IN THE SOUTH GAUTENG HIGH COURT, JOHANNESBURG (REPUBLIC OF SOUTH AFRICA)

CASE NO: _____ In the matter between: **BONGANI NKALA** First Plaintiff Second Plaintiff SIPORONO PHAHLAM MAPHATSOE KOMPI Third Plaintiff Fourth Plaintiff THEMBEKILE MNAHENI Fifth Plaintiff **MATONA MABEA** Sixth Plaintiff **MOKHOLOFU BOXWELL** Seventh Plaintiff **ALLOYS MNCEDI MSUTHU** Eighth Plaintiff **MYEKELWA MKENYANE** Ninth Plaintiff **MASIKO SOMI** Tenth Plaintiff ZWELENDABA MGIDI Eleventh Plaintiff MTHOBELI GANGATHA Twelfth Plaintiff LANDILE QEBULA Thirteenth Plaintiff PHUMELELO SOLITASI SIYOCOLO **TEKEZA JOSEPH MDUKISA** Fourteenth Plaintiff Fifteenth Plaintiff MICHAEL LITABE Sixteenth Plaintiff **JOSEPH LEBONE** Seventeenth Plaintiff LIPHAPANG AKIME LEBINA Eighteenth Plaintiff **ZAMA GANGI** Nineteenth Plaintiff **MALUNGISA THOLE** Twentieth Plaintiff MONOKOA THOMAS LEPOTA

MZAWUBALEKWA DIYA Twenty-first Plaintiff

MSEKELI MBUZIWENI Twenty-second Plaintiff

ZANEYEZA NTLONI Twenty-third Plaintiff

TOHLANG PAULOSI MAKO Twenty-fourth Plaintiff

NANABEZI MGODUSWA Twenty-fifth Plaintiff

THULENKHO KUSWANA Twenty-sixth Plaintiff

MALEBURU REGINA LEBITSA Twenty-seventh Plaintiff

MATAASO MABLE MAKONE Twenty-eighth Plaintiff

MATSEKELO CISILIA MASUPHA

Twenty-ninth Plaintiff

MATIISETSO MASEIPATI JESENTA NONG

Thirtieth Plaintiff

and

HARMONY GOLD MINING COMPANY LIMITED

(Registration number M1950/038232/06) First Defendant

EVANDER GOLD MINES LIMITED (previously

KINROSS MINES LIMITED)

(Registration number M1963/006226/06) Second Defendant

LESLIE GOLD MINES LIMITED

(Registration number 1959/001124/06) Third Defendant

RANDFONTEIN ESTATES LIMITED

(Registration number 1889/00251/06) Fourth Defendant

ARMGOLD/HARMONY FREEGOLD JOINT VENTURE

(PROPRIETARY) LIMITED

(Registration number 2001/029602/07) Fifth Defendant

AVGOLD LIMITED

(previously TARGET EXPLORATION COMPANY LIMITED)

(Registration number 1990/007025/06) Sixth Defendant

UNISEL GOLD MINES LIMITED

(Registration number 1972/010604/06) Seventh Defendant

LORAINE GOLD MINES LIMITED

(Registration number 1950/039138/06) Eighth Defendant

WINKELHAAK MINES LIMITED

(Registration number 1955/003606/06) Ninth Defendant

BRACKEN MINES LIMITED

(Registration number 1959/001126/06) Tenth Defendant

ANGLOGOLD ASHANTI LIMITED

(previously VAAL REEFS EXPLORATION AND

MINING COMPANY LIMITED)

Eleventh Defendant (Registration number 1944/01734/06)

FREE STATE CONSOLIDATED GOLD MINES

(OPERATIONS) LIMITED (previously WESTERN

HOLDINGS LIMITED)

Twelfth Defendant (Registration number 1937/009266/06)

GOLD FIELDS LIMITED

(previously EAST DRIEFONTEIN GOLD MINING

COMPANY LIMITED AND DRIEFONTEIN

CONSOLIDATED LIMITED)

(Registration number 1968/004880/06) Thirteenth Defendant

GOLD FIELDS OPERATIONS LIMITED

(previously WESTERN AREAS

GOLD MINING COMPANY LIMITED)

Fourteenth Defendant (Registration number 1959/0032096/06)

NEWSHELF 899 (PROPRIETARY) LIMITED

Fifteenth Defendant (Registration number 2007/019941/07)

BEATRIX MINES LIMITED

Sixteenth Defendant (Registration number 1977/002138/06)

FARWORKS/682 LIMITED (previously

KLOOF GOLD MINING COMPANY LIMITED)

Seventeenth Defendant (Registration number M1964/004462/06)

DRIEFONTEIN CONSOLIDATED

(PROPRIETARY) LIMITED

Eighteenth Defendant (Registration number 1993/002956/07)

GFI MINING SOUTH AFRICA

(PROPRIETARY) LIMITED

DRAFT PARTICULARS OF CLAIM	
JCI LIMITED (Registration number 1894/000854/06)	Thirtieth Defendant
RANDGOLD AND EXPLORATION COMPANY LIMITED (Registration number 1992/005642/06)	Twenty-ninth Defendant
AFRICAN RAINBOW MINERALS LIMITED (previously ANGLOVAAL MINING LIMITED) (Registration number 1933/004580/06)	Twenty-eighth Defendant
ANGLO AMERICAN SOUTH AFRICA LIMITED (Registration number 1917/005309/06)	Twenty-seventh Defendant
EAST RAND PROPRIETARY MINES LIMITED (Registration number M1893/000773/06)	Twenty-sixth Defendant
DRDGOLD LIMITED (Registration number 1895/00926/06)	Twenty-fifth Defendant
SIMMER AND JACK MINES LIMITED (Registration number 1924/007778/06)	Twenty-fourth Defendant
DOORNFONTEIN GOLD MINING COMPANY LIMITED (Registration number M1947/024709/06)	Twenty-third Defendant
BLYVOORUITZICHT GOLD MINING COMPANY LIMITED (Registration number M1937/009743/06)	Twenty-second Defendant
BUFFELSFONTEIN GOLD MINES LIMITED (Registration number M1995/0100726/06)	Twenty-first Defendant
VILLAGE MAIN REEF LIMITED (Registration number M1943/005703/06)	Twentieth Defendant
(Registration number M2002/031431/07)	Nineteenth Defendant

 \bigcirc

PARTIES

- The above-named Plaintiffs institute this action on behalf of themselves and the other members of two classes:
 - 1.1 Current and former mineworkers who have silicosis (whether or not accompanied by any other disease) and who work or have worked on the gold mines listed on the attached annexure "A" at any time from 1 January 1965 to date ("the first class").
 - 1.2 The dependants of mineworkers who died as a result of silicosis (whether or not accompanied by any other disease) and who worked on the gold mines listed on the attached annexure "A" at any time after 1 January 1965 ("the second class").
- The Defendants are gold mining companies which owned and/or controlled the mines which are set forth in annexure "A", where the mineworkers referred to in paragraph 3 above were employed.
- The Plaintiffs (as applicants) brought application proceedings in this court under Case No. _____ against these defendants for certification of the classes. Certification was granted on _____.

The Plaintiff Class Representatives

- 4 Each Plaintiff acts in his or her own capacity and on behalf of and in the interests of the first or the second class.
- The first Plaintiff is Bongani Nkala, a former mineworker residing at Kambi Administrative Area, Mthatha. The first plaintiff worked at Harmony Gold Mine as a Team Member from 1985 to 1997.
- The second Plaintiff is Siporono Phahlam, a former mineworker residing at Imizizi Administrative Area, Redoubt, Bizana. The second plaintiff worked at the following mines:
 - 6.1 President Brand as a Team Leader from 1971 to 1974;
 - 6.2 Vaal Reefs as a Team Leader from 1974 to 1980; and
 - 6.3 Elandsrand as a Miner from 1980 to 2004.
- 7 The third Plaintiff is Maphatsoe Kompie, a former mineworker residing at Ha Mathabela Qomo-Qomong, Lesotho. The third plaintiff worked at the following gold mines:
 - 7.1 Deelkraal as a Winch Driver from 1981 to 1997; and
 - 7.2 Elandsrand as a Loco Driver from 1997 to 2009.

- The fourth Plaintiff is Thembekile Mnaheni, a former mineworker residing at Mohoabatsana Administrative Area, Mount Fletcher. The fourth plaintiff worked at Kinross Gold Mine as a Labourer and Winch Driver from 1976 to 1998.
- 9 The fifth Plaintiff is Matona Mabea, a former mineworker residing at Mekaling Ha Makoanyane, Lesotho. The fifth plaintiff worked at Randfontein Gold Mine as a member of the Stop Team, a Winch Driver and a Team Leader from 1977 to 2004.
- 10 The sixth Plaintiff is Mokholofu Boxwell, a former mineworker residing at Butha-Buthe, Lesotho. The sixth plaintiff worked at the following gold mines:
 - 10.1 Winkelhaak as a Timber Boy from 1965 to 1978;
 - 10.2 Libanon as a Machine Driller from 1979 to 1980;
 - 10.3 Bracken as a Machine Driller from 1980 to 1992; and
 - 10.4 Free Gold (Joel) as a Machine Driller from 1994 to 1998.
- 11 The seventh Plaintiff is Alloys Mncedi Msuthu, a former mineworker residing at Mthumasi Administrative Area, Ramafole Location, Mount Fletcher. The seventh plaintiff worked at the following gold mines:
 - 11.1 West Driefontein as a Labourer from 1977 to 1978; and
 - 11.2 President Steyn/Free Gold (Bambanani) as a Drill Operator from 1978 to 2009.

- 12 The eighth Plaintiff is Myekelwa Mkenyane, a former mineworker residing at Amadiba Location, Bizana. The eighth plaintiff worked at the following gold mines:
 - 12.1 Kinross as a General Worker from 1975 to 1976;
 - 12.2 Free State Saaiplaas as a General Worker and a Winch Driver from 1976 to 1998;
 - 12.3 Masimong Division as a Gang Supervisor and a Development Team Leader from 1998 to 2005; and
 - 12.4 Harmony as a Stope Team Leader from 2005 to 2009.
- 13 The ninth Plaintiff is Masiko Somi, a former mineworker residing at Nyaka Location, Bizana. The ninth plaintiff worked at the following gold mines:
 - 13.1 President Steyn as a Cleaner from 1976 to 1977;
 - 13.2 Western Holdings / Free Gold (Matjhabeng) as a Chief Boss Assistant from 1977 to 1987; and
 - 13.3 Free State Geduld from 1977 to 1995.
- 14 The tenth Plaintiff is Zweledaba Mgidi, a former mineworker residing at Twazi Administrative Area, Flagstaff. The tenth plaintiff worked at the following gold mines:
 - 14.1 Loraine as a Timber Boy from 1983 to 1998;

- 14.2 President Brand as a Winch Driver from 1999 to 2004; and
- 14.3 President Steyn / Free Gold (Bambanani) from 2004 to 2011.
- The eleventh Plaintiff is Mthobeli Gangatha, a former mineworker residing at at Nkunzimbini Administrative Area, Lusikisiki. The eleventh plaintiff worked at Unisel Gold Mine as a Timber Boy and a Loco Driver from 1986 to 2001.
- The twelfth Plaintiff is Landile Qebula, a former mineworker residing at Ngxokweni, Libode, Eastern Cape. The twelfth plaintiff worked at Vaal Reefs No 8 Shaft / Great Noligwa Gold Mine as a Stope Team Member, a Machine Operator, a Mine Assistant and a Loco Operator from 1978 to 1995, and from 2004 to 2010.
- 17 The thirteenth Plaintiff is Phumelelo Solitasi Siyocolo, a former mineworker residing at Ntlenzi Administrative Area, Flagstaff. The thirteenth plaintiff worked at Vaal Reefs Gold Mine as a Timber Boy, a Winch Driver and a Machine Operator from 1977 to 2008.
- The fourteenth Plaintiff is Tekeza Joseph Mdukisa, a former mineworker residing at Mkdona Administrative Area, Bizana. The fourteenth plaintiff worked at Western Deep Levels No 2 Shaft / Savuka as a Transporter, Pipe Layer, Team Member, Machine Operator, Loco Driver, Loco Team Leader and Construction Team Leader from 1970 to 1998.

