenges in Africa. Nairobi: UN-HABITAT; 2008. Available at: <http://www.unhabitat.org/pmss/listItemDetails.aspx?publicationID=2574> (Accessed 11 Mar 2014).
5. Statistics South Africa P0309.3. Mortality and causes of death in South Africa: Findings from death notification 2013. Available at: <http://www.statssa.gov.za/publications/statsabout.asp?PPN=P0309.3&SCH=5490> (Accessed 9 Mar 2014).
6. du Plessis R, Webber L, Saayman G. Bloodborne viruses in forensic medical practice in South Africa. *Am J Forensic Med Pathol.* 1999; 20(4):364-368.
7. Ly TD, Laperche S, Brennan C, Vallari A, Ebel A, Hunt J, et al. Evaluation of the sensitivity and specificity of six HIV combined p24 antigen and antibody assays. *J Virol Methods.* 2004; 122(2):185-194.
8. Douceron H, Deforges L, Gherardi R, Sobel A, Chariot P. Long-lasting postmortem viability of human immunodeficiency virus: a potential risk in forensic medicine practice. *Forensic Sci Int.* 1993; 60(1-2):61-66.
9. Shisana O RT, Simbayi LC, Zuma K, Jooste S, Pillay-van-Wyk V, Mbelle N, Van Zyl J, Parker W, Zungu NP, Pezi S and the SABSSM III Implementation Team. South African national HIV prevalence, incidence, behaviour and communication survey, 2008: a turning tide among teenagers? Cape Town: HSRC Press; 2009. Available at: <http://www.mrc.ac.za/pressreleases/2009/sanat.pdf> (Accessed 30 Nov 2012).
10. World Health Organization. Gender, women and health. Gender and HIV/AIDS. Gender and health information sheet. Geneva: WHO; 2003. Available at: <http://www.who.int/gender/documents/hiv/a85585/en/> (Accessed 30 Nov 2012).

The impact of contact dermatitis: a case series from the National Institute for Occupational Health (NIOH)

Rose A,^{1,3} Rees D^{2,3}

¹ Department of Community Health, Faculty of Health Sciences, University of the Free State, Bloemfontein, South Africa

² National Institute for Occupational Health, National Health Laboratory Service, Johannesburg, South Africa

³ School of Public Health, Faculty of Health Sciences, University of the Witwatersrand, Parktown, South Africa

Correspondence: Dr André Rose, Department of Community Health, Faculty of Health Sciences, University of the Free State, PO Box 339 (G52), Bloemfontein, South Africa, 9301. E-mail: andrerose2000@yahoo.com

ABSTRACT

Background: Occupational contact dermatitis (OCD), a commonly diagnosed occupational disease, has the potential to have negative psychosocial, vocational and financial outcomes. Workers' compensation can ameliorate some of the financial loss. Little is known about these outcomes in South African cases of OCD.

Methods: This was a cross sectional study, using qualitative and quantitative methods, of patients diagnosed at the Dermatology Clinic of the National Institute for Occupational Health (NIOH) in Johannesburg. All patients' records for the period October 2006 to March 2008 were reviewed and the patients were asked to participate in a telephone interview. The cases were followed up at the Compensation Commissioner's office to evaluate the status of their claims.

Results: One hundred and twenty-nine patients were seen at the Clinic during the study period and 128 were included in the review. Ninety-three patients participated in the telephone interview, 47 of whom had been diagnosed with occupational contact dermatitis. There was a recurring theme that people felt embarrassed by the condition and that it "affected [their] lives too much." Vocational impact included "job insecurity", "difficulty completing work" and "stigmatisation from fellow workers and the employer." Nine of the 47 participants (19.1%) interviewed and diagnosed with occupational skin disease had lost income. Twenty-four of the 47 (51.1%) patients with occupational skin disease had made out-of-pocket medical payments. The median out-of-pocket payment per month for all participants was R260 (range R20-R900) over a median duration of 15.9 months (range 1-36 months). Sixty-four patients (50%) were diagnosed with occupational contact dermatitis and hence were potentially eligible for workers' compensation. An important finding was that only eight had been resolved: six of the 64 had received compensation; a further two cases had been repudiated.

Conclusion: Contact dermatitis was associated with negative psychosocial and vocational impacts and financial loss. Fewer than expected compensation claims had been resolved.

Keywords: occupational skin disease, compensation, allergic contact dermatitis, irritant dermatitis, quality of life

BACKGROUND

The two most common types of occupational contact dermatitis (OCD) are irritant contact dermatitis (ICD) and allergic contact dermatitis (ACD).¹ The diagnosis of occupational contact dermatitis depends on factors such as the nature of the rash, the occupational exposure, the anatomical site, improvement of the rash when not at work, and the results of investigations such as skin patch testing.^{2,3} ACD can have a latent period of weeks to years after first exposure^{2,4} but ICD can occur without latency.⁵

OCD is one of the most frequently diagnosed occupational diseases and may require expert assessment to diagnose and manage the condition. Consequently, the National Institute for Occupational Health (NIOH) has established a Dermatology Clinic to attend to these cases. The Clinic is situated at the NIOH in Johannesburg. The referral base



Photo courtesy of Anna Fourie, NIOH

Irritant contact dermatitis



Allergic contact dermatitis

Photo courtesy of Anna Fourie, NIOH

PSYCHOSOCIAL IMPACT OF DERMATITIS

Embarrassment and social avoidance

"It (the skin dermatitis) affected me greatly. I was too embarrassed by what people said. I could not touch my wife."

"This skin problem makes me very embarrassed at work and home."

"People stare at me all the time. This is very embarrassing."

"I have waited three years that is too long. It has affected my life too much. It is embarrassing."

"This condition has affected me too much. It has changed my life. I cannot touch metals and it is very embarrassing to be with people."

Self-consciousness

"This skin condition makes me very uncomfortable. People stare at me and look at me funny."

Personal relationships

"It has affected my life too much. It affects my work and my family life. I have been waiting too long. It is too frustrating."

"It also affected me at home. I was embarrassed to touch my wife."

"This skin problem is very embarrassing. People are too scared to touch me."

Box 1. The psychosocial impact of dermatitis on participants

VOCATIONAL IMPACT OF DERMATITIS

"I could not work and stayed out of work a lot. They (the employer) told me that I was just lazy and that if I did not work I should leave. This made me so emotional."

"I was told to get another job if I could not continue to work in the workshop."

"It affected how I do my work a lot. And people would just look at me all the time."

"The skin condition is very embarrassing. It has also affected my work too much."

"I am still in the same job and the problem is still the same. I cannot leave the job. The skin problem affects my work"

"The company has a policy of no work, no pay. I have to work even if I cannot. It has been very difficult for me. The skin problem affects me too much."

"It has affected my income. If I do not work I do not get paid. I have to work even when it is too painful to work."

"The skin problem did not affect my work at all."

Box 2. The vocational impact of dermatitis on participants

includes a wide variety of industry-based occupational health services, medical practitioners and self-referrals. At the time of the study reported here, the Clinic operated once a month and was staffed by a medical scientist (immunologist) and a specialist dermatologist with an interest in occupational skin diseases. The medical scientist was experienced in skin patch testing and had extensive knowledge of the industries and agents causing work-associated skin diseases.

Skin diseases have the potential to reduce the quality of life of individuals and their families. Psychosocial, vocational and financial domains may be affected, and these often overlap.⁶ The psychosocial effects include poor self-image and impaired interpersonal relationships. OCD may reduce work productivity, result in unwanted job changes, impede promotion at work, and contribute to absenteeism and presenteeism.^{6,7} Direct financial losses as a consequence of the disease arise from out-of-pocket payments for medication and for accessing treatment.^{6,7} In South Africa, workers' compensation of OCD is provided for by the Compensation for Occupational Injuries and Diseases (COID) Act of 1993. The benefits in terms of the Act can ameliorate some of the financial loss due to OCD as they include medical aid and monetary payments.

Little is known about the negative impact of OCD on employees in South Africa. In addition, the workers' compensation experiences of these cases are likely to be poor.⁸ Hence, this study was designed, which aimed to describe aspects of the psychosocial, vocational and financial outcomes of patients seen at the NIOH Dermatology Clinic, to describe compensation outcomes, and to identify possible barriers to successful compensation.

METHODS

This was a cross-sectional study using quantitative and qualitative methods.

Subjects

All 129 patients seen at the NIOH dermatology clinic from October 2006 to March 2008 were eligible for the study. One hundred and twenty-eight of these had medical records complete enough for inclusion. The diagnosis was made by a specialist dermatologist. Cases thought to have ACD were patch-tested (n=96), but those exposed to an established skin irritant were not.

Data collection

Diagnostic information and contact details were collected from the medical records of the 128 cases. Subsequently, questionnaires were telephonically administered by the first author to all cases who could be contacted (n=93). The questionnaire contained both closed-ended and open-ended questions, and covered current occupational status and occupational exposures; financial losses due to the skin disease; the impact of the disease on personal lives and vocation; and

experience with the Compensation Commissioner's office. The conversation was captured verbatim.

The status of claims of 64 cases submitted to the Compensation Commissioner's office was established by reviewing the electronic records at the Commissioner's office in Pretoria. Additionally, these records were reviewed to identify missing compensation documents.

Data analysis

Analysis was done using STATA 10. Means are presented where the data were normally distributed and medians and ranges where the data were skewed. Univariate analysis using logistic regression was done to identify predictors of compensation outcome. Multivariate analysis was not appropriate due to the small number of resolved compensation claims. The findings from the open-ended questions in the telephone interview were analysed using qualitative techniques: the responses were coded and grouped into themes.

The study was approved by the Human Research Ethics Committee of the University of the Witwatersrand, Johannesburg (certificate clearance number M080410).

RESULTS

Ninety-three (72.7%) of the 128 cases reviewed were male. Psychosocial, vocational and financial impacts are discussed for the 93 contactable cases, and compensation information for the 64 (50.0%) of the 128 who were diagnosed with OCD, as these were potentially eligible for compensation. Allergic contact dermatitis (ACD) was diagnosed in 35 of the 64 cases (54.7%) and irritant contact dermatitis in the remaining 29 (45.3%). In the 64 cases submitted to the Commissioner, 54 (84.4%) underwent skin patch tests. Thirty-three (61.1%) of these were positive, 15 (27.8%) were negative, and six (11.1%) were equivocal.

Psychosocial and vocational aspects (measured qualitatively) and financial impacts overlap and, although they are treated separately in the following sections, the shared aspects of the different domains of life are demonstrated by the quotes used to illustrate each domain.

Psychosocial impact

The patients were affected by their skin disease even if it was not related to their occupation. Themes that emerged included embarrassment and social avoidance, self-consciousness, and a negative impact on personal relationships. Box 1 displays a series of quotes from the telephone interviews, illustrating the effects of the skin disease on the participants' psychosocial well-being. The overall findings indicated that having a skin condition had a negative effect on the psychosocial well-being of some participants, but this was contradicted by one person who said: "It has not affected me that much. I would not say that it was a big problem." One participant reflected that her life at work only improved

once she was moved to an office job: "I was shifted to an office job. I am much happier now. I cannot complain. I was paid out and I am happy."

Vocational impact

The themes that emerged are shown in Box 2 and included "job insecurity", "difficulty completing work" and "stigmatisation from fellow workers and the employer." Some participants felt that their job security was threatened because the skin condition impacted on their ability to complete work-related tasks. This was sometimes interpreted by the employer as unwillingness by the worker to do their work properly or as laziness. In some cases, workers were asked to leave their employment if they felt that they could not perform their tasks to the satisfaction of the employer. It should be noted that negative vocational experiences were not universal. One subject stated that: "The skin problem did not affect my work at all."

Financial considerations

"I feel that the company is delaying this whole process (of the claim being settled). I am sure I didn't get promoted because of my skin and my salary did not increase."

There was a feeling among some of the participants that they were being deliberately disadvantaged by the employer and that this would then have an impact on their finances

HELP is one call away!

BREATH ALCOHOL TESTING

Instruments for all situations include high speed testers capable of testing people at site entrance/exit points and portable instruments with digital readouts for use at remote sites which provide immediate printed evidence.

LION ALCOLMETER 600

TOUCH SCREEN DISPLAY SYSTEM to select operating modes, preventing language barriers
Allow data logging so that relevant details such as Names, Surnames and ID numbers of the test subject can be saved to each breath test
GPS FUNCTION (optional)

LION ALCOLMETER 500P

The LION ALCOLMETER 500 and its printer are both housed in a compact and sturdy carry case
The LION ALCOLMETER 500P can be purchased and used on its own i.e. without the printer and other items.

AlcoBlow

The fastest, easiest to use alcohol tester ever devised. The breathalyzer of choice for security and mine entrance points across South Africa. Please enquire about our new AlcoBlow Rapid test. South Africa's most popular instrument is now even better!

ALCO-Safe
For all the information you require regarding BREATH ALCOHOL TESTING visit our website at www.alcoholtesting.co.za or e-mail: alcosafe@icon.co.za Tel: +27 12 343 8114

Table 1. Financial outcomes of participants diagnosed with skin disease

	Diagnosed with occupational skin disease N=45		Diagnosed with non-occupationally-related skin disease N=46		P value
	n	%	n	%	
Participants who reported loss of income due to their skin disease	24	53.3	22	47.8	
Participants who indicated they had missed out on promotion due to their skin disease	8	17.8	6	13.1	0.5314
Participants who indicated they made medical out of pocket payments related to their skin disease	24	25.8	32	34.4	0.1115
	Median	Range	Median	Range	
Out-of-pocket payments per month (Rands)	187	25-1200	200	20-900	
Duration of payments (months)	24	1-204	12	1-252	

because it would, for example, result in them not receiving promotions and salary increases.

Ninety-three cases participated in the telephone interview; 91 (97.8%) of whom were able to indicate how their disease impacted on them financially. Forty-five of these 91 (49.5%) were diagnosed with an occupational skin disease. Table 1 illustrates the financial outcomes of employees diagnosed with a skin disease by whether or not it was related to their occupation. Missing out on promotion and out-of-pocket payments did not differ significantly between the two groups (chi-square test: $p > 0.05$).

Compensation outcomes

Only eight of the 64 submitted cases (12.5%) were resolved at the time of the visit to the Compensation Commissioner's office for the review of compensation status. Six (9.4%) had received compensation and two (3.1%) had been repudiated. This is despite a long period since diagnosis of OCD for most cases: the median duration from diagnosis of OCD to the examination of the Compensation Commissioner's records was 19 months (range 4-29 months). The univariate analysis

identified some factors associated with claim resolution but the associations were not significant, probably because of the small number of claims resolved. A case was more likely to be resolved if the skin patch test was positive [OR 3.57 (95% CI 0.39-32.96)], if it originated from a large industry [OR 1.41 (95% CI 0.80-2.47)]; or if the worker was skilled or a professional compared to being unskilled [OR 4.30 (95% CI 0.80-23.25)]. Two of the resolved cases were still working for the same employer and three were still exposed to the same agent suspected of causing the dermatitis.

The general experience of people with the Compensation Commissioner's office was negative. The following two quotes encapsulate this experience:

"I called them (the Commissioner's office) but they kept saying that they would call me back. They never did."

"I waited three years and still did not get my money."

The Compensation Commissioner's office indicated that the most important reason for a claim not being settled was outstanding documents. Table 2 shows the category of documents outstanding and the proportion of the 64 cases reviewed that fell into these categories (data are according to the electronic records of the Compensation Commissioner's office).

In 33 cases (52.4%), the employer claimed to have submitted the necessary documents but there was no evidence in the files that the employer had submitted the documents for 25 of these cases (76%).

Table 2. Numbers and proportions of documents that had not been captured on the electronic database at the Commissioner's office

Document type	Outstanding documents N=64	
	n	%
WCL 1 (Employer's report of an occupational disease)	46	71.9
WCL 14 (Notice of an occupational disease and claim for compensation)	46	71.9
WCL 22 (First medical report in respect of an occupational disease)	49	76.6
WCL 26 (Progress medical report in respect of an occupational disease)	48	75.0
Dermatology report	54	84.4
WCL 10 (The exposure history)	55	85.9
Results of special investigations	47	73.4
Final medical report	50	78.1
National identity document	48	75.0
Salary advice slip	47	75.8

DISCUSSION

This series of cases of contact dermatitis identified negative impacts of the disease and tardy resolution of compensation claims with outstanding claim documents being the norm.

Psychosocial outcomes

Occupational or non-occupational skin disease affected workers similarly. Patients stated that the disease affected their self-images, and their relationships with their families and people in general. There was a recurring theme that people felt embarrassed by the condition and that it "affected [their]

lives too much." There were no differences between men and women in their perceptions of how their skin disease had affected them. This is in contrast to a study in Cape Town, published in 2000, where Jobanputra and Bachmann reported that women experienced more psychosocial consequences than men, and that having a skin condition affected women more in terms of self-esteem, clothing choice and anxiety.⁹ The psychosocial impacts highlight the importance of not neglecting the "softer" issues in occupational health.

Vocational impact

A work-related condition such as OCD can reduce productivity which increases workers' vulnerability. Several participants indicated that they were told to find another job when they complained that they could not work under the conditions that caused or aggravated their skin condition. This creates a dilemma for workers where rates of unemployment are high, and may force them to remain in employment despite the impact on their health, with negative medical and psychosocial consequences.¹⁰

Generally, OCD does not prevent people from working but it can make working very difficult, and the disease contributes to absenteeism and presenteeism in the workplace;¹¹ affected workers may be present at work but may perform sub-optimally. This may impact negatively on the morale of co-workers, and overall productivity.¹¹

Financial outcomes

Collection of data on financial losses was limited by the long delay (up to two years) between the participants initially being seen at the Clinic and the study being conducted. Participants could not always recall how much or for how long they had spent money on medical care related to their skin condition. The assessment of financial expenditure was further limited because hidden costs, such as those for transport, loss of potential income due to lost promotion opportunities at work, and loss of wages due to reduced productivity as a result of presenteeism and absenteeism, were not quantified.

The percentage of cases who reported loss of income was very similar between the OCD cases and the non-OCD cases, highlighting that the impact of a skin disease is not limited to it being occupationally related. Twenty-four participants (25.8%) diagnosed with OCD and 32 with non-OCD (34.4%) indicated they had had to make out-of-pocket payments for medical expenses. The median

out-of-pocket payment was R187 per month over 24 months for cases diagnosed with OCD. At face value this may not appear to be a large amount of money but when one considers that the majority of cases were unskilled workers with low salaries, the amount could have had a significant financial impact. The undocumented expenditure, such as transport costs, would have compounded this impact.

The economic burden of skin diseases has not been established in South Africa but the costing of the burden of skin disease could help strengthen the case for primary prevention in the occupational setting, which should reduce expenditure on secondary and tertiary costs and compensation claims.¹²

Compensation outcomes

One function of the compensation system is to partially protect workers from financial loss with a temporary or permanent payment.¹³ The cost of medical treatment for occupational diseases should be covered by the compensation system; if this does not happen, occupational disease can have a significant impact on the finances of individuals.^{12,13}

In 2006, Lazarov et al. reported that only 24.3% of OCD cases (n=70) in their study received compensation.¹⁴ The low number of cases compensated raises concerns about the process of submission and adjudication of claims under the COID Act.

All OCD cases seen in this cohort were diagnosed with OCD by a specialist dermatologist with extensive expertise in occupational dermatology. Despite this, two claims were rejected by the Compensation Commissioner and 56 cases were still pending at the time of the study, with a median of 21 months after the diagnosis. There are several factors that could explain this: first, the compensation officers

OCSA

The 'briefcase to coalface' Workplace Health Solution

MEDICAL SURVEILLANCE
GETTING THE NATION "FIT FOR DUTY"

"Medicals on the move – There is no place small enough, remote enough or distant enough for OCSA's fleet of mobile units"

Check out our new clinic in Centurion, 102 Jean Avenue. Tel 012 667 6772 for bookings

All abnormal cases are reviewed by an Occupational Medicine Practitioner

Risk Based Medical Surveillance
Fit for Duty medicals include:

- Pre-placement
- Periodic / transfer
- Return to work
- Exit

Fit for Duty Medical Testing, including:

- Full physical examination
- Vision screening (Keystone)
- Lung function & Audiometry screening
- ECG & X-ray
- Lab screening tests
- Heat Tolerance Test
- Functional Capacity Assessments
- Immunisation (where necessary)

For all your workplace health services contact
Tel: +27 (0)11 803 3538 marketing@ocsa.co.za www.ocsa.co.za

who screen cases may not understand why certain cases that do not fulfil all the criteria on a checklist may still be eligible; second, a positive skin patch test is requested by the Commissioner's office to assist in making a diagnosis of CD and, if the results are not in the file, the clerks may erroneously exclude a case. The skin patch test is not indicated in irritant dermatitis.¹⁵

The number of cases compensated in this study is very low when compared to some studies. For example, in 1995 Holness et al. reported that 87% of cases (n=230) were resolved successfully in their study.¹⁶ Carman et al. (2008) reported that, on average, 12.3% of cases submitted to the Commissioner's office from 1999 to 2005 were finalised but the data were not disaggregated according to acceptance or rejection of a claim.¹⁷

The main reason cited by the Commissioner's office for failure to finalise claims was that there were outstanding documents. A comparison of the records of the Commissioner's office and the NIOH records of forms submitted showed that 25 cases (44.6%) were pending because the employer had not submitted the necessary documents (WCL 1). Failure by the employer to submit the necessary documents exacerbates the existing backlog at the Commissioner's office and results in "inefficient compensation, thereby prejudicing workers who had an occupational injury or disease."¹⁸

The COID Act (amended, 1997) stipulates that, as part of the compensation process, the employer needs to submit a WCL 1 form on behalf of the employee.¹⁹ The compensation process thus hinges on the employer being responsive in submitting the necessary documentation. There were instances where the employer was contacted and had indicated that they had not submitted the WCL 1 forms because they did not agree with the NIOH dermatologist's diagnosis of OCD.