- 19 The fifteenth Plaintiff is Michael Litabe, a former mineworker residing at Ha Motemekoane, Maseru, Lesotho. The fifteenth plaintiff worked at Western Deep Levels as a Pipe Attendant, Stope Team Member, Winch Driver and Stope Team Leader from 1975 to 2003.
- The sixteenth Plaintiff is Joseph Lebone, a former mineworker residing at Mohale's Hoek, Lesotho. The sixteenth plaintiff worked at the following gold mines:
 - 20.1 President Brand as a member of the Stope Team from 1972 to 1973; and
 - 20.2 President Steyn / Free Gold (Bambanani) as a Winch Driver, Loco Driver and Loader Driver from 1974 to 2006.
- 21 The seventeenth Plaintiff is Liphapang Akime Lebina, a former mineworker residing at Ha Josiase, Maseru, Lesotho. The seventeenth plaintiff worked at the following gold mines:
 - 21.1 Free State Saaiplaas as a Store Attendant in 1966;
 - 21.2 President Brand as a Boiler Maker and Loco Driver from 1967 to 1975, and from 1976 to 1998; and
 - 21.3 Western Deep Levels as a Boiler Maker and Loco Driver from 1975 to 1976.
- The eighteenth Plaintiff is Zama Gangi, a former mineworker residing at Gorha Administrative Area, Lusikisiki. The eighteenth plaintiff worked at South Deep Gold

- Mine as a Single Drum Operator, a Timber Boy and a Mine Assistant from 1981 to 2005, and from 2007 to 2008.
- 23 The nineteenth Plaintiff is Malungisa Thole, a former mineworker residing at Imizizi Administrative Area, Bizana. The nineteenth plaintiff worked at Western Areas Gold Mine as an Electrician from 1980 to 1999.
- 24 The twentieth Plaintiff is Monokoa Thomas Lepota, a former mineworker residing at Ha Elia, Roma, Lesotho. The twentieth worked as a Loco Driver and a Rock Drill Operator at the following gold mines:
 - 24.1 Free State Geduld from 1973 to 1974,
 - 24.2 President Steyn from 1974 to 1976;
 - 24.3 Hartebeesfontein from 1977 to 1986; and
 - 24.4 Beatrix from 1988 to 2007.
- The twenty-first Plaintiff is Mzawubalekwa Diya, a former mineworker residing at Bizana, Eastern Cape. The twenty-first plaintiff worked at Kloof Gold Mine as a Team Member, Winch Operator, Loco Driver and Bell Ringer from 1978 to 2005.
- The twenty-second Plaintiff is Msekeli Mbuziweni, a former mineworker residing at Nqabeni Village, Esikelo Administrative Area, Bizana. The twenty-second plaintiff worked at the following gold mines:

- 26.1 East Driefontein Mine as a Winch Driver from 1978 to 2000; and
- 26,2 Driefontein Consolidated as a Winch Driver from 2000 to 2006.
- The twenty-third Plaintiff is Zaneyeza Ntloni, a former mineworker residing at Twali, Eastern Cape. The twenty-third plaintiff worked at Buffelsfontein Gold Mine as a Machine Operator from 1979 to 1980, and from 1981 to 2006.
- The twenty-fourth Plaintiff is Tohlang Paulosi Mako, a former mineworker residing at Mohale's Hoek, Lesotho. The twenty-fourth plaintiff worked at Hartebeesfontein Gold Mine as a Sweeper, Timber Boy and a Miner Assistant from 1982 to 2003.
- The twenty-fifth Plaintiff is Nanabezi Mgoduswa, a former mineworker residing at Tshuzi Location, Luphilisweni Administrative Area, Bizana. The twenty-fifth plaintiff worked as a Machine Operator, Water Jet Operator and Winch Driver at the following gold mines:
 - 29.1 Vaal Reefs mine in 1989, and from 1993 to 1994;
 - 29.2 Hartebeesfontein Mine from 1991 to 1992;
 - 29.3 Vaal Reefs Mine (No 10 Shaft) / Tau Lekoa from 1997 to 2009.
- The twenty-sixth Plaintiff is Thulenkho Kuswana, a former mineworker residing at Bizana. The twenty-sixth plaintiff worked at the following gold mines:
 - 30.1 Vaal Reefs as a Machine Operator from 1976 to 1979; and

- 30.2 Blyvooruitzicht as a Wkinch Driver from 1979 to 2009.
- The twenty-seventh Plaintiff is Maleburu Regina Lebitsa, a widow residing at Ha-Motsoane, Naleli, Lesotho. The twenty-seventh plaintiff is the dependant of the late Lekhooanyana Isaac Lebitsa, a former mineworker who died as a result of silicosis and who worked at Vaal Reefs from 1974 to 1997.
- The twenty-eighth Plaintiff is Mataaso Mable Makone, a widow residing at Botha-Bothe, Ha-Tumane, Lesotho. The twenty-eighth plaintiff is the dependant of the late Molupe Makone, a former mineworker who died as a result of silicosis and who worked at Western Holdings Gold Mine from 1974 to 2008.
- The twenty-ninth Plaintiff is Matsekelo Cisilia Masupha, a widow residing at Thuathe Phutha-Lichaba, Ha Thuntsane, Lesotho. The twenty-ninth plaintiff is the dependant of the late Mokonyana Robert Masupha, a former mineworker who died as a result of silicosis and who worked at President Brand Gold Mine from 1975 to 2003.
- The thirtieth Plaintiff is Matiisetso Maseipati Jesenta Nong, a widow residing at Matelile, Ha Rannakoe, Lesotho. The thirtieth plaintiff is a dependant of the late Samuel Leponesa Nong, a former mineworker who died as a result of silicosis and who worked at President Steyn / Free Gold (Bambanani) from 1984 to 2005.

The Defendants

- 35 The Defendants' registered offices and principal places of business are situated within the jurisdiction of this Court.
- The first Defendant is Harmony Gold Mining Company Limited ("Harmony"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number M1950/038232/06 and with its registered office at Randfontein Office Park, corner Main Reef Road and Ward Avenue, Randfontein. The first Defendant owned and / or controlled the following mines:
 - 36.1 Harmony Gold Mine situated in the Free State, from 1950 to date;
 - 36.2 Virginia Gold Mine situated in the Free State, from 1972 to date;
 - 36.3 Merriespruit Gold Mine situated in the Free State, from 1972 to date;
 - 36.4 Unisel Gold Mine situated in the Free State, from 1996 to date;
 - 36.5 Saaiplaas Gold Mine Shafts 2 and 3 situated in the Free State, from 1997 to date;
 - 36.6 President Brand Gold Mine Shafts 1, 2, 3 and 5 situated in the Free State, from 1998 to date:
 - 36.7 Kusasalethu Gold Mine (formerly Elandskraal mine, an amalgamation of Elandsrand and Deelkraal mines) situated on the Gauteng-North West Province border, from 2001 to date;

- 36.8 Evander Gold Mine (comprised of an amalgamation of Kinross Gold Mine, Bracken Gold Mine, Leslie Gold Mine and Leslie Gold Mine) situated in Mpumalanga, from 1998 to date;
- 36.9 Kinross Gold Mine situated in Mpumalanga, from 1998 to date;
- 36.10 Winkelhaak Gold Mine situated in Mpumalanga, from 1998 to date;
- 36.11 Bracken Gold Mine situated in Mpumalanga, from 1998 to date;
- 36.12 Leslie Gold Mine situated in Mpumalanga, from 1998 to date;
- 36.13 Randfontein Estates Gold Mine situated in Gauteng, from 2000 to date;
- 36.14 Doornkop Gold Mine (including the South Reef Project) situated in Gauteng, from 2000 to date;
- 36.15 Tshepong Gold Mine (previously Freegold 2 and 4) situated in the Free State, from 2002 to date;
- 36.16 Masimong mine (previously Freegold 3 and Saaiplaas Gold Mine Shafts 4 and 5) situated in the Free State, from 1998 to date;
- 36.17 Bambanani Gold Mine (previously Freegold 1 and President Steyn Gold Mine Shaft 4) situated in the Free State, from 2002 to date. (Bambanani Gold Mine has also incorporated shafts 1 and 2 of President Steyn Gold Mine from 2010 to date);

- 36.18 Joel Gold Mine (previously HJ Joel) situated in the Free State, from 2002 to date;
- 36,19 St Helena Gold Mine situated in the Free State, from 2002 to date;
- 36.20 Matjhabeng Gold Mine (previously Western Holdings) situated in the Free State, from 2002 to date;
- 36.21 Target Gold Mine Shafts 1 and 2 (previously Loraine Gold Mine Shafts 1 and 2) situated in the Free State, from 2004 to date;
- 36.22 Target Gold Mine Shaft 3 (previously Loraine Gold Mine Shaft 3) situated in the Free State, from 2010 to date;
- 36.23 Freddies Gold Mine Shafts 7 and 9 situated in the Free State, from 2010 to date; and
- 36,24 Phakisa Gold Mine situated in the Free State, from 2002 to date.
- The second Defendant is Evander Gold Mines Limited ("Evander") (previously Kinross Mines Ltd), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number M1963/006226/06 and with its registered office at Randfontein Office Park, corner Main Reef Road and Ward Avenue, Randfontein. The second Defendant owned and / or controlled the following mines:
 - 37.1 Evander Gold Mine situated in Mpumalanga, from 1996 to date;

- 37.2 Kinross Gold Mine situated in Mpumalanga, from 1963 to date;
- 37.3 Winkelhaak Gold Mine situated in Mpumalanga, from 1996 to date;
- 37.4 Bracken Gold Mine situated in Mpumalanga, from 1996 to date; and
- 37.5 Leslie Gold Mine situated in Mpumalanga, from 1996 to date.
- The third Defendant is Leslie Gold Mines Limited ("Leslie"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 1959/001124/06 and with is registered office at Randfontein Office Park, corner Main Reef Road and Ward Avenue, Randfontein. The third Defendant owned and / or controlled Leslie Gold Mine situated in Mpumalanga, from 1959 to date.
- The fourth Defendant is Randfontein Estates Limited ("Randfontein"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 1889/00251/06 and with its registered office at Randfontein Office Park, corner Main Reef Road and Ward Avenue, Randfontein. The fourth Defendant owned and / or controlled the following mines:
 - 39.1 Randfontein Estates Gold Mine situated in Gauteng, from 1889 to date; and
 - 39.2 Doornkop Gold Mine (including the South Reef Project) situated in Gauteng, from or about 1990 to date.

- The fifth Defendant is ARMgold/Harmony Freegold Joint Venture (Pty) Limited ("ARMgold/Harmony"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 2001/029602/07 and with its registered office at Randfontein Office Park, corner Main Reef Road and Ward Avenue, Randfontein. The fifth Defendant owned and / or controlled the following mines:
 - 40.1 Tshepong Gold Mine (previously Freegold 2 and 4) situated in the Free State, from 2002 to date;
 - 40.2 Masimong mine (previously Freegold 3 and Saaiplaas Gold Mine Shafts 4 and 5) situated in the Free State, from 2002 to date;
 - 40.3 Bambanani Gold Mine (previously Freegold 1 and President Steyn Gold Mine Shaft 4) situated in the Free State (from 2002 to date). Bambanani Gold Mine now also incorporates shafts 1 and 2 of President Steyn Gold Mine, from 2010 to date;
 - 40.4 Joel Gold Mine (previously HJ Joel) situated in the Free State, from 2002 to date;
 - 40.5 St Helena Gold Mine situated in the Free State, from 2002 to date;
 - 40.6 Matjhabeng Gold Mine (previously Western Holdings) situated in the Free State, from 2002 to date;

- The sixth Defendant is Avgold Limited ("Avgold") (previously Target Exploration Company Limited), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 1990/007025/06 and with its registered office at Randfontein Office Park, corner Main Reef Road and Ward Avenue, Randfontein. The sixth Defendant owned and / or controlled the following mines:
 - 41.1 Target Gold Mine situated in the Free State, from 1990 to date;
 - 41.2 Loraine Gold Mine Shafts 1 and 2 situated in the Free State, from 1996 to date;
 - 41.3 Loraine Gold Mine Shaft 3 and situated in the Free State, from 1996 to 1998 and from 2010 to date;
 - 41.4 Freddies Gold Mine Shafts 7 and 9 situated in the Free State, from 2010 to date;
 - 41.5 Hartebeesfontein Gold Mine situated in the North West, from 1996 to 1999.
- The seventh Defendant is Unisel Gold Mines Limited ("Unisel"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 1972/010604/06 and with its registered office at Randfontein Office Park, corner Main Reef Road and Ward Avenue, Randfontein. The seventh Defendant owned and / or controlled Unisel Gold Mine situated in the Free State, from 1972 to date.

- The eighth Defendant is Loraine Gold Mines Limited ("Loraine"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 1950/039138/06 and with its registered office at Randfontein Office Park, corner Main Reef Road and Ward Avenue, Randfontein. The eighth Defendant owned and / or controlled Loraine Gold Mine situated in the Free State, from 1950 to 1998.
- The ninth Defendant is Winkelhaak Mines Limited ("Winkelhaak"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 1955/003606/06 and with its registered office at Randfontein Office Park, corner Main Reef Road and Ward Avenue, Randfontein. The ninth Defendant owned and / or controlled Winkelhaak Gold Mine situated in Mpumalanga, from 1955 to date.
- The tenth Defendant is Bracken Mines Limited ("Bracken"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 1959/001126/06 06 and with its registered office at Randfontein Office Park, corner Main Reef Road and Ward Avenue, Randfontein. The tenth Defendant owned and / or controlled Bracken Gold Mine situated in Mpumalanga, from 1959 to date.
- The eleventh Defendant is AngloGold Ashanti Limited ("Anglogold Ashanti") (previously Vaal Reefs Exploration and Mining Company Limited), a company duly registered in terms of the company laws of the Republic of South Africa, with

registration number 1944/01734/06 and with its registered office at 76 Jeppe Street, Newtown. The eleventh Defendant owned and / or controlled the following mines:

- 46.1 Vaal Reefs Gold Mine Shafts 1, 2, 3, 4, 5, 6 and 7 situated in the North West, from 1944 to 1998;
- 46.2 Great Noligwa Gold Mine (previously Vaal Reefs No 8 Shaft) situated in the North West, from 1944 to date;
- 46.3 Kopanang Gold Mine (previously Vaal Reefs No 9 Shaft) situated in the North West, from 1984 to date;
- 46.4 Tau Lekoa Gold Mine (previously Vaal Reefs No 10 Shaft) situated in the North West, from 1985 to 2010;
- 46.5 Moab Khotsong Gold Mine (previously Vaal Reefs No 11 Shaft) situated in the North West, from 1944 to date;
- 46.6 Mponeng Gold mine (previously Western Deep Levels No 1 Shaft) situated in Gauteng, from 1998 to date;
- 46.7 Savuka Gold Mine (previously Levels No 2 Shaft) situated in Gauteng, from 1998 to date; and
- 46.8 Tau Tona Gold Mine (previously Western Deep Levels No 3 Shaft) situated in Gauteng, from 1998 to date.