This is a contravention of the COID Act on the part of the employer. The COID Act (amended, 1997) makes provision for either fining or imprisoning the employer for failing to comply with the Act.¹⁹ However, the enforcement of the Act is problematic due to resource constraints.²⁰

The median time (19 months) from submission to assessment of a claim was long, yet the majority of claims had not been resolved. The Taylor Report (2002) states that the main reason for the compensation system failing is that the Commissioner had failed to administer the Compensation Fund properly.¹⁸

In the 2007/2008 annual report of the Compensation Fund, the Commissioner reported that there were administrative shortfalls within the Compensation Fund administration.²⁰ A range of challenges to the management of the Fund are listed and these include human resource challenges, ineffective technology utilisation and failure to decentralise services.²⁰ These and other shortfalls need to be addressed if workers are not to be prejudiced.

Limitations

Only one dermatologist saw patients at the NIOH Dermatology Clinic. Cases may thus have been misclassified. The advantage of having the same person, however, is that there is consistency in the criteria used to make the diagnosis of OCD.

This was a retrospective review with a long delay between the time that cases were diagnosed at the NIOH and the review of the records. Patients interviewed may not have been able to accurately recall the information that they were asked to provide. Additionally, validated questionnaires with standard quality of life questions were not used; their use would have improved comparison with other studies. It is possible that some participants were reluctant to discuss financial matters with an interviewer unknown to them.

The researcher had access to only the electronic records at the Commissioner's office. The electronic records could not be verified against hard copies that this office may have received. It is thus not clear if documents submitted were received but not captured on the electronic system.

The unexpectedly small number of resolved cases resulted in low statistical power for identifying barriers to claim resolution.

CONCLUSION

OCD is chronic in nature, may have a poor prognosis, and has a significant impact on the psychosocial, financial and occupational dimensions of affected people.

The compensation outcome of OCD cases seen at the NIOH Dermatology Clinic was unsatisfactory. The two most important factors that contributed to the poor outcome were



Photo courtesy of Dr Hilary Carman, NIOH

Irritant contact dermatitis

the failure of the employer to submit documents to the Commissioner's office, and the failure of the Commissioner to process claims efficiently and timeously.

The findings of this study highlight three important public health considerations. First, primary prevention is necessary to avoid the negative consequences of dermatitis. Second, the psychosocial and financial impact of skin diseases on workers is important, even if the disease is not occupational. Third, a well-functioning compensation process is needed to help protect workers from the financial burden of OCD.

ACKNOWLEDGEMENTS

Dr Hilary Carman, consultant dermatologist to the NIOH, and Anna Fourie, medical scientist in the Dermatology Clinic, for allowing access to their clinic and data. Dr Nicola Christofides, School of Public Health, University of the Witwatersrand, for assistance with analysis of the data.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

LESSONS LEARNED

1. Skin disease can have negative psychosocial, vocational and financial impacts, whether the disease is occupationally related or not.
2. Occupational skin disease may lead to loss of income due to days off work, failure to be promoted or out-of-pocket payments for health care.
3. There was a general dissatisfaction among patients with the Compensation Commissioner's handling of compensation claims.
4. The compensation process failed to protect the majority of workers from the financial losses caused by occupational skin disease.

REFERENCES

1. Diepgen TL, Coenraads PJ. The epidemiology of occupational contact dermatitis. *Int Arch Occup Environ Health*. 1999; 72:496-506.
2. White I. Occupational Contact Dermatitis. *Br Med J*. 1996; 313:487-489.
3. Belsito D. Occupational contact dermatitis: Etiology, prevalence, and resultant impairment/disability. *J Am Acad Dermatol*. 2005; 53:303-313.
4. Nixon R, Frowen K, Moyle M. Occupational dermatoses. *Aust Fam Physician*. 2005; 34:327-333.
5. Slodownik D, Lee A, Nixon R. Irritant contact dermatitis: A review. *Aust J Dermatol*. 2008; 49:1-11.
6. Harlow D, Poyner T, Finlay AY, Dykes PJ. High impairment of quality of life of adults with skin diseases in primary care. *Br J Dermatol*. 1998; 139(Suppl 51):15-20.
7. Hong J, Koo B, Koo J. The psychosocial and occupational impact of chronic skin disease. *Dermatol Ther*. 2008; 21:54-59.
8. Carman HA, Fourie A. The problem of compensation for occupational skin disease in South Africa. *Occup Health Southern Afr*. 2010; 16:12-21.
9. Jobanputra R, Bachmann M. The effects of skin diseases on quality of life in patients from different social and ethnic groups in Cape Town, South Africa. *Int J Dermatol*. 2000; 39:826-831.
10. Barbotte E, Guillemin F, Chau N. Prevalence of impairments,

disabilities, handicaps and quality of life in the general population: a review of recent literature. *Bull World Health Organ*. 2001; 79:1047-1055.

11. Holm EA, Esmann, Jemec GBE. The handicap caused by atopic dermatitis - sick leave and job avoidance. *J Eur Acad Dermatol Venereol*. 2006; 20:255-259.
12. Herd RM, Tidman MJ, Prescott RJ, Hunter JA. The cost of atopic eczema. *Br J Dermatol*. 1996; 135:20-23.
13. Bachmann OM. Compensating for occupational lung disease. *S Afr Med J*. 1990; 77:202-207.
14. Lazarov A, Rabin B, Fraidlin N, Abraham D. Medical and psychosocial outcome of patients with occupational contact dermatitis in Israel. *J Eur Acad Dermatol Venereol*. 2006; 20:1061-1065.
15. Gawkrödger DJ. Patch testing in occupational dermatology. *Occup Environ Med*. 2001; 58(12):823-828.
16. Holness DL, Nethercott JR. Work outcome in workers with occupational skin disease. *Am J Intern Med*. 1995; 27:807-815.
17. Carman H, Kruger P. Occupational skin disease: A review of international and South African literature and data. *Occup Health Southern Afr*. 2008; 14:12-17.
18. Taylor V. Transforming the present, protection the future: Consolidated Report. South Africa, 2002. Available at: <http://www.cdhaarmann.com/Publications/Taylor%20report.pdf> (accessed 3 Dec 2009).
19. Compensation for Occupational Injuries and Diseases Act. Available at: <http://www.labour.gov.za/downloads/legislation/acts/compensation-for-occupational-injuries-and-diseases/amendments/Amended%20Act%20-%20Compensation%20for%20Occupational%20Injuries%20and%20Diseases.pdf> (accessed 2 Dec 2009).
20. Compensation Fund, 2008. Annual report 2007/2008. Available at: <http://www.labour.gov.za/downloads/documents/annual-reports/compensation-for-occupational-injuries-and-diseases/2008/cfintro.pdf/view> (accessed 3 Dec 2009).

Take the test

In support of workers' health & safety, we offer occupational health, safety and training to both the employer and their employees – at our centres as well as at the employer's site.







- Chest X-ray • Vision screening • Audiogram (hearing test)
- Spirogram (lung function) • Urine/blood sugar screening • Medical history
- Physical examination • First aid training • Fire fighting training
- Working at heights training • Safety rep training • Evacuation marshal training
- Risk assessment • Incident investigation • Safety consulting services
- Workshop on occupational health and hygiene for the construction industry: Professional construction manager/professional construction project manager



Sasolburg: Tel: (016) 971 1541, Fax: (016) 971 1560
Alrode: Tel: (011) 908 6890, Fax: (011) 908 6891



Tel: 0861 111 504
Fax: 086 639 8252

www.basadiochealth.co.za www.altramed.co.za



The logos of the Asbestos Relief Trust and the Kgalagadi Relief Trust

The story of the Asbestos Relief Trust – Part 2

JM teWaterNaude

Just Industrial Medicine, Claremont, Cape Town, South Africa

Correspondence: Dr Jim teWaterNaude, Just Industrial Medicine, 104 Library Square, Wilderness Road, Claremont, South Africa 7708. e-mail: jimtewn@mweb.co.za

Part 1 of the story of the Asbestos Relief Trust (ART) described the background birth of the Trust, and the pioneering seminal processes of the early days. Part 2 explains eligibility for financial compensation from the ART or the Kgalagadi Relief Trust (KRT).

The sections of the ART and KRT Trust Deeds^{1,2} headed “Proof of exposure” and “Proof of disease” encapsulate what the Trusts are about, namely compensating qualifying claimants who have demonstrable asbestos-related disease. In compensable cases, sufferers need to show that they have an asbestos-related disease and that they were exposed to asbestos from one of the operations during the time periods run by the founders of the ART or the KRT.

PROOF OF EXPOSURE

Both environmental and occupational claims are considered compensable. The trustees are obliged to review all sources of asbestos exposure throughout the claimant’s lifetime – from both qualifying and non-qualifying operations; it is the responsibility of the claimant to furnish documentary proof of exposure.

The ART-qualifying operations are those which were owned by Griqualand Exploration and Finance Company Limited (GEFCO), or African Chrysotile Asbestos (ACA), and those in which General Mining Corporation (Gencor) had a stake. The KRT-qualifying operations are those that were owned by Danielskuil Cape Blue Asbestos (DCBA) and Kuruman Cape Blue Asbestos (KCBA). Derived from internal working documents of the Trusts, a simplified list of qualifying operations without the ownership periods is shown in Table 1.

The periods of eligibility are limited to those in which the operations were owned by one of the aforementioned

companies. This excludes some people who one might think are eligible. For example, the Wandrag crocidolite mine at Kuruman was never owned by the founding companies, so individuals exposed to asbestos from this mine do not qualify for compensation, unless they were exposed during a short period in the 1990s when the mine was rented by the founders. Similarly, individuals exposed to asbestos from the Penge amosite mine prior to 1981 would not qualify for compensation from the Trusts because Penge was bought by the founders of the ART in late 1981. Furthermore, because Gencor paid a large settlement amount in the preceding Cape PLC action, any worker who was paid from that settlement was specifically excluded from being eligible to claim from the ART.³

Additional conditions for eligibility stated in the Trust Deeds are that: 1) any asbestos exposure that occurred in the 10 years preceding death due to mesothelioma or asbestos-related lung cancer cannot be considered in the review of the exposure history, and 2) any award by the Trusts in the case of asbestosis or asbestos-related pleural thickening is apportioned according to exposure to asbestos in the qualifying and non-qualifying operations. For example, if a person worked at a non-qualifying operation for two years and at a qualifying operation for three years, the award would be 60% of what it would have been had that person worked only at a qualifying operation, regardless of the length of time worked.

Recognising that most claimants lack resources and have difficulty gaining access to documentary proof of employment, the trustees actively sought out and filed any existing work records from the founding companies (personal communication, John Doidge, ART Trustee). These were initially kept in the Trust offices in Kuruman, and were referred to when claimants presented for possible compensation. Trust staff would need to search through old dusty envelopes and boxes to locate the relevant files – a manually laborious process. Because of the inherent risks of storing paper records and the need to expedite the process of searching, the ART decided to digitise the records. An intensive eight months followed – from November 2007 to June 2008 – when more than 810 000 records were scanned and saved. Future searches for work records were thus electronically enabled.⁴ Search fields now include the full name, surname and identity or passport number of the employee, and searches are conducted by an experienced operator in the Johannesburg Trust office. The Medical Bureau for Occupational Diseases (MBOD) has also been granted access to this information to assist its staff to check work histories in asbestos-related disease cases.

Where claimants can neither be found on this system nor produce proof of employment, the trustees accept affidavits – provided that the information so disclosed can be verified beyond reasonable doubt, as decided by the Trust Manager and



Professors Jeebhay and Goodman consider a case at a SOMP reading for the ART

a trustee. Here too, the trustees have facilitated the process by providing claimants with access to former fellow mine employees who have been trained to take affidavits and are able to assist the claimants' recall of people, places and events.

The remainder of this article deals with occupational claims because the process of compensating environmental claimants introduces another layer of complexity – to be described in Part 3.

PROOF OF DISEASE

The compensable diseases recognised by the Trust Deeds are 1) asbestosis and/or pleural thickening with mild to moderate lung function impairment, or 2) with severe lung function impairment, 3) asbestos-related lung cancer, and 4) mesothelioma at any site. Other asbestos-related cancers excluded by the Trusts but recognised by the International Agency for Research on Cancer are laryngeal and ovarian cancer.⁵ These are not included in the Trust Deeds as they were defined as asbestos-related cancers in 2009, some years after the Trust Deeds were penned.

Once claimants have shown that they were employed at a qualifying operation, and if they have not previously been medically tested at the Trust's expense, they are issued with a medical letter to attend a local service provider, usually a general practitioner (GP). The letter entitles the claimant to undergo a medical history and physical examination, a closed loop spirogram, and a chest radiograph at the Trust's expense. These are bundled and couriered to the Cape Town ART office where an expert panel (see Specialist Occupational Medicine Panel – Box 1) evaluates the evidence for asbestos-related disease and provides a decision as to whether the claimant is eligible for compensation. This decision is communicated to the claimant by the same GP at a follow-up medical examination which is again paid for by the Trust.

Should any treatable condition be detected, the GP is asked to treat or appropriately refer the claimant for further tests or treatment. In cases of suspected asbestos-related cancers, the Trust Deeds require that a diagnosis is based on tissue histology. The claimant is then referred to the nearest tertiary medical centre. All further investigations are paid for by the Trust, including transport and accommodation, as none of the rural areas where asbestos was mined is closer than 250 km from a medical centre that houses an X-ray computed tomography scanner and has access to tests such as bronchoscopy, needle biopsy or video-assisted thoracoscopic surgery (VATS) – all of which are used to diagnose lung cancer and mesothelioma.

Once a claimant is certified as having a compensable asbestos-related disease, the case is referred to the ART staff in Johannesburg, who manage the legal aspects.

Part 3 of the story of the ART will deal, in some detail, with the vexed question of how the ART and the KRT manage environmentally-exposed cases.

CONFLICT OF INTEREST STATEMENT

Dr teWaterNaude has been employed by the ART as Medical Manager since 2005.

ERRATUM

In Part 1 of The story of the Asbestos Relief Trust, the sentence "A third settlement was reached in 2006, in a voluntary agreement with the Swiss Eternit Group" should read "A third

settlement was reached in 2006, in a voluntary agreement with Becon AG, which manages the asbestos-related issues of the former Swiss Eternit Group (SEG)."

REFERENCES

1. Deed of Trust creating Asbestos Relief Trust. Available at: www.asbestostrust.co.za, Asbestos Relief Trust, in Trust Deed (accessed 6 Mar 2014).
2. Deed of Trust creating The Kgalagadi Relief Trust. Available at: www.asbestostrust.co.za, Kgalagadi Relief Trust, in Trust Deed. Accessed 6 Mar 2014.
3. teWaterNaude JM. The story of the Asbestos Relief Trust - Part 1. *Occup Health Southern Afr*. 2014; 20(1): 12-14.
4. The Asbestos Relief Trust – A ten year history, 2003 – 2013. Available at: www.asbestostrust.co.za in History (accessed 4 Mar 2014).
5. IARC Monograph. A review of human carcinogens. Part C: Arsenic, metals, fibres, and dusts/ IARC Working Group on the Evaluation of Carcinogenic Risks to Humans. Lyon: France, 2009.

Table 1. ART and KRT qualifying operations

ART crocidolite operations	KRT crocidolite operations
Asbes (Mill & Shaft)	Bestwell (Shaft)
Bretby (Mill & Shaft)	Billinghurst (Shaft)
Bute (including Heuningvlei Mine & Mill)	Bosrand (Shaft)
Coretsi (South, West & East)	Boxmoor/Carrington
Eldoret Mill (aka Merencor Mill)	Central Mill
GEFCO (Sterkspruit & GCM)	Corheim (Shaft)
Greyling (Complex, North & South) (Shafts)	Four Shaft (Shaft)
Kuruman (Central Workshop & General Office)	Grasmere (Shaft)
Merencor (Shaft)	Klipfontein (Mill & Shaft)
Mt Vera (Shaft)	Kuruman East (Shaft)
Orcadia (Shaft)	Langley (Shaft)
Pomfret (Mill & Shafts, including Innes Shaft)	Mansfield (Shaft)
Reries (Mill & Shafts)	Mill Site (Shaft)
Strelly/Bergrand (2 farms; Shaft on Strelly)	Mimosa (Shaft) (pre-1952)
Whiterock (Shaft)	Newstead (Shaft)
ART chrysotile operations	Noordhoek (Shaft)
ACA (Diepgezet)	Ouplaas (aka Oudeplats) (Shaft)
Havelock	Owendale (Mill & Shaft)
ART amosite operations	Salamander/East Mine (Shafts)
Penge (post-1981) & Burgersfort Depot	Sardinia (Shaft)
ART manufacturing operations	Warrandale (Shaft)
AC Pipes	Whitebank (Shaft)
Rocla	Whitedale (Shaft)
Superconcrete	Winstead (Shaft)
Superocla	Witkloof (Shaft)
Unipipe	Witkloof West (Shaft)
United Cement Industries	

THE SPECIALIST OCCUPATIONAL MEDICAL PANEL (SOMP)

The Trust Deeds require that claimants' chest X-rays (CXR) be interpreted according to the International Labour Organization (ILO) classification of radiographs of pneumoconioses and that the spirometry be interpreted by the percentage impairment. For this purpose, the Trusts convened a panel of medical specialists who familiarised themselves fully with the ILO system of reading CXRs, as well as the lung function criteria for compensation as set out in the ART Trust Deeds. The initial panels comprised three specialists. However, as they developed experience and confidence in the new procedures, the configuration soon changed to two specialists reading all the medical information, one being a radiologist and the other an occupational medicine specialist or practitioner. The ILO system of grading the CXRs for quality was adapted to similarly grade the spiograms. Unreadable tests were sent back to be repeated. This allowed the SOMP to ensure that the quality of the submitted tests was of a high standard. Typically, the best tests come from GPs who employ the services of trained radiographers and spirometrists.

An aide memoire to Health Surveillance Primum non nocere FIRST DO NO HARM

Dr Murray Coombs – Occupational Medicine Specialist, Chairman SASOM Biological Monitoring Scientific Committee. Tel: +27 (0)12 678 0784, e-mail: mcoombs@iafrica.com

MODELS OF AND CHECKLISTS FOR HEALTH SURVEILLANCE

Model 4 – OBJECTIVES OF A MEDICAL SURVEILLANCE PROGRAMME (e.g. Synergie)

The objectives of a medical surveillance programme are:

- To ensure that employees are fit for and suited to the work they are to do, and that they meet the inherent health requirements for their relevant occupations. This ensures that the health status of employees does not place their own health and safety, or that of any other employees, at increased risk (“fitness adjudication”).
- o Employees found to be unsuitably employed are assisted in appropriate steps to either improve their medical status, such that they are able to return to their work, or are assisted in a genuine

attempt to seek appropriate alternative occupations.

- o Employees with injuries and illnesses that render them unable to return to their work are assisted with rehabilitation and workplace re-integration. Where relevant, these employees may need to attempt suitable alternative placement. Where appropriate, assistance should be given to enable compensation of workers with occupational diseases and/or injuries.
- To identify early adverse effects of exposure to hazards in their work or working environment, thereby determining the efficacy of hazard control measures (“biological effect monitoring”).
- o This early identification process allows interventions (medical or logistic) that have the best likelihood for excellent outcomes.
- o Through the analysis of the medical surveillance data, high-risk areas in need of environmental intervention can be identified.
- o This regular interaction with employees should ensure that they are adequately informed of the risks of their work (education) and the results of all medical examinations.

- To monitor actual exposure to certain hazards through the measurement of the hazards (or their metabolites) in the body fluids of exposed workers (“biological monitoring”).
- To establish reference points for the medical information on all employees, especially those exposed to health hazards; notably baseline data on entry, job transfer, and exit data when they leave, against which work-related changes may be identified more readily and the employer’s obligations are understood.