- 46.9 Tshepong Gold Mine (previously Freegold 2 and 4) situated in the Free State, from 1998 to 2002;
- 46.10 Masimong mine (previously Freegold 3 and Saaiplaas Gold Mine Shafts 4 and 5) situated in the Free State, from 1998 to 2002;
- 46.11 Bambanani Gold Mine (previously Freegold 1 and President Steyn Gold Mine Shaft 4) situated in the Free State, from 1998 to 2002;
- 46.12 Joel Gold Mine (previously HJ Joel) situated in the Free State, from 1998 to 2002;
- 46.13 Matjhabeng Gold Mine (previously Western Holdings) situated in the Free State, from 1998 to 2002; and
- 46.14 Elandsrand Gold Mine (including Deelkraal Gold Mine) situated on the Gauteng-North West Province border, from 1998 to 2001.
- The twelfth Defendant is Free State Consolidated Gold Mines (Operations) Limited (previously Western Holdings Limited) ("Free State CGM"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 1937/009266/06 and with its registered office at 76 Jeppe Street, Newtown. The twelfth Defendant owned and / or controlled the following mines:
 - 47.1 President Brand Gold Mine situated in the Free State, from about 1985 to 1998;

- 47.2 President Steyn situated in the Free State, from 1985 to 1998;
- 47.3 Freddies Gold Mine situated in the Free State, from 1985 to 1998.
- 47.4 Free State Saaiplaas situated in the Free State, from about 1985 to 1998.
- 47.5 Free State Geduld situated in the Free State, from 1985 to 1998.
- 47.6 Western Holdings situated in the Free State, from 1937 to 1998.
- The thirteenth Defendant is Gold Fields Limited ("Gold Fields") (previously East Driefontein Gold Mining Company Limited and Driefontein Consolidated Limited), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 1968/004880/06 and with its registered office at 150 Helen Road, Sandown, Sandton. The thirteenth Defendant owned and / or controlled the following mines:
 - 48.1 South Deep Gold Mine situated in Gauteng, from 2007 to date;
 - 48.2 Beatrix Gold Mine (which integrates Oryx Gold Mine from 1998) situated in the Free State, from 1998 to date;
 - 48.3 Kloof Gold Mine (including Libanon Gold Mine, Leeudoorn Gold Mine and Venterspost Gold Mine) situated in Gauteng, from 1998 to date.
 - 48.4 East Driefontein Gold Mine situated in Gauteng, from 1968 to date;
 - 48.5 West Driefontein Gold Mine situated in Gauteng, from 1981 to date;

- 48.6 Driefontein Consolidated Gold mine situated in Gauteng, from 1981 to date.
- 48.7 Since 2010, the thirteenth Defendant refers to Kloof Gold Mine and Driefontein Consolidated Gold Mine as the KDC Complex.
- The fourteenth Defendant is Gold Fields Operations Limited ("Gold Fields Operations") (previously known as Western Areas Gold Mining Company Limited), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 1959/003209/06 and with its registered office at 150 Helen Road, Sandown, Sandton. The fourteenth Defendant owned and / or controlled the following mines:
 - 49.1 Western Areas Gold Mine situated in Gauteng, from 1959 to 1995 (when it merged with South Deep Gold Mine);
 - 49.2 South Deep Gold Mine situated in Gauteng (created as a result of the merger between South Deep Exploration Company and Western Areas Gold Mine in 1995), from 1995 to date.
- The fifteenth Defendant is Newshelf 899 (Proprietary) Limited ("Newshelf 899"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 2007/019941/07 and with its registered office at 150 Helen Road, Sandown, Sandton. The fifteenth Defendant owned and/or controlled the South Deep Gold Mine, from 2007 to date.

- The sixteenth Defendant is Beatrix Mines Ltd ("Beatrix Mines"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 1977/002138/06 and with its registered office at 150 Helen Road, Sandown, Sandton. The sixteenth Defendant owned and / or controlled Beatrix Gold Mine (which integrates Oryx Gold Mine from 1998) situated in the Free State, from 1977 to date.
- The seventeenth Defendant is Farworks/682 Limited ("Farworks") (previously known as Kloof Gold Mining Company Ltd); a company duly registered in terms of the company laws of the Republic of South Africa, with registration number M1964/004462/06 and with its registered office at 150 Helen Road, Sandown, Sandton. The seventeenth Defendant owned and / or controlled Kloof Gold Mine situated in Gauteng, from 1964 to date.
- The eighteenth Defendant is Driefontein Consolidated (Proprietary) Limited ("Driefontein"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 1993/002956/07 and with its registered office at 150 Helen Road, Sandown, Sandton. The eighteenth Defendant owned and / or controlled Driefontein Consolidated Gold mine (created out of the merger of East Driefontein and West Driefontein gold mines in 1981) situated in Gauteng, from 1993 to date.
- The nineteenth Defendant is GFI Mining South Africa (Proprietary) Limited ("GFI"), a company duly registered in terms of the company laws of the Republic of South

Africa, with registration number M2002/031431/07 and with its registered office at 150 Helen Road, Sandown, Sandton. The nineteenth Defendant owned and/or controlled the following mines:

- 54.1 Beatrix Gold Mine situated in the Free State, from 2002 to date; and
- 54.2 the KDC (Kloof Driefontein Complex) situated in Gauteng, from 2002 to date.
- The twentieth Defendant is Village Main Reef Limited ("Village Main Reef"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number M1934/005703/06 and with its registered office at Isle of Houghton, First floor Old Trafford 1, 13 Boundary Road. The twentieth Defendant owned and / or controlled the following mines:
 - 55.1 Tau Lekoa Gold Mine (previously Vaal Reefs Gold Mine No 10 Shaft) situated in the North West, from 2011 to date;
 - 55.2 Buffelsfontein Gold Mine (which has included Hartebeesfontein Gold Mine from 1999 to date) situated in the North West, from 2011 to date; and
 - 55.3 Blyvooruitzicht Gold Mine (including Doornfontein Gold Mine) situated in the North West, from 2011 to date.
- The twenty-first Defendant is Buffelsfontein Gold Mines Limited ("Buffelsfontein"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number M1995/010072/06 and with its registered office at

Isle of Houghton, First floor Old Trafford 1, 13 Boundary Road. The twenty-first Defendant owned and / or controlled the following mines:

- 56.1 Buffelsfontein Gold Mine (which has included Hartebeesfontein Gold Mine from 1999 to date) situated in the North West, from 1999 to date; and
- 56.2 Tau Lekoa Gold Mine (previously Vaal Reefs No 10 Shaft) situated in the North West, from 1995 to date.
- The twenty-second Defendant is Blyvooruitzicht Gold Mining Company Limited ("Blyvooruitzicht"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number M1937/009743/06 and with its registered office at Quadrum Office Park, Building 1, 50 Constantia Boulevard. The twenty-second Defendant owned and / or controlled Blyvooruitzicht Gold Mine (which merged with Doornfontein Gold Mine in 1995) situated in the North West, from 1937 to date.
- The twenty-third Defendant is Doornfontein Gold Mining Company Limited ("Doornfontein"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number M1947/024709/06 and with its registered office at Quadrum Office Park, Building 1, 50 Constantia Boulevard. The twenty-third Defendant owned and / or controlled Doornfontein Gold Mine situated in the North West, from 1947 to date.

- The twenty-fourth Defendant is Simmer and Jack Mines Limited ("Simmer and Jack"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 1924/007778/06 and with its registered office at 357 Rivonia Boulevard, Rivonia. The twenty-fourth Defendant owned and / or controlled the following mines:
 - 59.1 Buffelsfontein Gold Mine (which has included Hartebeesfontein Gold Mine from 1999 to date) situated in the North West, from 2005 to 2011; and
 - 59.2 Tau Lekoa Gold Mine (previously Vaal Reefs No 10 Shaft) situated in the North West, from 2010 to 2011.
- The twenty-fifth Defendant is DRDGold Limited ("DRDGold"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 1895/000926/06 and with its registered office at Quadrum Office Park, Building 1, 50 Constantia Boulevard. The twenty-fifth Defendant owned and / or controlled the following mines:
 - 60.1 Buffelsfontein Gold Mine (which has included Hartebeesfontein Gold Mine from 1999 to date) situated in the North West, from 1997 to 2005;
 - 60.2 Blyvooruitzicht Gold Mine (which merged with Doornfontein mine in 1995) situated in the North West, from 1997 to 2011; and
 - 60.3 East Rand Proprietary Mine situated in Gauteng, from 2003 to date.

- The twenty-sixth Defendant is East Rand Proprietary Mines Limited ("East Rand Proprietary Mines"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number M1893/000773/06 and with its registered office at Quadrum Office Park, Building 1, 50 Constantia Boulevard. The twenty-sixth Defendant owned and / or controlled East Rand Proprietary Mines situated in Gauteng, from 1893 to date.
- The twenty-seventh Defendant is Anglo American South Africa Limited ("Anglo American SA"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 1917/005309/06 and with its registered office at 44 Main Street, Johannesburg. The twenty-seventh Defendant owned and/or controlled the following mines:
 - 62.1 Vaal Reefs Gold Mine situated in the North West, from 1944 to 1998;
 - 62.2 Western Deep Levels Gold Mine situated in Gauteng, from 1944 to 1998;
 - 62.3 President Steyn Gold Mine situated in the Free State, from 1948 to 1998;
 - 62.4 President Brand Gold Mine situated in the Free State, from about 1950 to 1998;
 - 62.5 Free State Geduld Gold Mine situated in the Free State, from about 1937 to 1998;
 - 62.6 Free State Saaiplaas Gold Mine situated in the Free State, from about 1950 to 1998;

- 62.7 Freddies Gold Mine situated in the Free State, from about 1950 to 1998;
- 62.8 Western Holdings Gold Mine situated in the Free State, from about 1937 to 1998;
- 62.9 Elandsrand Gold Mine situated on the Gauteng-North West Province border, from about 1974 to 1998.
- The twenty-eighth Defendant is African Rainbow Minerals Limited ("ARM") (previously Anglovaal Mining Limited), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 1933/004580/06 and with its registered office at ARM House, 29 Impala Road, Chislehurston, Sandton. The twenty-eighth Defendant owned and/or controlled the following mines:
 - 63.1 Lorraine Gold Mine situated in the Free State, from 1950 to 1996;
 - 63.2 Hartebeesfontein Gold Mine situated in the North West, from 1933 to 1996;
 - 63.3 Target Gold Mine situated in the Free State, from 1990 to 1996; and
 - 63.4 Virginia Gold Mine situated in the Free State, from about 1950 to 1972.
- 64 The twenty-ninth Defendant is Randgold and Exploration Company Limited ("Randgold"), a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 1992/005642/06 and with its

registered office at 7th Floor Fredman Towers, 13 Fredman Drive, Sandown. The twenty-ninth Defendant owned and/or controlled the following mines:

- 64.1 Harmony Gold Mine situated in the Free State, from 1993 to 1996;
- 64.2 East Rand Proprietary Mines situated in Gauteng, from 1993 to 1996;
- 64.3 Durban Roodepoort Deep situated in Gauteng, from 1993 to 1996;
- 64.4 Blyvooruitzicht Gold Mine situated in the North West, from 1993 to 1996;
- 64.5 Doornfontein Gold Mine situated in the North West, from 1995 to 1996; and
- 64.6 Buffelsfontein Gold Mine situated in the North West, in 1996.
- The thirtieth Defendant is JCI Limited, a company duly registered in terms of the company laws of the Republic of South Africa, with registration number 1894/000854/06 and with its registered office at 10 Benmore Road, Morningside, Sandton. The thirtieth Defendant owned and/or controlled the following mines:
 - 65.1 Randfontein Estates Gold Mine situated in Randfontein, from about 1913 to 1997;
 - 65.2 Western Areas Gold Mine situated south-west of Johannesburg, from 1959 to 1997;
 - 65.3 H J Joel Gold Mine situated in the Free State, from 1985 to 1997; and

65.4 South Deep Gold Mine situated south-west of Johannesburg, from 1990 to 1997.

Definition of terms

- 66 The term "class period" means the period from 1 January 1965 to date.
- The term "owner" means the owner of a mine, as defined in section 1(xiv) of the Mines and Works Act 27 of 1956 and/or section 1 of the Minerals Act 50 of 1991 and/or section 102 of the Mine Health and Safety Act 29 of 1996. The terms "owned" and "own" have the corresponding meaning.
 - 67.1 Section 1(xiv) of the Mines and Works Act 27 of 1956 reads:

'owner' in relation to a mine, works or machinery, includes the lessee of the mine, works, machinery or any part thereof, and a tributor for the working of the mine or any part thereof, but does not include a person who owns only rights to the surface of the land on which a mine, works or machinery is situate;

- 67.2 Section 1 of the Minerals Act 50 of 1991 defined "owner" in relation to a mine as:
 - (b) (i) the holder of the prospecting permit or mining authorisation concerned.
- 67.3 Section 102 of the Mine Health and Safety Act 29 of 1996 reads:

- (a) "owner' in relation to a mine, means
 - (i) the holder of a prospecting permit or mining authorisation issued under the Minerals and Petroleum Resources Development Act.
- 68 Save where the context indicates otherwise, a reference to a Defendant shall include a reference to the Defendant as an employer and to its servants acting in the course and scope of their employment.
- 69 Save where the context indicates otherwise, the term "control" as used herein means the control exercised by:
 - 69.1 the owner of the mine; and/or
 - 69.2 the parent company of the mine-owning subsidiary company, if any; and/or
 - 69.3 the company contracted to manage the operations of the mine, if any.
- 70 The control exercised by a parent company refers to the effective control or influence exercised by a parent company over the activities of its subsidiary mine-owning company:
 - 70.1 under a service or management agreement, in terms of which the parent company provided services and/or advice which impacted materially upon the environmental conditions to which mineworkers were exposed, including: mine planning and design; mine ventilation design; environmental control; dust control design and implementation; health and the provision of

- medical services; procurement of mining equipment; the provision of mine medical services; and the setting of production and financial targets; and/or
- 70.2 by virtue of reliance by the management and/or directors of the subsidiary company on the superior knowledge and/or authority of the parent company, which reliance was known by the parent company.

THE DEFENDANTS' KNOWLEDGE OF SILICOSIS AND THE ASSOCIATED RISKS

- 71 At all material times in the class period, the Defendants knew, or ought reasonably to have known: that
 - 71.1 The inhalation of harmful quantities of respirable free silica dust generated by the activities of and related to gold mining can cause a pulmonary condition known as silicosis, which is disabling and potentially fatal (whether or not accompanied by any other disease);
 - 71.2 There was a high prevalence of silicosis on South African gold mines generally, and on the mines owned and/or controlled by the Defendants in particular;
 - 71.3 There were high dust levels and inadequate dust monitoring, dust prevention and dust protection methods on the mines owned and/or controlled by the Defendants;

- 71.4 Mineworkers (including the members of the first class and the breadwinners of the members of the second class) were exposed to high dust-levels when working on the mines owned and/or controlled by the Defendants; and
- 71.5 Mineworkers frequently lack the knowledge of silicosis and/or the means that enable them to take suitable steps to prevent contracting silicosis, to secure the appropriate treatment and/or to palliate the consequences.
- At all material times, the Defendants further knew, or ought reasonably to have known, that the risk of contracting silicosis could be materially reduced by:
 - 72.1 informing mineworkers of the risk posed by dust and educating them as to the means by which it may be mitigated;
 - 72.2 identifying the source/s of the dust;
 - 72.3 preventing or minimising the escape of dust into the air, through the introduction of appropriate engineering controls and proper mine design;
 - 72.4 evacuating contaminated air from the workplace and/or diluting silica dust that remains in the air to harmless levels through adequate and effective ventilation;
 - 72.5 filtering dust out of the air by effective dust filtering;
 - 72.6 providing effective respiratory protection equipment to persons exposed;

- 72.7 removing persons from work environments contaminated with harmful levels of dust;
- 72.8 providing adequate facilities to remove harmful silica dust from the air, clothing, and common living facilities;
- 72.9 ensuring that persons employed on the mine complied with directions put in place that were designed to ensure a healthy work place;
- 72.10 maintaining engineering controls designed to limit the release of dust into the air and to evacuate and remove dust from the work place, in a good and efficient condition;
- 72.11 monitoring the efficacy of the measures taken by measuring the amount of harmful dust to which mineworkers are exposed; and
- 72.12 monitoring the health effects of such exposure, including by medical examinations of mineworkers, with a view to making continuous improvements.

DUTIES OWED BY THE DEFENDANTS

- 73 The Defendants owed:
 - 73.1 The members of the first class a duty to provide a safe and healthy work environment that was not injurious to the health of mineworkers; and

- 73.2 The members of the second class and their breadwinners a duty to provide a safe and healthy work environment that was not injurious to the health of mineworkers.
- 74 The Defendants owed such duties by virtue the fact that the Defendants, during the class period, directly or via subsidiaries or via contractors:
 - 74.1 Owned the mines at issue; and/or
 - 74.2 Controlled the mines at issue; and/or
 - 74.3 Employed the miners who worked on the mines at issue.
- 75 Such duties arose from:
 - 75.1 the <u>statutory</u> duty owed by the Defendants to the mineworkers to comply with the health and safety regulations:
 - 75.1.1 stipulated in chapter 6 of the regulations to the Mines and Works

 Act 27 of 1956, as amended and promulgated under Government

 Notice R334 on 12 March 1965 ("the 1965 MWA regulations"),

 which remained in force from 12 March 1965 to 26 June 1970;
 - 75.1.2 stipulated in chapter 10 of the regulations to the Mines and Works

 Act 27 of 1956, as amended and promulgated under Government

 Notice R992 on 26 June 1970 ("the 1970 MWA regulations"), which
 remained in force from 26 June 1970 to 2 July 2002; and

- 75.1.3 stipulated in chapter 9 of the regulations to the Mine Health and Safety Act, 29 of 1996 ("the MHSA regulations"), promulgated under Government Notice R904 of 2 July 2002, and which came into force on 2 July 2002 and remain in effect.
- 75.2 the <u>common law</u> duty of care owed by the Defendants to the mineworkers to provide a safe and healthy work environment that was not injurious to their health; and
- 75.3 the <u>constitutional</u> obligations on the Defendants arising from the rights enshrined in sections 10, 11, 12, 24, and 27 of the Constitution of the Republic of South Africa, 1996 ("the Constitution").

THE DEFENDANTS' BREACH OF THEIR DUTIES

Breach of statutory duties

- At all material times during the class period, and in respect of each mine owned by one or more of the Defendants and at which a member of the first class or breadwinner of a member of the second class was employed as a mineworker:
 - 76.1 The mine was declared 'a controlled mine' in terms of Chapter II of the Occupational Diseases in Mines and Works Act, No 78 of 1973 ('ODIMWA');
 - 76.2 Mineworkers performed 'risk work' as defined in section 13 of ODIMWA;
 - 76.3 Defendants were 'owners' of mines as defined in terms of ODIMWA;

- 76.4 Defendants were 'employers' as defined in the Mine Health and Safety Act,
 No 29 of 1996 ('MHSA')
- 76.5 Mineworkers were 'employees' as defined in the MHSA; and
- 76.6 The owners of such mines were bound to comply with the MWA and MHSA regulations.
- 77 The 1970 MWA regulations remained in force until their repeal on 2 July 2002.
 - 77.1 They remained in force after the repeal of the said Mines and Works Act, and the coming into effect of the Minerals Act, Act 50 of 1991, on 1 January 1992, by virtue of the provisions of section 68(2) of the said Minerals Act.
 - 77.2 They also remained in force after the coming into effect of the Mine Health and Safety Act, 29 of 1996, on 15 January 1997, by virtue of the provisions of Item 4 of Schedule 4 to the Mine Health and Safety Act.
 - 77.3 The 1970 MWA regulations were repealed with the coming into operation of the MHSA regulations.
- 78 The MHSA regulations came into force on 2 July 2002, with their promulgation in Government Notice R904 and remain in force.
- 79 The regulations breached by the Defendants are the following:

- 79.1 The 1965 MWA regulations, which applied from 12 March 1965 to 26 June 1970, and which provided *inter alia* as follows:
 - 79.1.1 Regulation 6.6(2) The workings of every part of a mine where persons are required to travel or work shall be properly ventilated to maintain safe and healthy environmental conditions for the workmen and the ventilating air shall be such that it will dilute and render harmless any inflammable or noxious gases and dust in the ambient air.
 - 79.1.2 **Regulation 6.6(4)** No person shall enter or remain in or be caused or permitted to enter or remain in any part of the workings of a mine if the air contains harmful smoke, gas, fumes or dust perceptible by sight, smell or other senses unless such person is wearing effective apparatus to prevent the inhalation of such smoke, gas, fumes or dust.
 - 79.1.3 Regulation 6.6(5) If at any time it is found by the person for the time being in charge of the workings of a mine or any part thereof that, by reason of inflammable or noxious gases present in the workings or such part thereof, the workings or such part is dangerous, every workman shall be withdrawn by him from the workings or part so found dangerous and the matter immediately reported to the manager or mine overseer; who shall not allow any

person to resume work in such working place until he has satisfied himself by personal inspection that the working place is safe.

- 79.1.4 Regulation 6.6(6)(f) In the general body of the air at any place where persons are required to work or travel, under normal working conditions the concentration of dust shall not exceed such standard as may from time to time be specified by the Government Mining Engineer.
- 79.1.5 **Regulation 6.10** At every controlled metalliferous or controlled diamond mine:
 - (3) Blasting procedures shall be so arranged that no person is exposed to harmful dust, smoke, gas or fumes from blasting.
 - (4) After blasting has taken place in any part of the workings no person shall enter or be caused or permitted to enter such part or any place liable to be contaminated until a sufficient quantity of fresh air has been caused to flow through such part or place to clear it of harmful dust, smoke, gas or fumes from blasting.
 - (6) Every development end, such as a tunnel, drive, cross-cut, raise, box-hole, winze or shaft, and every working connected only with such development end and not with a second outlet shall be so ventilated by means other than a water-blast as will ensure that harmful dust, smoke and fumes from blasting are effectively

expelled before the expiry of the interval fixed by the Inspector Mines in terms of sub-regulation (2) of this regulation.

79.1.6 **Regulation 6.19** In the workings of every controlled mine:—

- (1) Every machine for ripping, picking, cutting, drilling or loading rock, coal or other mineral shall be fitted with means, or means shall be provided, either for applying water effectively to prevent dust being created by the operation of such machine, or for effectively trapping such dust by some suitable apparatus approved by the Inspector of Mines.
- (3) Where rock, coal or other mineral is discharged at any main bin, ore-pass or at any transfer point of a conveyor belt or of an ore-pass system, a constant supply of clean water shall be applied by means of efficient atomisers or sprays which shall be kept at all times in good working order, or a dust extraction system shall be provided and operated, to prevent the escape of dust into the air while rock, coal or other mineral is being discharged at the openings of such bins, passes or transfer points.
- (4) The floor of every main travelling road, as defined in subregulation (2) of regulation 55, shall be kept wet or otherwise treated to prevent the escape of dust into the air.

Regulation 6.20 In the workings of every controlled mine no person shall—

- (1) Perform or cause or permit to be performed work of any kind liable to create dust unless the floor, roof, sides and other surfaces where the work is to be performed and any broken rock, coal or other mineral which is being moved or discharged, are effectively wetted and kept wet so as to prevent as far as practicable the escape of harmful dust into the air; and
- (2) Use, or continue to use, any machine for ripping, picking, cutting, drilling or loading rock, coal or other mineral unless the means provided for allaying dust are operating in apparent good working order.
- 79.2 The 1970 MWA regulations, which were materially similar to the 1965 MWA Regulations, and applied from 26 June 1970 to 2 July 2002. These provided *inter alia* as follows:
 - 79.2.1 Regulation 10.6.2 The workings of every part of a mine where persons are required to travel or work shall be properly ventilated to maintain safe and healthy environmental conditions for the workmen and the ventilating air shall be such that it will dilute and render harmless any flammable or noxious gasses and dust in the ambient air.

- 79.2.2 Regulation 10.6.4 No person shall enter or remain in or cause any other person to enter or remain in any part of the workings of a mine if the air contains harmful smoke, gas, fumes or dust perceptible by sight, smell or other senses unless such person is wearing effective apparatus approved for the purpose by the Chief Inspector to prevent the inhalation of such smoke, gas, fumes or dust.
- 79.2.3 Regulation 10.6.5 If at any time it is found by the person for the time being in charge of the workings of a mine or any part thereof that, by reason of flammable or noxious gases present in the workings or such part thereof, the workings or such part is dangerous, every workman shall be withdrawn by him from the workings or part so found dangerous and the matter immediately reported to the manager, mine overseer or shift boss, who shall not allow any person to resume work in such working place until he has satisfied himself by personal inspection that the working place is safe.
- 79.2.4 **Reg. 10.6.6(f)** In the general body of the air at any place where persons are required to work or travel, under normal working conditions, the concentration of dust shall not exceed such standard as may from time to time be specified by the Director-General.

- 79.2.5 **Regulation 10.7.1** In every metalliferous or diamond mine (unless exempted in writing by the Principal Inspector of Mines) the velocity of the air current along the working face of any stope shall average not less than 0,25 metre per second over the working height.
- 79.2.6 **Regulation 10.10.3** Blasting procedures shall be so arranged that no person is exposed to harmful dust, smoke, gas or fumes from blasting.
- 79.2.7 **Regulation 10.10.4** After blasting has taken place in any part of the workings no person shall enter, or cause or permit any other person to enter, such part or any place, liable to be contaminated until a sufficient quantity of fresh air has been caused to flow through such part or place to clear it of harmful dust, smoke, gas or fumes from blasting.
- 79.2.8 Regulation 10.10.6 Every development end, such as a tunnel, drive, crosscut, raise, box-hole, winze or shaft, and every working connected only with such development end and not with a second outlet, shall be so ventilated by means which will ensure that harmful dust, smoke and fumes from blasting are effectively expelled before the expiry of the interval fixed by the Regional Director in terms of regulation 10.10.2.
- 79.2.9 **Regulation 10.20.1** Every machine for ripping, picking, cutting, drilling or loading rock, coal or other mineral shall be fitted with

means, or means shall be provided, either for applying water effectively to prevent dust being created by the operation of the machine, or for effectively trapping such dust by some suitable apparatus approved by the Regional Director.