- To promote optimal health status of employees through identifying:
 - o Treatable medical conditions that may render them temporarily unable to perform their work.
 - o Chronic illnesses that may have no bearing on their fitness to work, but which threaten their personal long-term health.
- To refer employees for treatment and follow-up, when necessary.

These figures have been reproduced with the permission of “Synergie Occupational Health Management Systems”. For more information, please contact Dr Greg Kew, an Occupational Medicine Specialist at EOH; e-mail: greg.kew@eoh.co.za; website: www.eoh.co.za.

Flow charts of the Synergie Occupational Health System

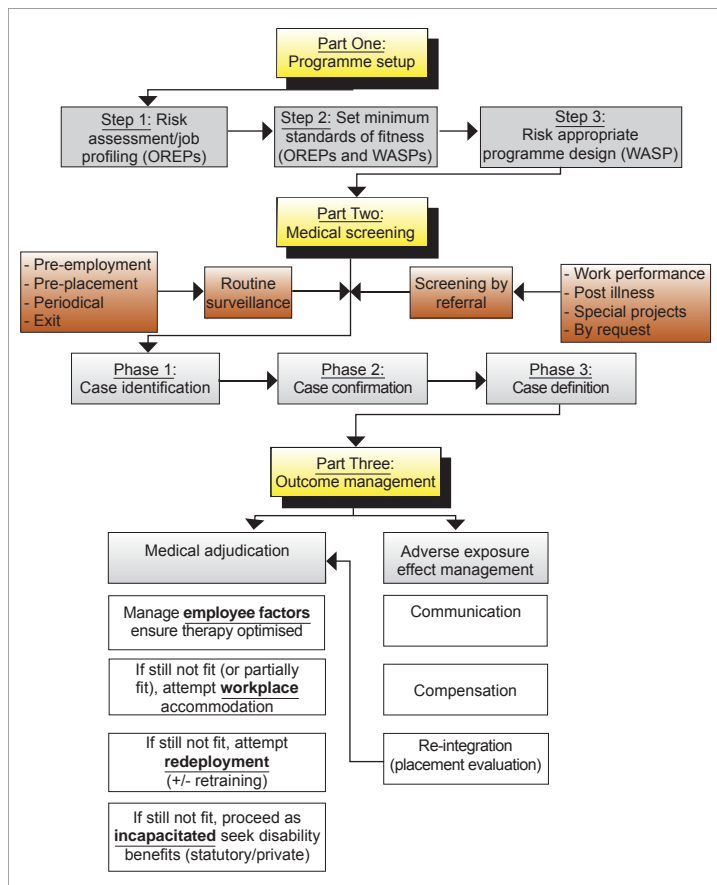


Figure 1. Overview of the Medical Screening Programme

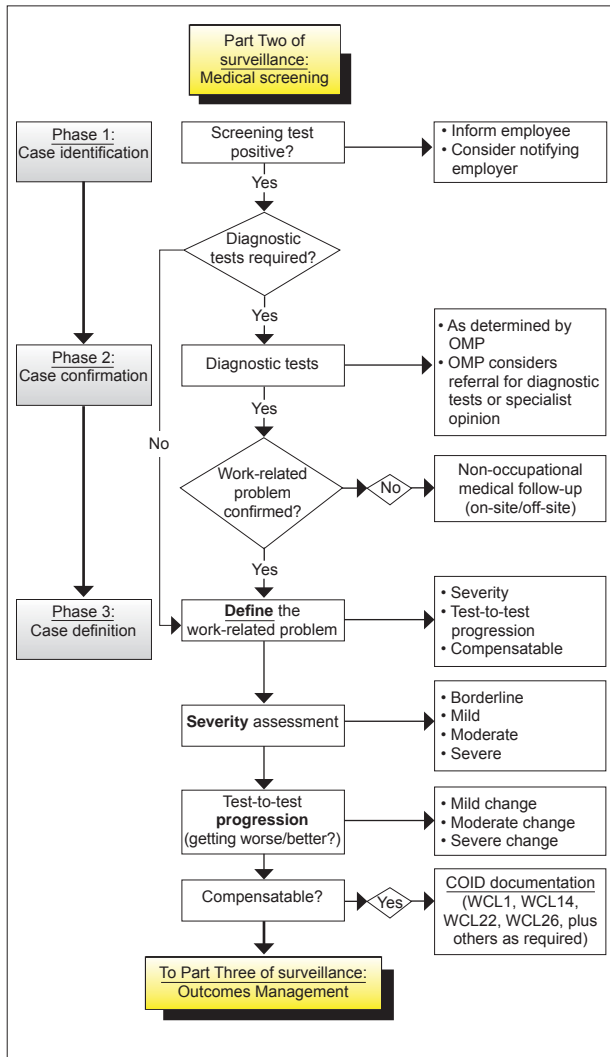


Figure 2. A more detailed view of Part Two of the Medical Screening Programme

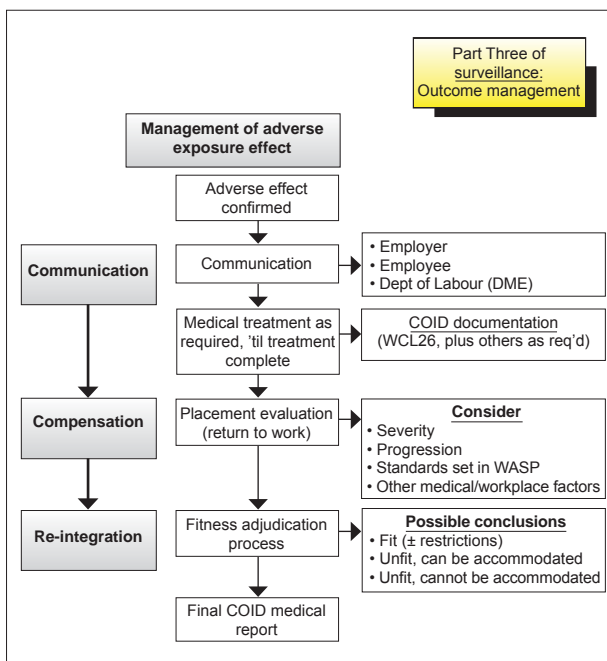


Figure 3. Overview of the Adverse Exposure Effect sequence

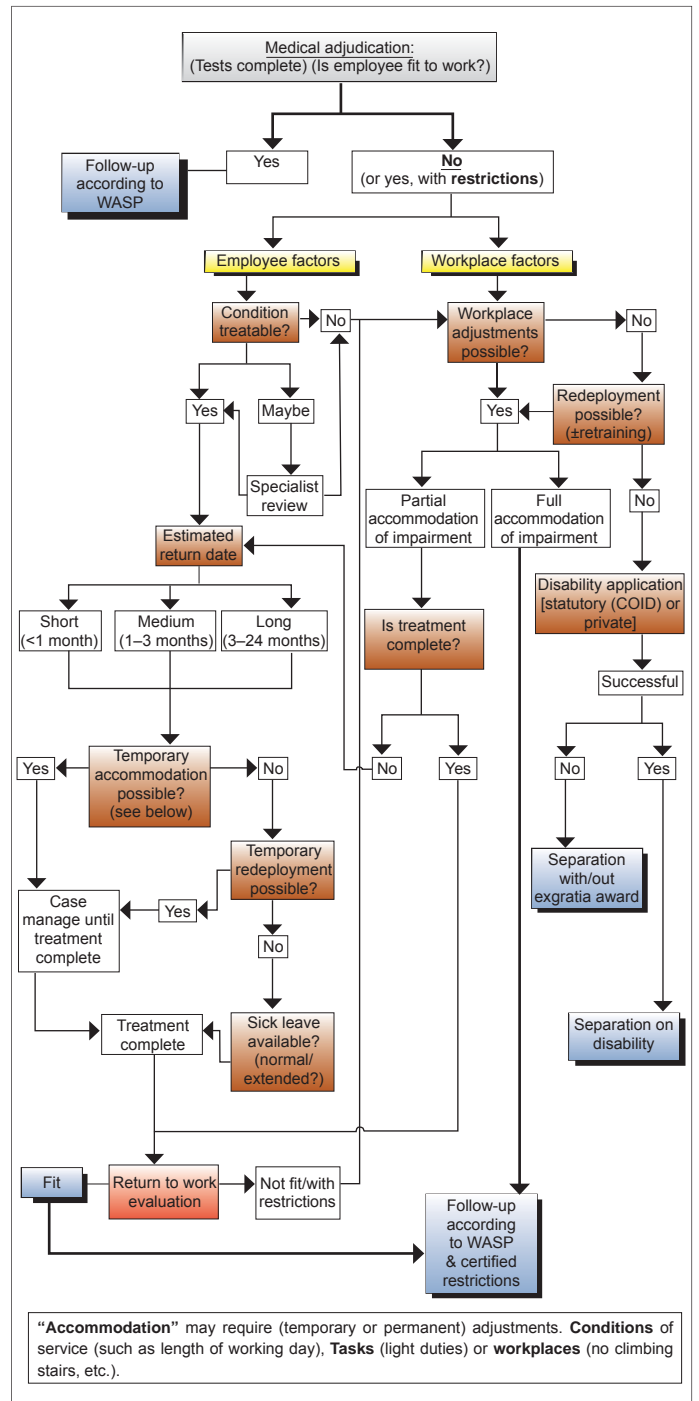


Figure 4. Overview of the Medical Adjudication sequence

RESOURCES

1. CDC. Healthier Worksite Initiative, 2010. http://www.cdc.gov/nccdp/hwdpao/hwi/resources/preventative_screening.htm
2. ACGIH. TLV/BEI Resources, 2006. <http://www.acgih.org/TLV/TLVPresentation.htm>
3. ILO. Encyclopaedia of Occupational Health and Safety, 1998. http://www.ilo.org/safework/WCMS_113329/lang-en/index.htm
4. United States department of Labor. Medical Screening and Surveillance. <https://www.osha.gov/SLTC/medicalsurance/index.html#surveillance>
5. Dr Greg Kew. Synergie Occupational Health Management Systems, EOH, Cape Town, South Africa. www.eoh.co.za (Worksite Health Section).

These pages are sponsored by Drs Du Buisson, Kramer, Swart, Bower Inc./Ing.



Mine Medical Professionals' Association

Professor Jill Murray

Professor Jill Murray's contribution to the study and research of mining-related diseases in southern Africa has had a far-reaching and profound effect on their understanding and management. An award from the Dean of the Faculty of Health Sciences, University of the Witwatersrand in November 2012 for dedication and achievement in research is testimony to the influence that Jill has had on the understanding of this disease landscape.