- 79.2.10 Regulation 10.20.2 Where rock, coal or other mineral is discharged into any main bin, ore-pass or at any transfer point of a conveyor belt or of an ore-pass system, constant supply of clean water shall be applied by means of efficient atomisers or sprays which shall be kept at all times in good working order, or a dust extraction system shall be provided and operated, to prevent the escape of dust into the air while rock, coal or other mineral is being discharged into the openings of such bins or ore-passes or at transfer points.
- 79.2.11 **Regulation 10.20.3** The floor of every main travelling road as defined in regulation 6.10, shall be kept wet or otherwise treated to prevent the escape of dust into the air.
- 79.2.12 **Regulation 10.21.1** In the workings of every mine no person shall perform, or cause or permit to be performed, work of any kind liable to create dust unless the floor, roof, sides and other surfaces where the work is to be performed and any broken rock, coal or other mineral which is being moved or discharged, are effectively wetted and kept wet so as to prevent as far as practicable the escape of harmful dust into the air.

- 79.2.13 **Regulation 10.21.2.** In the workings of every mine no person shall use, or continue to use, any machine for ripping, picking, cutting, drilling or loading rock, coal or other mineral unless the means provided for allaying dust are operating in apparent good order.
- 79.3 The MHSA regulations, which have applied from 2 July 2002 and remain in force, and which provide *inter alia* as follows:
 - 79.3.1 **Regulation 22.9.2(1)** The employer must ensure that the occupational exposure to health hazards of employees is maintained below the limits set out in schedule 22.9(2)(a) and (b).
 - 79.3.2 **Schedule 22.9(2)(a)** stipulates an Occupational Exposure Limit, for respirable crystalline particulate (dust) of 0.1mg/m3.
- 80 In breach of the 1965 MWA, 1970 MWA and/or MHSA regulations, the Defendants caused or permitted:
 - 80.1 Mineworkers to travel and to work in areas that were not properly ventilated to maintain safe and healthy environmental conditions for the workmen and wherein the ventilating air was such that it did not dilute and render harmless any noxious gasses and dust in the ambient air; and/or
 - 80.2 Mineworkers to enter or remain in parts of the workings of the mine where the air contained harmful dust perceptible by sight, smell or other senses

without requiring the defendant to wear effective apparatus approved for the purpose by the Chief Inspector to prevent the inhalation of dust.

- 81 In breach of the 1965 MWA, 1970 MWA and/or MHSA regulations, the Defendants further failed to ensure:
 - 81.1 That the concentration of dust in the general body of the air at any place where persons were required to work or travel, under normal working conditions, did not exceed the standards specified from time to time by the Director-General;
 - 81.2 That mineworkers were withdrawn from workings or part thereof found to be dangerous by reason of harmful gases present; that such matter was immediately reported to the manager, mine overseer or shift boss; and that such person did not allow any person to resume work in such working place until he had satisfied himself by personal inspection that the working place was safe;
 - 81.3 That the velocity of the air current along the working face of the stopes where the miners worked, averaged not less than 0.25 metre per second over the working height;
 - 81.4 That blasting procedures were so arranged that mineworkers were not exposed to harmful dust, smoke, gas or fumes from blasting;

- 81.5 That after blasting had taken place in any part of the workings mineworkers would not enter, or be caused or permitted to enter, any place liable to be contaminated before a sufficient quantity of fresh air had been caused to flow through such part or place to clear it of harmful dust, smoke, gas or fumes from blasting;
- 81.6 That every development end, and every working connected with such development end, was properly ventilated by means to ensure that harmful dust, smoke and fumes from blasting were effectively expelled within the prescribed interval;
- 81.7 That every machine for ripping, picking, cutting, drilling or loading rock or mineral was fitted with means, or that means were provided, either for applying water effectively to prevent dust being created by the operation of the machine, or for effectively trapping such dust by some suitable and approved apparatus;
- 81.8 That where rock was discharged into a main bin, ore-pass and at any transfer point of a conveyor belt or of an ore-pass system, a constant supply of clean water was applied by means of efficient atomisers or sprays to prevent the escape of dust into the air while rock, coal or other mineral was discharged into the openings of such bins or ore-passes or transfer points; and or that such atomisers and sprays were, at all times kept in good working order so as to prevent the escape of dust into the air while rock,

- coal or other mineral was discharged into the openings of such bins or orepasses or at transfer points;
- 81.9 That where rock was discharged into a main bin, ore-pass and at any transfer point of a conveyor belt or of an ore-pass system, and atomisers or water sprays were not in use, that a dust extraction system was provided to prevent the escape of dust into the air while rock, coal or other mineral was being discharged into the openings of such bins or ore-passes or at transfer point;
- 81.10 That the floor of every main travelling road, as defined in regulation 6.10, was kept wet or otherwise treated to prevent the escape of dust into the air;
- 81.11 That the floor, roof, sides and other surfaces where work liable to create dust was being performed and any broken rock, coal or other mineral which is being moved or discharged, was effectively wetted and kept wet so as to prevent as far as practicable the escape of harmful dust into the air; and/or
- 81.12 That any machine used for ripping, picking, cutting, drilling or loading rock or mineral was used only where the means provided for allaying dust were operating in apparent good order.
- 81.13 That employees exposure to respirable crystalline quartz was maintained below the Occupational Exposure Limit of 0.1mg/m3.

In consequence of Defendants' breaches of the 1965 MWA, 1970 MWA and/or MHSA regulations, members of the first class and the breadwinners of members of the second class were exposed to harmful quantities of silica dust which caused them to contract, or materially contributed to them contracting, silicosis.

Breach of the common law duty of care

- 83 Members of the first class and the breadwinners of the members of the second class, as the case may be, were employed as mineworkers to work on mines owned and/or controlled by the Defendants, where:
 - 83.1 they performed the daily duties of mineworkers under the direction and control of the Defendants;
 - 83.2 they performed the tasks, duties and responsibilities assigned to them under the direction and control of the Defendants; and
 - 83.3 they were exposed to the physical and environmental conditions in the workplace that were determined, regulated and controlled by the relevant Defendants.
- The Defendants owed a common law duty of care to the members of the first class and the breadwinners of the members of the second class to provide a safe and healthy work environment that was not injurious to their health.

- The Defendants negligently, wrongfully and unlawfully breached this duty of care in the following respects:
 - 85.1 The Defendants caused and/or allowed mineworkers, to be exposed to levels of harmful dusts and gases above the reasonably safe levels at which nearly all mineworkers may be repeatedly exposed day after day without adverse health effects (these levels are referred to as "the safe levels");
 - 85.2 The Defendants failed to establish any programme, alternatively failed to establish any effective programme, to identify the potentially harmful dusts and gasses that may be encountered in the workplace and to assess the risk posed by such substances to mineworkers' health (a risk assessment programme);
 - 85.3 The Defendants failed to establish any programme, alternatively failed to establish any effective programme, for the regular assessment and measurement of the exposure of mineworkers to harmful dusts and gasses for the purposed of determining or confirming that mineworkers were not exposed to levels of harmful dusts and gasses above the safe levels, for the purpose of taking remedial action where such conditions were established (a dust sampling programme);
 - 85.4 The Defendants failed to establish any programme, alternatively failed to establish any effective programme, to monitor the health effects of workplace exposure to harmful dusts and gasses for risk assessment and prevention purposes (a medical surveillance programme);

- 85.5 The Defendants failed to establish effective measures to prevent, alternatively to minimise, the release of harmful dust and fumes into the work environment from blasting, drilling, crushing, scraping, barring, lashing, tipping and loading activities;
- 85.6 The Defendants failed to establish effective measures to prevent, alternatively to minimise, the release of harmful dust emissions at source, through the use of ventilation hoods, ducting and filters;
- 85.7 The Defendants failed to ensure that sufficient clean air was supplied to dilute such harmful dusts and gasses as were released into the work environment to below the safe levels;
- 85.8 The Defendants failed to ensure that blasting fumes had been thoroughly cleared before allowing mineworkers back into their workplaces after blasting;
- 85.9 The Defendants failed to provide appropriate respiratory protective equipment to mineworkers who were exposed, or were likely to be exposed to harmful quantities of crystalline silica dust, gasses or fumes, alternatively failed to ensure that such respiratory protective equipment was properly used and maintained; and/or
- 85.10 The Defendants failed to ensure that such engineering controls and systems as were put in place, to ensure that mineworkers were not exposed to

harmful quantities of crystalline silica dust, were effective or adequately supervised or maintained.

In consequence of Defendants' breaches of their duty of care, the members of the first class and the breadwinners of members of the second class were exposed to harmful quantities of silica dust which caused them to contract, or materially contributed to them contracting, silicosis.

Breach of constitutional obligations

- 87 The Defendants owed a duty to the members of the first class and the breadwinners of the members of the second class not to breach the following of their constitutional rights:
 - 87.1 The right to human dignity (section 10 of the Constitution);
 - 87.2 The right to life (section 11 of the Constitution);
 - 87.3 The right to bodily integrity (section 12(2) of the Constitution);
 - 87.4 The right to an environment not harmful to health and well-being (section 24 of the Constitution); and
 - 87.5 The right to have access to adequate healthcare (section 27(1) of the Constitution).

- 88 The Defendants breached these constitutional rights by virtue of the conduct pleaded in paragraphs 80, 81 and 85 above.
- In consequence of Defendants' breaches of these constitutional rights, the members of the first class and the breadwinners of members of the second class were exposed to harmful quantities of silica dust which caused them to contract, or materially contributed to them contracting, silicosis.

MINEWORKERS' CONTRACTING OF SILICOSIS AND THE SEQUELAE

- 90 The members of the first class and the breadwinners of members of the second class have contracted silicosis.
- As a result of having contracted silicosis, members of the first class and the breadwinners of members of the second class lost certain amenities, and have been or were left with certain disabilities, the nature, effects and duration of which include the following:
 - 91.1 abnormal respiratory systems, evident on clinical examination;
 - 91.2 abnormal chest radiographs, often showing bilateral reticular nodular opacities;

- 91.3 reduced lung function consistent with their respective levels of silicosis, including some degree of airflow obstruction, which conditions are permanent and will deteriorate over time;
- 91.4 intermittent chest pains and coughing, which condition is permanent;
- 91.5 breathlessness when walking at a normal pace on level ground;
- 91.6 night sweats, weight loss and general weakness; and
- 91.7 reduced life expectancy, the precise extent of which is presently unknown.
- 92 In addition, many of the members of the first class:
 - 92.1 were dismissed by the Defendants and remained unemployed because of their medical conditions. They are unable to continue to work as mineworkers or in any other occupation for which their education and experience qualified them;
 - 92.2 cannot perform any strenuous activities including herding cattle, ploughing and homestead maintenance and improvements;
 - 92.3 are at increased risk of contracting pulmonary tuberculosis and respiratory tract infections, which reasonably will cause hospitalisation and require regular and lengthy courses of medication; and
 - 92.4 suffer depression as a result of their inability to work and contribute to the support of their families.

93 The breadwinners of the members of the second class died as a result of having contracted silicosis.

DAMAGES

- 94 The members of the <u>first class</u> have suffered damages under the following heads as a result of Defendants' actions:
 - 94.1 past loss of earnings;
 - 94.2 future loss of earnings;
 - 94.3 past medical expenses;
 - 94.4 future medical expenses; and
 - 94.5 general damages for pain, suffering, loss of amenities of life, disablement and reduced life expectancy.
- 95 The members of the <u>second class</u> have suffered damages under the following heads as a result of the Defendants' actions:
 - 95.1 Loss of support due to the death of the breadwinner; and
 - 95.2 Medical and funeral expenses incurred.
- 96 The first phase of these proceedings seeks only a declaratory judgment as to common questions of fact and law, in order to determine the Defendants' liability.

If the Court finds the Defendants liable, then members of the classes that choose to 'opt in' at that stage of the proceedings will file individual statements of claim in relation to the determination of the damages suffered.

WHEREFORE THE PLAINTIFFS CLAIMS FROM THE DEFENDANTS

- An order declaring that the Defendants are liable to members of the first and second class for damages as defined above.
- 2. Further and/or alternative relief;
- 3. Costs of suit.

Dated at **JOHANNESBURG** on this the ____ day of _____ 2012.

CURRICULUM VITAE: JONATHAN ELLIOT MYERS

JUNE 2012

CURRENT POSITION AND ADDRESS

Work:

Professor of Public Health Medicine
Director: Centre for Occupational and Environmental Health Research
School of Public Health & Family Medicine
University of Cape Town
Faculty of Health Sciences
Observatory
7925
SOUTH AFRICA

Tel: (+27 21) 4066898 Fax: (+27 21) 4066459 Cell: + 27 82 926 8925

Email: myers.jonny@gmail.com

www.coehr.uct.ac.za

Home:

32 Bisset Road Newlands 7700

Tel/Answerphone: (+27 21) 671 8435 Fax: (+27 21) 683 6443

PERSONAL

Born Cape Town 19 September 1947 Married to Susan Myrdal, a lawyer and Long term insurance ombudsman, with two children Alex (born 1988) and Amber (born 1991).

EDUCATION

1964 Matriculated Herzlia High School, Cape Town.

1966-1968 BSc in physics and mathematics at the University

of Cape Town.

1969-1973 MBChB (Equivalent to the US MD) at UCT.

POST GRADUATE TRAINING

1978 Diploma of Tropical Medicine& Hygiene

London School of Hygiene and Tropical Medicine

UK

1979 Combined course in Epidemiology and Medical

Statistics, London School of Hygiene and Tropical

Medicine, UK

1988 Doctorate of Medicine (MD) degree (Equivalent to the US

PhD) at UCT. Thesis title:

"The health effects of working in the brick industry in the Western Cape: A respiratory epidemiologic study in the

South African occupational health context".

PROFESSIONAL EXPERIENCE

1974-1975 Internships at Tygerberg Hospital, Cape Town and

Meir Hospital, Kfar Saba, Israel

1975-1976 Medical Officer (out patients and casualty)

Victoria Hospital, Cape Town

1976 General Practitioner, Cape Town

1979-1980 Part time general practitioner and part time

researcher at the South African Labour Development Research Unit (SALDRU), Department of Economics.

UCT

1980-1986 Founding member, Industrial Health Research

Group, Department of Sociology, UCT

1987-1988 Sabbatical as Takemi Fellow at the Takemi

Program in International Health, and Research Fellow in the Occupational Health Program, Harvard School

of Public Health.

1988 Registrar in Community Health, UCT

Founding Director, WorkHealth

1991	Lecturer and specialist in community health, Department of Community Health, University of Cape Town.
1992	Associate Professor of Community Health Founding Director, Occupational and Environmental Health Research Unit
1994	Professor of Community Health and Chief Specialist, Head of Department
1997	Foundation sub-specialist in Occupational Medicine
1997/8	Visiting Senior Scientist, Office of the Director, National Institute of Occupational Safety and Health, Washington DC, United States of America
1999/2003	Member of the Senior Management Team and Excecutive Committee of the Health Sciences Faculty Portfolio Manager: Postgraduate Programmes 1999-2000 Assistant to the Dean in charge of the Conference Management Centre 1999-Head of Department of Public Health and
	Primary Health Care and Director: School of Public Health and Primary Health Care, 2001 - 2003
2005-	Director: WHO Collaborating Centre for Occupational Health
2008-	Director: Centre for Occupational and Environmental Health Research

OTHER PROFESSIONAL ACTIVITIES

International

American Journal of Industrial Medicine Member of Editorial Board (1987-)

BMC Journal of Occupational Medicine and Toxicology Member of Editorial Board (2004-)

Environmental Health Journal Member of Editorial Board (2007-)

Occupational and Environmental Medicine Member of Editorial Board (1994-2004)

Journal of Environmental Medicine Member of Editorial Board (1997-2000)

Scandinavian Journal of Work Environment and Health Reviewer (2001-)

Takemi Program in International Health, Harvard School of Public Health, Boston, USA.

Takemi Fellow (1987/8)

The Takemi Fellowship consists of a one-year fulltime advanced training and research programme and thereafter involves continuing membership in an international network of public health scientists, mainly but not exclusively, in developing countries and meeting biannually in either Boston, USA or Tokyo, Japan.

Collegium Ramazzini, Italy Elected Fellow (1989)

The Collegium is an international network of a limited number of occupational and environmental health scientists, mainly but not exclusively, from developed countries. The purpose of the Collegium is to offer a bridge between the world of scientific discovery and the social and political centres which must act on these discoveries to conserve life. Fellows meet annually in the birthplace of Bernadino Ramazzini in Carpi, Italy.

International Commission on Occupational Health

Member, Scientific Committee on Neurotoxicology and Psychophysiology (1992 -)

Member, Scientific Committee on Occupational Health Services Research (1994 -)

Member, Scientific Committee on Occupational Epidemiology (1995 -)

Member, Scientific Committee on Education and Training (2009-)

Committee of the Institute of Medicine of the National Academy of Sciences, USA to study Female Morbidity and Mortality in SubSaharan Africa Member (1992 -5)

International Epidemiological Association Member (1993-)

Advisory Board of the South African Fogarty Fellowship Program in Epidemiology Member (1995-2000)

Advisory Board and Scientific Committee of the South African Fogarty Fellowship Program in Occupational and Environmental Health.

Member (1996-)

Invited Member of the Faculty of Occupational Medicine of the Royal College of Physicians MFOM (1997-)

Invited Senior Visiting Scientist to the head office of the United States National Institute for Occupational Safety and Health (September 1997- August 1998).

Member of Planning Committee for a Tri-Regional Collaborative Programme in Work Health and Safety involving Sweden, Central America and Southern Africa, (1998 -2001)

Selected Faculty Member of the Environmental health Section of the Public Health and Epidemiology Faculty. Faculty of 1000 Medicine, 2005. http://www.f1000medicine.

Director, WHO Collaborating centre in Occupational Health, January 2005

South African

South African Medical Journal Reviewer

National Centre for Occupational Health, National Department of Health Epidemiology consultant (1988-)

Member, Scientific Panel (1992 -7).

Research Institute for Environmental Diseases
Honorary epidemiology consulant (1990-1992)

The South African Society for Occupational Medicine Chairman, Cape Provincial branch of the (1990 -3) Member, National Executive Committee (1990 -3) Honorary Life member (1994-)

Everite Ltd. Fibre Cement company Member of the Health and Environment Audit Committee (1988-1997)

Medical Research Council of South Africa Chairperson, Evaluation Panel for Environmental and Occupational Health Research (1992-4).

South African Health and Social Services Organisation (formerly the National Medical and Dental Association)
Member (1981-)

Medical Association of South Africa Member (1988-)

Epidemiological Association of Southern Africa Member (1988-2002)

Public Health Association of South Africa Member (2002-)

The College of Medicine of South Africa
Associate Member of the Faculty of Community Health (1992)

The Colleges of Medicine of South Africa Elected Senator (1998-2001)

The College of Public Health Medicine Elected Council member (1996-2005)

Member of the Occupational Medicine Group initiating a four year standalone speciality of occupational medicine (1997-1999)

Chairperson of the Division of Occupational Medicine (within the College of Public Health Medicine) Member (1999-2006)

Compensation Commissioner for Occupational Injuries and Diseases Ministerial appointment as Medical Assessor (1993-) Member, Occupational medical advisory panel (1997-2008) Member of the Technical Committee for Occupational Disease (2000-2006) Advisory Committee on Occupational Health, National Department of Labour Member (2000-2007)

Department of National Health

Appointed as Commissioner to investigate and propose restructuring of the Chief Directorate of Occupational Health (1996)

National Department of Environmental Affairs and Tourism Member of reference panel for a task team producing an environmental policy document to guide legislation (1996)

University of Cape Town

WorkHealth, University of Cape Town Founding Director (1988 -1995)

WorkHealth is a grouping of academics from the Faculty of Medicine at the University of Cape Town concerned with teaching, consultancy and the provision of clinical services in occupational health. Members are drawn from the Departments of Community Health, Dermatology, Logopaedics, Medicine (including the Respiratory Clinic and the Geriatrics Unit) and Occupational Therapy.

The UCT Occupational and Environmental Health Research Unit Founding Director (1992 -)

Occupational health research conducted in the Department is coordinated under the aegis of this unit.

UCT Safety and Risk Management Committee Consultant on occupational health and safety (1990 -1999)

Ad-hoc committee on Regional Public/Community Health training Member (1991-2)

Vice-Chancellor's Advisory Committee on the development of Public Health training at UCT
Member (1992 -1996)

Visiting Scholars Fund Committee Member, (1993-4)

Medical Faculty Research Committee Member (1994-2002)

Dean's Advisory Committee on Primary Health Care Medical Faculty Member (1994-1998) Zibonele Project Coordinating Committee Community Health Department representative, with fiduciary re-sponsibility (1993-4).

The Zibonele project is a joint Community Health/Students Health and Welfare Organisation (SHAWCO) community-based health project involving a community health worker program, a women's wellness project and student run clinical services directed at a local community in Khayelitsha, Cape Town.

Vice-Chancellor's advisory committee on Restructuring of Provincial Health Services and the Medical Faculty (1995-7)

Development of specialist training programme for subspeciality of occupational health (1997-)

Faculty Implementation Committee (1998)

Member of Senior Management Team of Health Sciences Faculty (1999-) Portfolio Manager: Postgraduate Programmes in the Faculty of Health Sciences (1999-2001)

Member of the Executive Committee of the Health Sciences Faculty Board (2001-2)

Member of the Faculty Research Committee, (1998-2002) Alternate (2003-5)

Member Faculty Doctoral and Masters Committee (2003-)

Member Faculty Professional Masters Committee (2003-)

Director: Faculty Conference Management Centre (2003-)

MAJOR AWARDS

Elected Takemi Fellow, 1987

Elected Fellow of Collegium Ramazzimi, 1989

First recipient of the US-based Alan Pifer Research Award for UCT researchers engaged in medical, economic, scientific, engineering or social research that advances the welfare of disadvantaged South Africans, 1993

Nominated Associate Member of the Faculty of Community Health of the College of Medicine of South Africa (1992)

Granted Honorary Life Membership of the South African Society for Occupational Medicine, 1994

Invited Member of the Faculty of Occupational Medicine (MFOM), United Kingdom, 1997

Invited Senior Visiting Scientist, National Institute of Occupational Safety and Health, Washington DC, USA, 1997/8.

Elected Fellow of the University of Cape Town, 1999.

Awarded a South African Medical Research Council Unit in Occupational and Environmental Health Research, 2001.

The American College of Occupational and Environmental Medicine Board 2004 Merit in Authorship Award for the article, "Association Between Human Paraoxonase Gene Polymorphism and Chronic Symptoms in Pesticide-Exposed Workers", published in the *Journal of Occupational and Environmental Medicine*.

Awarded the Fellowship FCPHM(DOH)(SA) by Peer Review of the College of Public Health Medicine (Division of Occupational Medicine) of South Africa, 2005

TEACHING EXPERIENCE

Undergraduate teaching

Undergraduate students in the Medical Faculty in epidemiology, biostatistics, research methods and occupational health in both old and new curricula.

Teaching in epidemiology to non-medical undergraduates

Postgraduate teaching

B Sc (Med) Honours in Epidemiology Designer and founding course co-ordinator (1991-1992) Teaching theoretical epidemiology and research methods(1993-4)

M Phil in Epidemiology Member of design team of the first South African coursework masters programme in Epidemiology, (1995-99)

Masters in Public Health (MPH)

Strongly promoted the formation of this coursework entry level public health degree in 1999

Initiated moves to develop a coursework modular masters degree in public health incorporating departmental, medical faculty and university wide contributions (1996-)

Course coordinator: New module in 2000 on Advanced methods in epidemiology (Epi III).

Postgraduate Diploma in Occupational Health . Programme convenor and course convenor for certain modules (1991-2010)

Master of Philosophy in Occupational and Environmental Health. Programme convenor (2006-)

Medical Registrar/Resident training programmes.

Programme Convenor for MMed in:

Public Health medicine (1993-2010)

Doctoral dissertations: Programme convenor and Chair of School dissertations committee (2003-)

Oliver Tambo Fellowship programme in Health Management (1996-2002) Participation in organising an in-service training programme for senior health managers in the 9 provincial and national health departments.

Course organiser, lecturer and coordinator for "Occupational Safety and Health in Practice (1999)" Final two weeks of a 2 year course for participants from all over Africa, organised by the Swedish National Institute for Working Life.

Web based self directed flexible learning postgraduate diploma/masters modules in occupational health for Southern African students. Various courses/modules developed for CD Rom delivery or WebCT delivery. Currently an entire postgraduate diploma (in occupational health) has been developed along with a new Master of Philosophy in Occupational Health and a Master of Medicine in Occupational Medicine along with several short courses in occupational health topics.

Co-Course convenor: Masters of Public Health module in advanced epidemiology. (2002-2010)

CONSULTANCIES

Over the course of my career I have been involved in a number of occupational and environmental health consultancies. These have taken the form of projects requested by industry management and organised labour in a wide range of industries, government at various levels, and by other role players in the health care industry. Examples include large corporations like British Petroleum, Shell, Nampak, Everite and the Lesotho Highlands Water Project (World Bank project) and many small firms on issues ranging from substantive occupational injury and disease risks to occupational health systems and services projects. Environmental health consultancy examples for consortia include the South Durban Basin and air pollution from BP and Engen refineries, Lanxess and chrome 6 pollution of acquifers under a tanning plant abutting a residential area, chrome 6 content of traditional medicines, neurotoxic effects of waste dumps containing manganese metal on abutting residential area, copper smelting and arsenic and SO₂ exposure to nearby residents, medical surveillance for clinical manganism in the manganese industry, and environmental and occupational hazards of chrome exposure in the ferroalloys industry.