Born in 1947 in Johannesburg and still a resident of that city, Jill was schooled at the renowned Roedean School from where she matriculated in 1964. She commenced her tertiary education at the University of Witwatersrand, where she obtained a BA degree and, later, a MBBCh. In addition to these qualifications, she has a degree in teaching from London University. She is currently an honorary Associate Professor in the School of Public Health.

Jill has spent most of her professional life as a pathologist at the National Institute for Occupational Health (NIOH) which is part of the National Health Laboratory Service. She is proud to be part of one of the largest non-forensic autopsy services in the world. "Until my retirement at the end of 2012 I had the good fortune to be the head of the Pathology Division of the NIOH, which undertakes examinations of the respiratory organs of deceased miners and ex-miners for compensation purposes," she explains. "I am fortunate to still have a part-time appointment."

Jill continues, "This service (which now has the findings of around 100 000 autopsies computerised since 1975) provides data not only for compensation but also for surveillance and research in lung disease, indeed all disease which manifests in the cardio-respiratory organs – with a particular emphasis on silicosis, tuberculosis and HIV."

"Maintaining a consistent and high standard of data for the computerised Pathology Automation System (PATHAUT) requires an ongoing sustained effort by many people," explains Jill. "The Pathology Division staff complement is fairly large with twenty-four members and highly specialised and complex laboratories. We also serve as a national reference centre for consultation purposes for all lung diseases."

These data are widely utilised for disease surveillance. "Annual reports on the findings are now available on the NIOH website. This is the only source of information that we have on long-term trends of lung diseases in the mining industry, and can also be used to monitor and evaluate interventions," Jill says, explaining the importance of such a source.

The Division also has an active research programme, and Jill has published more than 100 peer reviewed scientific papers as well as many technical reports. She has also produced a range of educational material for use in the workplace and by the mine medical services.

"None of this would have been possible without the extensive collaboration and support from the mine medical services which has been forthcoming over several decades," Jill says. "The Departments of Mineral Resources and Health, as well as South African and many international academic institutions (including the National Institute of Safety and Health (NIOSH) in the USA, the London School of Hygiene and Tropical Medicine and University College London in the UK, and Dokkyo University in Japan) have also been key partners." Although the emphasis has been on gold and platinum miners, research has encompassed many other commodities, including coal, asbestos and manganese. Jill has served as an advisor to the South African Departments of Mineral Resources and Health and her work has influenced policy, both nationally and internationally.

Teaching has always formed a large part of her activities. "Over the years I have mentored young scientists, many of whom have won awards," Jill says with pleasure. "Particularly gratifying was the award of the Wits Faculty of Health Sciences Prestigious Postgraduate Award in 2013 to Gill Nelson for her PhD which I supervised."

Jill has endeavoured to translate her research findings into practical applications in the workplace. "I have facilitated ongoing education to health professionals," she continues, "such as the facilitation of spirometry workshops in 2005 and 2006 in collaboration with NIOSH, USA. Over many years I worked with the mine doctors to implement a review process for improving the clinical management of TB." Jill also contributed to the Department of Mineral Resources Guidance Note on TB for occupational medical practitioners in the mining industry, and to the development of a comprehensive review tool for assessing the performance of TB programmes in the industry.

Jill's activities have extended to neighbouring countries. "I was a member of the Work and Health in southern Africa Steering Committee of the Swedish International Development Agency programme to improve occupational health in the SADC region." This initiative afforded her the opportunity to travel to some of the SADC countries where she facilitated workshops in Mozambique, Tanzania and Zambia.

Jill's invitations to speak at symposiums, conferences and workshops have spanned the African continent from Cape Town, to Madagascar and The Democratic Republic of Congo. She has also presented invited papers in the UK, USA, France, Japan, China and Indonesia.

Jill has been an active member of many professional associations and societies, including the Mine Medical Professionals' Association, the South African Thoracic Society, the International Academy of Pathology, and the International Union against Tuberculosis and Lung Disease.



Now enjoying her semi-retirement, Jill has more time to travel for pleasure. She also has time to enjoy art and classical music and to amuse herself with creating pottery.

Jill has experienced many landmark events in her busy and illustrious career. The following is a summary of some of the key points in her life.

OCCUPATIONAL HEALTH MILESTONES

The very first autopsies – done on mine workers with HIV in the late 1980s.

We found that almost all of them had extensive TB. We knew this was an important finding but we had little idea of the magnitude of the HIV/TB epidemic which was to dominate the health landscape in future years, manifesting first in the mines and then throughout South Africa.

The Leon Commission in 1995, which found that silica dust levels had shown little if any change in the preceding 50 years. The Commission called for more research into miners' diseases.

The advent of the Mine Health and Safety Act in 1995 was a truly progressive piece of legislation. The Mine Health and Safety Council has also played a key role in identifying and funding research.

The silicosis milestones of 2008 which set clear goals for the reduction of silica dust levels. The mines have made progress in reducing dust and now we need to ascertain that disease rates are falling in current and ex-miners.

The initiation of ARV treatment in the mines, the implementation of which was delayed until the end of 2003.

While much of the research has been translated into policy, there remains a gap in effective implementation. Disease rates are still high, the compensation system is still largely ineffective, and the negative effects of migrancy continue.

RESEARCH HIGHLIGHTS

Much of Jill's research has resulted from studies of large cohorts of miners – running into the thousands – who were followed up over long time periods. In some of these studies, men were followed up after having left the mines and, with the help of The Employment Bureau of Africa (TEBA), were traced to their homes in the deep rural areas of South Africa and neighbouring states.

Research over the years has demonstrated that:

- TB is the leading cause of death in both the gold and platinum mining industries. This is true for men with and without HIV and even for men undergoing anti-retroviral (ARV) treatment. Much of the TB present at autopsy was not diagnosed in life.
- Silicosis rates at autopsy increased 10-fold from 1975 to 2007.
- Mortality rates in miners with HIV, taking into account age, are similar to men in other countries such as the UK, Europe and Canada.
- HIV infection has a minimal impact on work-related injury and fatality rates in miners.

One of the early landmark studies was a prospective study of TB in the gold mines, using the newly developed technique of DNA fingerprinting to identify TB strains. It was found that, despite a control programme that cured 86% of new cases of TB, most disease was due to the spread of TB within the mines. These findings were published in *The Lancet*.

A cohort of around 2 000 gold miners was followed up from

1970 to 1995, into retirement. It was found that many developed TB after dust exposure ceased, and that there was an increased risk of TB with silica dust exposure alone – even in the absence of silicotic nodules in the lungs. The results have implications for medical surveillance of silica dust-exposed workers while employed and after cessation of dust exposure, and also for compensation practices.

PEOPLE WHO INFLUENCED ME

Professor Ian Webster was head of the Pathology Division for many decades and played a key role in linking asbestos exposure with malignant mesothelioma. He taught me that, despite all of the technical advances in modern medicine, autopsies can make a very important scientific contribution, and that the mortuary truly is a place “where death delights to help the living”.

Professor Tony Davies recruited me into the NIOH and insisted that I enrol for the Diploma in Occupational Health. Many of my fellow students, such as Mary Ross, Dave Barnes, Leslie London and Jim Murphy became important future collaborators in the endeavour to improve workers' health.

Professor Pete Lowe was the head of Medical Services of Gold Fields Limited. Over the years we travelled widely, visiting mines throughout the country.

SELECTED PUBLICATIONS

1. Sonnenberg P, Lim MSC, Dowdeswell RJ, Field N, Glynn JR, Murray J. Quantifying errors in the estimation of tuberculosis mortality in a population of South African miners. *Int J Tuberc Lung Dis*. 2012; 16(11):1449-1454.
2. Murray J, Davies T, Rees D. Occupational lung disease in the South African mining industry: Research and policy implementation. *J Publ Health Pol*. 2011; 32:S65-S79.
3. Nelson G, Girdler-Brown B, Ndlovu N, Murray J. Three Decades of Silicosis: Disease Trends at Autopsy in South African Gold Miners. *Environ Health Perspect*. 2010; 118(3):421-426.
4. Rees D, Murray J, Nelson G, Sonnenberg P. Oscillating Migration and the Epidemics of Silicosis, Tuberculosis, and HIV Infection in South African Gold Miners. *Am J Ind Med*. 2010; 53:398-404.
5. Glynn JR, Sonnenberg P, Nelson G, Bester A, Shearer S, Murray J. Survival from HIV-1 seroconversion in Southern Africa: a retrospective cohort study in nearly 2000 gold-miners over 10 years of follow-up. *AIDS*. 2007; 21:625-632.
6. Godfrey-Fausset P, Sonnenberg P, Shearer S, Bruce M, Mee C, Morris L, Murray J. Tuberculosis control and molecular epidemiology in a Southern African gold mining community. *Lancet* 2000; 356:1066-1071.
7. Hnizdo E, Murray J. The risk of pulmonary tuberculosis in relation to silicosis and exposure to silica dust in South African gold miners. *Occup Environ Med*. 1998; 55:496-502.
8. Murray J, Back P, Coetzee L, Lowe JP. Clinico-Pathological study to reduce the rate of missed and misdiagnosis of pulmonary tuberculosis in the South African mining industry. Final Report SIMRAC HEALTH 611. Johannesburg: Mine Health and Safety Council; 2000.
9. Page-Shipp L, Murray J, Churchyard G, Girdler-Brown B, Sonnenberg P, Chicksen E. Development of a TB programme review tool for the South African mining industry. SIM 030802 Phase 2. Johannesburg: Mine Health and Safety Council; 2007.

Report by Anne van Vliet,
e-mail: anne@communiquépr.co.za

Occupational Health Southern Africa would like to thank Dr Vusi Nhlapho, President of the MMPA, for highlighting the sterling work that Professor Murray has done over the years, in the hope that it will serve to inspire the current and next generation of pathologists and Mine Medical Professionals.



SAIOH news

Hello all, the year is well underway and, as usual, there is a hive of activity at the SAIOH offices.

NEW OFFICES

SAIOH has officially taken occupancy of its new offices at 36 Gazelle Close, Corporate Park South, Midrand.

A SPECIAL THANKS

For many years SAIOH made use of "Raysaf", an external service provider, to take care of its administrative services. I would like to thank RAYSAF and, in particular, Ray and Jan Strydom for the exemplary services rendered to SAIOH and the many instances of going above and beyond the call of duty in order to ensure that all ran smoothly at SAIOH over the years. SAIOH will now be managing its own administrative affairs with responsibility resting with one of its able councilors, Jaco Pieterse.