I headed a multidisciplinary and multi-institutional project commissioned by the Head of the Health Department in the Provincial Government of the Western Cape from 2004 to 2006 on "Burden of Disease Reduction in the Western Cape Province". This led to a 7 volume report along with a number of other outputs in journals and in the form of governmental reports and had a significant impact on policy formulation and implementation and the structure of cross-departmental programmes and projects within the Western Cape government, notably on injury reduction related to alcohol consumption and road traffic crashes amongst others. It also led the National Department of Health to embark on a burden of

disease approach to its work, and to international linkages to governmental policy issues abroad.

RESEARCH EXPERIENCE

Research -in- progress

- 1. Climate change and Health in Southern Africa.
- Effect of exposure to silica on the SA gold mines historically and currently.
- 3. Predictors of Homicide and Road Traffic Fatality data in South African cities.
- 4. Safety, violence and alcohol in their contribution to the burden of disease.

Supervision of research towards postgraduate degrees

- 1. Masters Thesis M Soc Sci on the Regulation of health and safety in South Africa's Manufacturing Industry. I A Macun. Completed 1989.
- 2. Doctoral Thesis Ph D on the determinants of health, health status and health care utilisation of African women in a rapidly urbanising area of Cape Town (Khayelitsha). D Cooper. Completed 1994.
- 3. Masters Thesis M Med on Building Sickness Syndrome in several buildings in Cape Town. M Bachmann. Completed 1994.
- 4. Doctoral Thesis PhD on Ergonomic factors and musculoskeletal problems in light industry in South Africa. G Schierhout. Completed 1995.
- 6. Doctoral Thesis PhD on the occurrence of mesothelioma in South African in relation to asbestos exposure. D Rees. Completed 1995.
- 7. Doctoral Thesis MD on the neurotoxicity of agrichemicals in the Western Cape region. L London. Completed 1995.
- 8. Doctoral Thesis PhD on environmental and other determinants of the prevalence childhood asthma in Cape Town. R Ehrlich. Completed 2000.
- 9. Doctoral Thesis MD on Cervical Cancer prevention in South Afica. R

Bailie. Completed 1996.

- 10. Doctoral Thesis PhD on Economic Modelling and Health sectoral planning of Health Services at National level. M Blecher. Completed 2007.
- 11. Masters Thesis MSc on the Respiratory Effects of Paraquat exposure. A Dalvie. Completed 1996.
- 12. Masters Thesis MMed on the nervous system effects of low levels of manganese in a manganese smelter using a respirable as opposed to an inhalable dust metric. T Young. Completed 2003.
- 13 Doctoral Thesis PhD on reproductive endocrine effects in malaria vector control workers exposed to DDT.A Dalvie. Completed, 2002.
- 14. Doctoral Thesis PhD on effectiveness of partner notification programmes for sexually transmitted diseases. C Mathews. Completed 2002.
- Doctoral Thesis PhD on respiratory and allergic effects of working with seafood. M Jeebhay. Completed 2004.
- 16. Masters Thesis MPH. Effectiveness of an HIV/AIDS peer education campaign in a nationwide retail company, N Sloan, Completed. 2001.
- Masters Thesis MPH. Risk factors for oesophageal cancer in Uruguay. V Sewram. Completed 2002.
- 18. Doctoral Thesis PhD. Dietary and medicinal wild plants as potential risk factors for oesophageal cancer in the Eastern Cape Province of South Africa. V Sewram. Completed 2007.
- Doctoral Thesis PhD. Determinants of effectiveness in the Khayelitsha antiretroviral treatment programme. A Boulle. Completed 2010.
- Doctoral Thesis PhD. A study of the neurobehavioural effects of foetal alcohol syndrome on children in a rural farming area of the Western Cape. P Sorour. Discontinued 2010.
- Doctoral Thesis PhD. Injury Fatality Surveillance in South Africa. R Matzopolous. In progress, 2011.
- 22. Doctoral Thesis PhD. The McCord Hospital PMTCT Program Evaluation: Assessing retention and long-term maternal and child health outcomes following PMTCT care. J Giddy. Withdrew 2010.

- 23. Doctoral Thesis PhD. Cervical cancer. J Moodley. Graduated 2011.
- 24. Masters Thesis MPH. Assessing quality of existing data sources on road traffic injuries and their utility in informing injury prevention in the Western Cape Province, South Africa. L Chokotha. Graduated 2011.
- 25. Environmental and Geographical Science Honours Thesis. N Ryan. <u>The Influence of Temperature (hot days) on Aggressive Behaviour in Cape Town (measured as injury mortality)</u>. Graduated 2011
- 26. Doctoral Thesis PhD. Validation of a South African triage system for use in Emergency Medicine. M. Twomey. Graduated 2011.
- 27. Doctoral Thesis PhD. Climate change readiness at City and Provincial level in the Western Cape. J Irlam.

27. A varying number of candidates doing major dissertations for the MPH, the MMeds (Public Health Medicine and Occupational Medicine), the M Phil (palliative medicine) and several minor dissertations for the Postgraduate Diploma in Occupational and Environmental Health, and the Postgraduate Diploma in Health Management (Health Economics and Financial Planning)/Oliver Tambo Fellowships.

PUBLICATIONS

1. Original peer-reviewed articles

1.1 International

- 1.1.1 The social context of occupational disease: Asbestos and South Africa. Myers JE. International Journal of Health Services 1981; 11(2):227-245.
- 1.1.2 A respiratory epidemiological survey of stevedores intermittently exposed to asbestos in a South African port. Myers JE, Garisch D, Myers HS, Cornell J, Rwexu R. American Journal of Industrial Medicine 1985; 7:273-283.
- 1.1.3 A repiratory epidemiologic survey of grain mill workers in Cape Town, RSA. Yach D, Myers JE, Bradshaw D, Benatar SR. American Review of Respiratory Diseases 1985; 131:505-510.
- 1.1.4 Myers JE, Garisch D, Cornell J, Myers HS. A respiratory epidemiological survey of a small South African Foundry. American Journal of Industrial Medicine 1987; 12:1-9.
- 1.1.5 Asbestos and asbestos-related disease: The South African Case. Myers JE, Aron J, Macun I. International Journal of Health Services 1987; 17(4):651-666.
- 1.1.6 The sociologic context of occupational health in South Africa. Myers JE, Macun I. American Journal of Public Health 1989; 79(2):216-224.
- 1.1.7 Respiratory health of brickworkers in Cape Town, South Africa: background, aims and dust exposure determinations. Myers JE, Lewis,P, Hofmeyr W. Scandinavian Journal of Work Environment and Health 1989; 15(3):180-187.
- 1.1.8 Respiratory health of brickworkers in Cape Town, South Africa: symptoms, signs and pulmonary function abnormalities. Myers JE, Cornell JE. Scandinavian Journal of Work Environment and Health 1989; 15(3):188-194.
- 1.1.9 Respiratory health of brickworkers in Cape Town, South Africa: radiographic abnormalities. Myers JE, Garisch D, Louw SJ. Scandinavian Journal of Work Environment and Health 1989; 15(3):195-197.
- 1.1.10 Respiratory health of brickworkers in Cape Town, South Africa: appropriate dust exposure indicators and permissible exposure limits. Myers JE. Scandinavian Journal of Work Environment and Health 1989; 15(3):198-202.

- 1.1.11 Occupational health in developing countries: Review of research needs. Christiani DC, Durvusala R, Myers JE. American Journal of Industrial Medicine 1990;17:393-401.
- 1.1.12 Acrylamide neuropathy in a South African factory: An epidemiologic investigation. Myers JE, Macun I. American Journal of Industrial Medicine 1991;19(4):487-494.
- 1.1.13 Grain dust and respiratory health in South African milling workers. Bachmann OM, Myers JE. British Journal of Industrial Medicine 1991;48(10):656-662.
- 1.1.14 Quantitative vibration sense testing in workers exposed to acrylamide monomer. Bachmann OM, Myers JE, Bezuidenhout BN. American Journal of Industrial Medicine 1992; 21:217-222.
- 1.1.15 Neuropsychological assessment of organic solvent effects in South Africa: Test selection, adaptation, scoring and validation issue, Nell V, Myers JE, Colvin M, Rees D. Environmental Research 1993;63:301-318.
- 1.1.16 A cross-sectional survey of neurobehavioural effects of chronic solvent exposure on workers in a paint manufacturing plant. Colvin M, Myers J, Nell V, Rees D, Cronje R. Environmental Research 1993;63:122-132.
- 1.1.17 Solvent exposure, alcohol consumption and liver injury in workers manufacturing paint. Rees D, Soderlund N, Cronje R, Song E, Kielkowski D, Myers J. Scandinavian Journal of Work, Environment and Health 1993;19:236-244.
- 1.1.18 n-Hexane neurotoxicity in metal can manufacturing workers. Bachmann OM, de Beer Z, Myers JE. Occupational Medicine 1993; 43(3):149-154.
- 1.1.19 Continuous ambulatory peritoneal dialysis: An option in the developing world? Zent R, Myers JE, Donald D, Rayner B. Peritoneal Dialysis International 1994; 14:48-51.
- 1.1.20 Musculoskeletal pain and workplace ergonomic stressors in manufacturing industry in South Africa. Schierhout GH, Myers JE, Bridger RS. International Journal of Industrial Ergonomics 1993;12:3-11.
- 1.1.21 The application of two secondary documentary sources to identify the underreporting of fatal occupational accidents in Cape Town, South Africa. L Lerer, J Myers. American Journal of Industrial Medicine 1994; 26(4):521-528.
- 1.1.22 Critical issues for agrichemical safety in South Africa. L London, JE Myers. American Journal of Industrial Medicine 1995; 27(1):1-14.

- 1.1.23 Development of observational methods for estimation of exposure to workplace postural stress. Schierhout GH, Bridger RS, Myers JE. Occupational Medicine 1994; 44:262-266.
- 1.1.24 Influences on sick building syndrome symptoms in three buildings. Bachmann OM, Myers JE. Soc. Sci. Med. 1995;40 (2):245-251.
- 1.1.25 Repeatability and validity of a field kit for whole blood cholinesterase estimation. London L, Thompson ML, Sacks S, Fuller B, Bachmann OM, Myers JE. Occupational and Environmental Medicine 1995; 52, 57-64.
- 1.1.26 Sick Building symptoms in office workers: a follow-up study before and one year after changing buildings. Bachmann OM, Turck WAV, Myers JE. Occupational Medicine 1995; 45(1):11-15.
- 1.1.27 Work-related musculoskeletal disorders and ergonomic stressors in the South African workforce. Schierhout GH, Myers JE, Bridger RS. Occupational and Environmental Medicine 1995;52(1):46-50.
- 1.1.28 Is self-reported pain an appropriate outcome measure in ergonomic-epidemiologic studies of work-related musculoskeletal disorders? Schierhout GH, Myers JE. American Journal of Industrial Medicine 1996; 30:93-98.
- 1.1.29 Women's health status and use of health services in a rapidly growing per-urban area of South Africa. Hoffman M, Pick WM, Cooper D, Myers JE. Social Science and Medicine 1997;45(1):149-157.
- 1.1.30 Occupational fatality under-reporting in rural areas of the Western Cape Province, South Africa. Schierhout GH, Midgley A, Myers JE. Safety Science 1997;25(1-3):113-122.
- 1.1.31 An investigation into neurological and neurobehavioural effects of long-term agrichemical use among deciduous fruit farm workers in the Western Cape, South Africa. London L, Myers JE, Nell VN, Taylor T, Thompson ML. Environmental Research 1997;73:132-145.
- 1.1.32 Meta-analysis and occupational health. Myers JE, Thompson Mary Lou. Occupational Medicine 1998; 48;99-101.
- 1.1.33 Effects of long-term organophosphate exposures on neurological symptoms, vibration sense and tremor amongst South African farm workers. London L, Nell V, Thompson ML, Myers JE. Scand J Work Environ Health 1998; 24:18-29.

- 1.1.34 Prevalence odds ratio or prevalence ratio in the analysis of cross sectional data: what is to be done? Thompson, M.L., Myers, J.E., Kriebel, D. Occupational and Environmental Medicine 1998; 55:272-277.
- 1.1.36 Use of a crop and job specific exposure matrix for retrospective assessment of long term exposure in studies of chronic neurotoxic effects of agrichemicals. London L, Myers JE. Occupational and Environmental Medicine, 1998 Vol.55:194-201.
- 1.1.37 Health and safety in Lesotho Highlands Dam Construction Program. Colvin M, Dalvie A, Myers JE, Macin IA, Sharp B. International Journal of Occupational and Environmental Health 1998; 4(4): 231-235.
- 1.1.38 Neuropsychological function in solvent exposed South African paintmakers. Myers JE, Nell V, Colvin M, Thompson ML. Journal of Occupational and Environmental Medicine 1999;41(11):1011-1018.
- 1.1.39 Long-term respiratory health effects of the herbicide Paraquat among workers in the Western Cape. Dalvie MA, White N, Raine R, Myers JE, London L, Thompson ML, Christiani DC. Occupational and Environmental Medicine 1999; 56(6):391-396.
- 1.1.40 Respiratory Health Hazards in Agriculture. M. Schenker (ed). "Respiratory Disease in Industrialising Countries". Christiani DC, Myers JE, White N. Workshop report. Supplement to American Journal of Respiratory and Critical Care Medicine. Chapter 6. Pages 176-186. 1999.
- 1.1.41 Asbestos exposure and mesothelioma in South Africa. Rees D, Goodman K, Fourie E, Chapman R, Blignaut C, Bachmann MO, Myers J. S Afr Med J 1999 Jun;89(6):627-34.
- 1.1.42 Case control study of mesothelioma in South Africa. Rees D, Myers JE, Goodman K, Fourie E, Blignaut C, Chapman R, Bachmann OM. American Journal of Industrial Medicine 1999;35(3):213-222.
- 1.1.43 L. London, M. L. Thompson, W. Capper and J. E. Myers. Utility of Vibration Sense Testing for Use in Developing Countries: Comparison of Extinction Time on the Tuning Fork to Vibration Thresholds on the Vibratron II. Neurotoxicology 2000; 21(5); 743-752.
- 1.1.44 J E Myers. Work-related diseases and their prevention. Editorial. African Newsletter on Occupational Health and Safety. Volume 12, Number 3, December 2002.