WELCOME

I would like to take this opportunity to welcome Lee Doolan as a SAIOH member of staff. Lee has many years of experience as an administrator and personal assistant and I am sure that she will add significant value to our organisation.

SANS 17020

The deadline for existing Occupational Hygiene Approved Inspection Authorities' (AIAs) submissions to SANAS has passed and I'm pleased to announce that 49 AIAs have made the relevant submissions and can continue to practice within this space. These details were provided by the Department of Labour to SAIOH; a list of the names of these AIAs is available from SAIOH. These AIAs are now required to become accredited.

COMPENSATION/SALARY SURVEY 2014

SAIOH intends embarking on a salary survey in 2014. The benefits of such a survey include SAIOH members being able to benchmark their salaries against regional and national norms to better understand whether their compensation is fair in relation to their age, skills, experience, location, etc. For the profession, it raises the status of all practitioners if we can demonstrate our worth in Rand terms. It also helps to attract potential occupational hygienists if they can see the profession as being worthwhile (i.e. lucrative) to follow. Of course, it also helps employers to ensure they are offering new positions at competitive salaries, and can help consultants to justify their service fees. International sister organizations, such as the American Industrial Hygiene Association, regularly



Movember



Lee Doolan

conduct such surveys and publish the results on their website <https://www.aiha.org/membership/Documents/2013-Compensation-Survey-Summary.pdf>.

Consulta, a company that specializes in market research, has been tasked to carry out this survey on SAIOH's behalf. Consulta guarantees complete anonymity and will provide SAIOH with only the survey results that contain no personal details of the study participants. Survey participants will be selected randomly and I encourage you all to please participate should you be selected, in order to ensure that the findings are representative of the entire occupational hygiene fraternity.

MEMBERSHIP FEES

It is you, our members, that make SAIOH what it is and it is membership fees that enable SAIOH to continue growing, adding value, and continue promoting the profession. Membership fees are due by the end of March, so please pay your fees soon. For your convenience, you can pay your membership fees via the SAIOH website.

MOVEMBER

Here is the Movember 2013 photo I promised you (my best attempt at growing a moustache). Anyway, it's for a good cause and my challenge this year will be to all SAIOH members as well as our sister organisations to participate in the Movember drive and do your bit for men's health.

COMMENTS AND VIEWS

Please remember to send us comments, views and any other information you may have about the profession which you believe can add value. You can either e-mail me directly at president@saioh.co.za or send an e-mail to admin@saioh.co.za

Report by PJ (Jakes) Jacobs, SAIOH President
e-mail: Peter.Jacobs2@riotinto.com*

** cell: 071 672 4916; postal address: PO Box 50772,
Randjesfontein, 1683*

Changes to SANS 10083



When noise monitoring and medical surveillance are discussed in the Noise Induced Hearing Regulations, the document referred to is SABS 083 which replaced SANS 10083:2004. The latest amendments to this Standard were published in July 2013 (SANS 10083:2013 Edition 5.2).

Extensive amendments have been made and, for the first time, I feel the emphasis is on hearing conservation and not just reporting Noise Induced Hearing Loss.

I would like to highlight some of the more important amendments:

1. A note to Section 3.1.7 states that it is strongly recommended that all prospective candidates to be trained as audiometrists should have successfully completed anatomy and physiology courses at a tertiary level. The rationale behind this recommendation is that an otoscopic examination must be done prior to audiometry and, if audiometrists do not have any knowledge of anatomy, they will not know what they are looking at and for.
2. There is no longer any confusion as to what value should be used in the absence of a baseline measurement. Sections 3.1.29, 17.1 and 17.13 clearly state that 0% should be used as the PLH where there is no valid baseline available.

Note: Do not confuse Instruction 171 with the SANS 10083:2013. The SANS 10083:2013 refers to baseline testing and Instruction 171 refers to calculations for compensation. If an employee has not had a valid baseline measurement done and has been working in a noisy environment, then it is assumed that he/she had normal hearing – a PLH of 0%. For the purposes of calculating the PLH for the current audiometry, Instruction 171 PLH tables are used to calculate permanent hearing loss.

3. The deadline for conducting baseline audiometry testing on existing employees working in previously identified noise zones has lapsed. A baseline audiogram can thus only be conducted on employees working in a noise zone for the first time or employees working in a newly identified noise zone.
4. Specific mention is made that seasonal workers should not be excluded from baseline or any other audiometry testing.
5. Periodic screening audiometry testing is to be done annually for three years following baseline testing. Following these tests, the frequency of testing is determined individually. The frequencies 2 kHz, 3 kHz and 4 kHz are used specifically.
6. The most exciting changes are the intervention measures that have to take place in the case of a PLH shift. The first intervention measure that should take place is when there is a shift of 3.2%. These measures include:
 - a) Investigation of the reason for the shift.
 - b) Investigation of the effectiveness of the personal protection (PPE) used (is the attenuation enough?)
 - c) Investigation of the proper fit and use of the PPE.
 - d) Training of the employee.

- e) The documentation and safe-keeping of the investigations.
7. Advanced intervention measures must be taken for a PLH shift of 6.4% or more and include:
 - a) Investigation for the reason for PLH shift.
 - b) Investigation of the effectiveness of the PPE.
 - c) Retraining of the employee.
 - d) Referral of the employee for diagnostic audiology.
 8. When there is a shift of 10% or more, the employee must be regarded as a possible candidate for compensation.
 - a) The employee should be retested at a later stage (there is a note [17.8] that explains this "later stage").
 - b) If the retest affirms the shift to be in excess of 10%, the employee must be removed from the noise environment and referred to an audiologist for a diagnostic audiogram.
 - c) If the diagnostic audiogram confirms the shift – the test date is recorded as the date of the commencement of the disease.
 - d) The employee should be referred for a medical opinion to an ear, nose and throat specialist for a PLH shift of >30% or if the case is complicated, and to an Occupational Health Medical Practitioner (OHMP) if the shift is < 30 and uncomplicated.
 - e) If it is the opinion of the OHMP that the PLH shift relates to the work place, the case should be reported as per the relevant legislation.
 - f) It is recommended that such an employee, as soon as is reasonably practicable, be removed from the noise zone where the loss in hearing sensitivity could threaten his/her health and safety at the workplace.
 - g) If the study conducted by the employer showed that the health and safety of an employee is threatened by the loss of hearing sensitivity, the employee should be given training and information regarding hearing conservation in accordance with the relevant legislation before being allowed to re-enter the noise zone.
 - h) The PPE that was used should be carefully inspected for possible shortcomings or inadequacies, taking its attenuation value into account.
 - i) The necessary steps should be taken to prevent a possible further PLH shift.
 - j) Should a loss in hearing sensitivity continue to develop, the employee should be removed from noise zones permanently.

If these steps are implemented, I am sure the incidence of NIHL will be significantly reduced.

These amendments to the SANS 10083 will clearly assist in the Hearing Conservation Programmes, and all OHPs are urged to have a copy of the amended standard available.

SOURCE

1. SANS 10083:2013 Edition 5.2

Report by Karin Meyer, SASOHN Portfolio: Audiometry,
B Cur DOHN,
e-mail: karinmeyer@telkomsa.net

SASOM news

CONGRATULATIONS

SASOM is proud to announce the recent achievements of two SASOM members in the international arena and wish to congratulate Dr Frank Fox on being elected a Fellow of the Faculty of Occupational Medicine (FFOM) in the United Kingdom and Dr Murray Coombs who has been elected Chairman of Medichem. Both members have contributed immensely to the universal body of knowledge on occupational medicine.

The election to the Board of the International Commission of Occupational Health (ICOH) of Dr Mary Ross in 2009 and Ms Claudina Nogueira in 2012 needs to be acknowledged. Dr Ross also serves on the Editorial Board of the ICOH Newsletter. We appreciate the hard work and dedication of these two ladies who attend every ICOH Board meeting and keep SASOM informed about international trends and news in occupational health.

Prof. Daan Kocks is quietly serving on the International Scientific Committee for the 31st ICOH Congress in Seoul, Korea, in 2015, and we thank him for his input from a South African perspective in the Congress programme.

NEWS ITEMS

Dr Jan Lapere, who serves on the SASOM Executive Committee as an occupational medical practitioner and a lawyer, has offered to keep occupational health practitioners informed of important developments in their field and changes in applicable legislation, through bi-weekly

'snippets' of news. These will be placed on the SASOM website and members will be sent a link to the news items as they become available.

ARAOH CONGRESS RELOCATED

The African Regional Association on Occupational Health (ARAOH) Congress planned for Nairobi in June 2014 has been relocated to Johannesburg due to socio-economic and political issues in Kenya. The Congress will now be held as an ARAOH/SASOM Congress at the Emperors Palace from 1 – 3 August 2014. The invitation, registration form and provisional programme are available on the SASOM website at www.sasom.org or e-mail ARAOH at info@araoh.org. Also available is information on accommodation and the fact that there is a free shuttle service from the OR Tambo Airport to the Emperors Palace.

While we have received several very interesting abstracts from America, Europe and Africa for the Congress, we need a few more. A call for papers and guidelines for submitting an abstract can also be found at the above addresses.

SASOM would like to thank the ARAOH Congress Organising, Financial and Scientific Committees for the hard work they have put into the Congress over the past two years. No doubt the programme will reflect their excellent input.

Report by Jenny Acutt in the SASOM National Office, e-mail: info@sasom.org



From left: Dr Mary Ross, Dr Kazutaka Kogi (ICOH President) and Ms Claudina Nogueira

All subscribers qualify for free access to the website www.occhealth.co.za

Occupational health

SOUTHERN AFRICA

Simply complete the form below and fax it to us on +27 (0)31 764 0386 or scan to e-mail: jennyg@dbn.technews.co.za

➔ **Step 1** – Details of person paying for subscription (i.e. billing details)

First name:	Surname:	Mr/Mrs/Dr/Ms etc:
Position/Title:	Department:	M/F:
Company name:		
Address 1:		
Address 2:		
City:	Postal code:	Province/State:
Country:	Telephone: ()	Fax: ()
e-mail:		

➔ **Step 4**

Signature of applicant: _____

Date of application: _____

➔ **Step 2**

Occupational Health SA (6 issues)		
Delivery within South Africa	R328-95 excl VAT	R375-00 incl VAT
Delivery into southern Africa (other than South Africa)	R713-82 excl VAT	R813-75 incl VAT
Delivery to northern Africa and rest of world	R750-66 excl VAT	R855-75 incl VAT
	Total	

All non-South African subscription prices are for surface mail only – 8 weeks delivery.

Contact the subscription manager for international airmail pricing.

All prices in ZA Rands.

WRITE TO:

Technique Publishing,
Box 626, Kloof, 3640,
South Africa

e-mail:
jennyg@dbn.technews.co.za

Telephone: +27 (0)31 764 0593

Fax: +27 (0)31 764 0386

➔ **Step 3 – Payment**

Payment method: MasterCard Visa Diners Club American Express
 Postal order Cash Cheque Direct Bank Deposit

Cheques payable to: Technique Publishing

Direct bank deposit details: Name of account: Technique Publishing; Bank: Standard Bank of SA; Branch code: Kloof Branch 045526; Account number: 051992450. SWIFT address: SB ZAZA JJ. Please CLEARLY indicate subscriber's surname on the deposit slip. **Please submit a copy of the deposit slip with the subscription form.**

Credit card payments:

Cardholder name: _____

Card Number: _____

CVC (Card Verification Code – on rear of card): _____

Expiry date: _____

Cardholder's signature: _____

For office use

Ref no: _____

Reg. date: ____ / ____ / ____

Payment code: _____

Knowledge is power –
subscribe today!

Occupational Health and

PEX
ENVIRONMENTAL & OCCUPATIONAL MONITORING SPECIALISTS

AIR + GROUND + WATER + PEOPLE

Occupational:

- Hazardous Chemical Substances Monitoring and Risk Assessments
- Hazardous Biological Agents Monitoring Risk Assessments
- Health Risk Assessments
- Ergonomics Assessments
- Indoor Air Quality
- Noise • Vibration • Lighting • Ventilation • Thermal Stress
- Asbestos • Lead • Waste/Pollution Assessments
- Compressed Air Quality Testing • Training

Environmental:

- Iso-Kinetic Stack Monitoring • Emission Inventories
- Ambient Air Monitoring (Emissions, Dust Fallout, PM2.5, PM10)
- Environmental Noise Monitoring and Modelling
- Soil Testing • Water Monitoring (Ground Water, Borehole, Storm Water, Effluent, UST) • EIA, EMP & ECO Specialist Studies
- Waste Audits and Waste Licence Applications • APPA/AEL Applications • Aspect & Impact Registers • Vehicle Exhaust Emission Testing

APPROVED INSPECTION AUTHORITY

(Approval no CI 084 OH)
40 Beechgate Crescent
PO Box 2079
Amanzimtoti 4125
Tel: +27 (0)31 914 1004
Fax: +27 (0)31 914 2199

HEARCARE

Dr Elize de Koker
Audiologist & Hearing Aid Acoustician

- Hearing tests • Compensation claims
- Fitness assessments • Medico legal • Screenings
- Exit diagnostic • Hearing protection
- Present audiometry courses (UJ accredited)
- Consult to mining industry

Tel: +27 (0)11 953 4114/079 495 4914
www.hearcare.co.za



Setting the benchmark in Occupational Health

HSP GROUP
MERGING MEDICINE & INDUSTRY

- Medical examinations • Executive medicals • Hearing tests • Doctors
- Lung functions • Primary health clinics • Vision screening
- Travel clinics • Chest X-rays • Biological monitoring • Mobile medicals
- First aid equipment • Training • Biogene • Cross border medicals
- Locums • Immunisations • Health risk assessments

info@hspgroup.co.za • 0861 873 477 • www.hspgroup.co.za

Human Hygiene Consultation
Your key to a healthy & safe working environment

Approved Inspection Authority Specialising in Occupational Health and Safety Services

- * Occupational Hygiene Exposure Monitoring
- * Risk Assessments * Environmental Monitoring
- * Food Safety Surveys * Health & Safety Training

Cell: 079 491 8024 / Fax: 086 519 3880
Email: humanhygiene@telkomsa.net
Website: www.humanhygiene.co.za



Upgrade your existing analog x-ray unit to DR

IMAGE X
Medical Imaging & Radiology Specialists
www.imagex.co.za
tel 011-869-6888
082-450-3128

Including PACS



JH CONSULTING
Acoustics, Noise & Vibration Control

Noise and Vibration Measurement Analysis and Control

Phone/Fax: 011 679 2342
Cell: 082 886 7133
e-mail: JH29@pixie.co.za

Need an ambulance urgently in the workplace?
CALL MAPONYA 911 RESCUE CONTROL CENTRE
0861 960 960

Emergency Medical Services (EMS)
– Ambulance Service

- Transportation of work-related injuries personnel to nearest and appropriate medical facility
- Transportation of patients other than work-related, e.g. medical cases etc.
- Roadside emergency medical evacuations
- Inter-hospital transfers
- EMS during major events, viz. sport, music etc.
- On-site 24/7 EMS provision to mines, power stations
- Offers a 24/7 Control Centre with a Tom Tom GPS to monitor EMS vehicles across country

Other Services Offered

- Occupational Health
- Training (first aid; fire fighting)
- Health & Safety related consulting services

MAPONYA 911 RESCUE
0861 960 960
info@maponya911.co.za



MEDOCC HEALTH CARE
Occupational Health Medicals

- Audiometry testing
- Lung functions
- Keystone vision screening
- Chronic illness management
- IOD management
- Wellness programme
- Mobile services

Healthy, wealthy and strong

Tel: +27 (0)31 825 2722 • privatenursing1@gmail.com • Cell: 084 550 5568



Hygiene Practitioners

To advertise contact Anne van Vliet
 Tel: +27 (0)11 462 5073
 Cell: +27 (0)82 775 0711
 e-mail: anne@communiquepr.co.za

Mignon van der Westhuizen



Spirometry Training Making a Difference

Clinical Technologist: Pulmonology
 Reg. HPCSA: KT 0000264
 Pr.No: 0750020095141
 E-mail: mignonspiro@absmail.co.za
 www.spirometrytraining.co.za

P O Box 990298
 Kibler Park,
 2053
 Fax: 088 011 943-2280
 Cell: 082 855 9118

OCCUTECH

ARE YOU MEETING THE OCCUPATIONAL AND ENVIRONMENTAL CHALLENGES

Occutech is an inspection authority for the work and business environment surrounds approved by the Department of Labour.

- Risk Assessors - health risk
- Major hazardous installation
- Occupational hygiene
- Environmental consultants
- Indoor air quality assessment

OCCUTECH IS ABLE TO RECOGNISE, EVALUATE AND RECOMMEND COST EFFECTIVE CONTROLS OF OCCUPATIONAL AND ENVIRONMENTAL HAZARDS

"PREVENTION IS BETTER THAN CURE"

http://www.occutech.co.za
 e-mail: occutech@occutech.co.za
 Tel: (031) 206 1244, Fax: (031) 205 2561

OCSA

Looking for a **One-Stop Integrated Workplace Health & Wellness Solution?**
"We provide quality services that you can trust"

- Occupational & Primary Health – Onsite clinics & Mobile units
- Occupational Hygiene & Environmental services
Approved Inspection Authority (AIA) Nr. CI 11/ 110 OH
- Academy of Excellence e.g. Audiometry, Spirometry, Wellness Training
- Employee Wellness including Absenteeism Management
- 360° Health Management Information System
- Risk & Injury Management

Tel: +27 11 803 3538
 E-mail: marketing@ocsa.co.za
 www.ocsa.co.za

Rencor
"The First Aid People"

P.O. Box 123, Rosetta
 Langley Park, Old Main Road
 C/O The Wine Cellar
 Fax: 086 699 7804
 Cell: 082 337 7727
 info@rencorfirstaid.co.za
 www.rencorfirstaid.co.za

We manufacture and supply industrial, domestic and sporting first aid kits, first aid supplies and general medical sundries. We also offer first aid training for you and your staff.



SOHS

SeniNhle
 Occupational Health Services (Pty) Ltd

We add value to your business by taking care of your medical surveillance and occupational hygiene programmes. Our medical team does Audiometric Tests, Lung Function Tests, Chest X-rays, Eye Tests, Urine and Blood Tests. Our occupational hygiene AIA team does Risk Assessments, measures Noise, Hazardous Chemical Substances, Asbestos, Silica, Lead, Illumination, Heat and Cold Stress, Vibration, Ergonomics and Indoor Air Quality.

For all your Occupational Hygiene and Medical Surveillance Programmes speak to us on:
 Tel: 012 998 4483
 Cell: 082 335 5491
 Fax: 012 993 5884
 e-mail: info@seninhle.co.za
 www.seninhle.co.za

"Integrating medical surveillance and occupational hygiene to add value to your business"

SHE
 Occupational Health, Safety, Environmental Consultants, Risk Assessors and Training Specialists

• Environmental Health and Environmental Management Assessments – Air, Ground, Water
 • Occupational Hygiene Assessments
 • Drafting of all Occupational Health, Safety and Environmental Standards
 • Hazard Analysis Critical Control Point (HACCP) – Food Safety Management

• ISO 14001, OHSAS 18001, ISO 9001 – Compliance
 • Legal Compliance Audits – OHS Act 85 of 1993
 • Health and Safety Plan, Risk Assessments, Safety Audits etc.
 • Occupational Health Risk Exposure Profiles (OREPS)
 • Risk Management (Major Hazard Installation Risk Assessment, HIRA etc.)

johan@ship-online.co.za
 www.ship-online.co.za
 Tel: +27 (0)12 654 3090
 Fax: +27 (0)86 632 0835

First Aid Training = A Safer Business

Completing a comprehensive **St John First Aid** course will give you and your employees the skills needed to create a safer and more productive working environment. **St John First Aid** courses are accredited with the Dept. of Labour and the Health and Welfare SETA. St John is a Level 1 contributor to B-BBEE with 135% procurement recognition. Visit our website www.stjohn.org.za or contact:

- Bloemfontein: (051) 444 6276 • Cape Town: (021) 461 8420
- Durban: (031) 305 6588 • East London: (043) 722 9840
- Fish Hoek: (021) 782 3306 • Grahamstown: (046) 636 1650
- Helderberg: (021) 851 7394 • Johannesburg: (011) 403 4227
- Kimberley: (053) 838 2519
- Port Elizabeth: (041) 364 2701/2
- Pretoria: (012) 324 1620

St John
 caring for people

OCCUPATIONAL HYGIENE SURVEYS

Approved Inspection Authority for occupational hygiene surveys

Tel: +27 (0)51 446 1358 • Fax: +27 (0)51 446 1401
 vdhadmin@iafrica.com • www.vdhih.com
 P.O. Box 26792, Langenhoven Park, Bloemfontein 9330

ISO/IEC 17020 accredited inspection body