- 1.1.45 Lee BW, London L, Paulauskis J, Myers JE, Christiania DC Association between human paraoxonase gene polymorphism and chronic symptoms in pesticide exposed workers. J Occup Environ Med. 2003; 45: 118-22.
- 1.1.46 J E Myers, I Naik, P Theodorou, E Esswein, HTassell, A Daya, K Renton, A Spies, Mary Lou Thompson, J Paicker, T Young, M Jeebhay, S Ramushu, L London, D J Rees. The utility of biological monitoring for manganese in ferroalloy smelter workers in South Africa. Neurotoxicology 2003; Vol 24(6): 875-883.
- 1.1.47 J E Myers, Mary Lou Thompson, S Ramushu, T Young, M F Jeebhay, Leslie London, E Esswein, K Renton, A Spies, I Naik, A Iregren, DJ Rees. The nervous system effects of occupational exposure on workers in a South African manganese smelter. Neurotoxicology 2003; Vol 24(6):885-894.
- 1.1.48 JE Myers' J teWaterNaude, , M Fourie, HB Abie Zogoe, I Naik, P Theodorou, H Tassel, A Daya, Mary Lou Thompson. Nervous System Effects Of Occupational Manganese Exposure On South African Manganese Mineworkers. Neurotoxicology 2003; Vol 24(6):649-656.
- 1.1.49 Dalvie MA, Myers JE, Thompson Mary Lou, Robins TG, Dyer S. The hormonal effects of long term DDT exposure on malaria vector control workers in Limpopo Province, South Africa. Environmental Research 2003; 96(1):9-19
- 1.1.50 Dalvie MA, Myers JE, Thompson Mary Lou, Robins T, Omar S, Riebow J. Exploration of different methods for measuring DDT exposure amongst malaria vector control workers in Limpopo Province, South Africa. Environmental Research 2003; 96(1):20-27.
- 1.1.51 Dalvie MA, Myers JE, Thompson Mary Lou, Robins TG, Dyer S, Riebow J, Molekwa J, Jeebhay M, Millar R, Kruger P. The long term effects of DDT exposure on semen, fertility and sexual function of malaria vector control workers in Limpopo Province, South Africa. Environmental Research. 2003; 96(1):1-8..
- 1.1.52 G J Churchyard, R Ehrlich, JM teWaterNaude, L Pemba, K Dekker, M Vermeijs, N. White, J Myers . Silicosis prevalence and exposure response relationships in South African goldminers . Occup Environ. Medicine 2004;61(10):811-817
- 1.1.53 Mary Lou Thompson, JE Myers Evaluating and interpreting exposure-response relationships (ERRs) in occupational epidemiology. NeuroToxicology 2006;27(2):147-152.
- 1.1.54 Young T, Myers JE, Thompson Mary Lou. The Nervous System Effects of Occupational Exposure to Manganese Measured as Respirable Dust in a South African Manganese Smelter. Neurotoxicology 2005; 26:993-1000.

- 1.1.55 JM teWaterNaude, RI Ehrlich, GJ Churchyard, L Pemba, K Dekker, M Vermeis, NW White, Mary Lou Thompson, JE Myers Tuberculosis And Silica Exposure In South African Goldminers. Occupational and Environmental Medicine.2006; 63: 187-192.
- 1.1.56 M.A. Dalvie, J.E. Myers. The relationship between reproductive outcome measures in DDT exposed malaria vector control workers: a cross-sectional study. Journal of Occupational Medicine and Toxicology 2006 Aug 10;1:21.
- 1.1.57 Twomey M, Wallis LA, Myers JE. Limitations in validating emergency department triage scales. Emergency Medicine Journal 2007 24(7):477-9.
- 1.1.58 DE Bourne, ML Thompson, LL Brody, M Cotton, B Draper, R Laubscher, MF Abdullah, JE Myers. Emergence Of A Peak In Early Infant Mortality Due To Hiv/Aids In South Africa. AIDS 2009; 23(1):101-106.
- 1.1.59 Myers JE, Fine J, Ormond-Brown D, Fry, J, ML Thompson. Estimating the Prevalence of Clinical Manganism from a Cascaded Screening Process in a South African manganese Smelter. Neurotoxicology 2009; 30(6):934-40.
- 1.1.60 Boulle A, Van Cutsem G, Hilderbrand K, Cragg C, Abrahams Mathee S, Ford N, Knight L, Osler M, J.Myers J, E. Goemaere E, Coetzee D, Maartens G. Seven year experience of a primary care antiretroviral treatment programme in Khayelitsha, South Africa. AIDS 2010, 24:563–572
- 1.1.61 Matzopoulos R, Bowman B, Mathews S, Myers J. Applying upstream interventions for interpersonal violence prevention: an uphill struggle in low- to middle-income contexts. Health Policy 2010, 97 (2010):62–70.
- 1.1.62 Lung function loss in relation to silica dust exposure in South African gold miners. Ehrlich RI, Myers JE, te Water Naude JM, Thompson ML, Churchyard GJ. Occup Environ Med. 2011 Feb;68(2):96-101.
- 1.1.63 Twomey M, Wallis LA, Thompson ML, Myers JE. The South African Triage Scale (adult version) provides reliable acuity ratings. International Emergency Nursing, in press, 2012.
- 1.1.64 Twomey M, de Sá A, Wallis LA, Myers JE. Inter-rater reliability of the South African Triage Scale: assessing two different cadres of health care workers in a real-time environment. African Journal of Emergency Medicine, in press, 2012.
- 1.1.65 Twomey M, Wallis LA, Thompson ML, Myers JE. The South African Triage Scale (adult version) provides valid acuity ratings when used by doctors

- and enrolled nursing assistants. African Journal of Emergency Medicine, in press 2012.
- 1.1.66 Twomey M, Wallis LA, Thompson ML, Myers JE. Validating the construct of acuity against a set of reference vignettes developed via modified Delphi method. Emergency Medicine Journal, in press 2012.
- 1.1.67 R Matzopoulos, CDH Parry, J Corrigall, J Myers, S Goldstein, L London. Global Fund collusion with liquor giant is a clear conflict of interest. World Health Organisation Bulletin, In Press 2012.
- 1.1.68 Myers JE. The South African burden of disease and climate change. Continuing Medical Education. In Press, 2012.
- 1.1.69 Chokoto L, Matzopoulos R, Myers JE Assessing Quality Of Existing Data Sources On Road Traffic Injuries (Rtis) And Their Utility In Informing Injury Prevention In The Western Cape Province, South Africa. Mortuary data are preferred over police data for valid estimation of traffic fatality rates. Traffic Injury Prevention, 2012, In Press.
- 1.1.70 Invited review paper for Wiley Interdisciplinary Science Review on Climate Change on the state of play with respect to climate change in South Africa basic science, impacts, adaptation, perceptions and policy/politics. Ziervogel G, New M, Myers JE and others. In preparation.

1.2 South African

- 1.2.1 Sick pay funds and the sick pay provisions of the Factories Act. IHRG. South African Labour Bulletin 1981 6(8).
- 1.2.2 The prevalence of hypertension among semi-skilled manual workers. Myers JE, White N, and Cornell J. South African Medical Journal 1982; 64:894-898.
- 1.2.3 Health and safety organisation: A perspective on the Machinery and Occupational Safety Act 6/1983. Myers JE, Steinberg M. South African Labour Bulletin 1983;8(8) and 9(1).
- 1.2.4 Differential ethnic standards for lung functions, or one standard for all? Myers JE. South African Medical Journal 1984; Vol 65: 768-772.
- 1.2.5 Compensation for occupational disease in South Africa. Myers JE, Garisch D, Cornell J. South African Medical Journal 1987; 71(5):302-306.
- 1.2.6 The epidemiology of hypertension in family practice in Cape Town. Pick W, Myers JE, Sayed AR, Dhansay J, George RL, Barday AW. South African Medical Journal 1990; 78:7-10.
- 1.2.7 Childhood near drowning A 12 year retrospective review. Kibel S, Nagel FO, Myers JE, Cywes S. South African Medical Journal 1990; 78(7):418-421.
- 1.2.8 Urbanisation and women's health in Khayelitsha Demographic and socioeconomic profile. Cooper D, Pick W, Myers JE, Hoffman MH, Sayed AR, Klopper JML. South African Medical Journal 1991; 79: 423-427.
- 1.2.9 Urbanisation and women's health in Khayelitsha Health status and use of health services. Cooper D, Pick W, Myers JE, Hoffman MH, Sayed AR, Klopper JML. South African Medical Journal 1991; 79:428-432.
- 1.2.10 Policy and strategy for occupational health services in South Africa. Myers J, Macun I. South African Medical Journal 1991; 80:504-507.
- 1.2.11 The future of occupational health and safety regulation in South Africa. Macun I, Myers J. Industrial Relations Journal of South Africa 1991; 11(3):11-22.

- 1.2.12 Occupational and environmental epidemiology Similarities and contrasts. Myers JE, von Schirnding YER. South African Medical Journal 1992, 81(11): 546-549.
- 1.2.13 Maintaining the Health of Women in South Africa. Cooper D, Bailie R, Myers JE. S Afr J Continuing Medical Education 1995; 13(2):127-134.
- 1.2.14 Conceptualising health services by level and location of care: A view from the Academic Health Centre. Myers JE, Pelteret R. South African Medical Journal 1995; 85(5):347-352.
- 1.2.15 General patterns of agrichemical usage in the Southern region of South Africa. L London, JE Myers. South African Journal of Science 1995; 91:509-514.
- 1.2.16 Agrichemical usage patterns and workplace exposure in the major farming sectors in the Southern region of South Africa. L London, JE Myers. South African Journal of Science 1995; 91:514-522.
- 1.2.17 HIV infected individuals in industries at high risk for TB: A rejoinder. London L, Maartens G, Myers JE, Berelowitz T. Occupational Health Southern Africa 1996: 2 (1):8-10.
- 1.2.18 Health status among farm workers in the Western Cape--collateral evidence from a study of occupational hazards. London L, Nell V, Thompson ML, Myers JE. S Afr Med J 1998;88(9):1096-101
- 1.2.19 Screening for primary aldosteronism--normal ranges for aldosterone and renin in three South African population groups. Rayner BL, Myers JE, Opie LH, Trinder YA, Davidson JS. S Afr Med J. 2001;91(7):594-9
- 1.2.20 Public health lessons from a pilot programme to reduce mother-to-child transmission of HIV-1 in Khayelitsha. Abdullah MF, Young T, Bitalo L, Coetzee N, Myers JE. S Afr Med J. 2001;91(7):579-83.
- 1.2.21 Globalisation and occupational health: The impact of globalization on occupational health. Myers JE. Occupational Health Southern Africa March/April 2004;10(2):15-18
- 1.2.22 Globalisation and Occupational Health: Globalisation, Occupational Health And The Agricultural Sector. Myers JE. Occupational Health Southern Africa; May/June 2004:10(3)6-11.
- 1.2.23 Globalisation, occupational health and the agricultural sector in Southern Africa. Myers JE. Occupational Health Southern Africa; July/August 2004:10(4):4-8.

- 1.2.24. Nicola M. Sloan, Jonathan E. Myers. Evaluation of an HIV/AIDS Peer Education Programme in a South African Workplace. South African Medical Journal 2005;95(4):261-264.
- 1.2.25. Myers JE. The business of health, the health of business. South African Medical Journal 2006; 92(11):74.
- 1.2.25. Myers A, Myers JE. Male circumcision the new hope? South African Medical Journal 2007; 97(5):338-341.
- 1,2.26 Matzopoulos R, Myers J, Bowman B, Mathews S. Interpersonal violence: prioritising interventions. South African Medical Journal 2008; 98 (9): 682-690.
- 1.2.27 Matzopoulos R, Myers J, Jobanputra R. Road traffic injury: prioritising interventions. South African Medical Journal 2008; 98 (9): 692-696.
- 1.2.28 Matzopoulos R, Myers JE, Butchart A, Corrigall J, Peden M, Naledi T. Reducing the burden of injury: An intersectoral preventive approach is needed. South African Medical Journal 2008; 98 (9): 703-705
- 1.2.29 Myers A, Myers J. Rolling out male circumcision as a mass HIV/AIDS intervention seems neither justified nor practicable. S Afr Med J. 2008 Oct;98(10):781-2.
- 1.2.30 Naledi TN, Househam KC, Groenewald P, Bradhsaw D, Myers JE. Improving data to reduce the burden of disease lessons from the Western Cape. S Afr Med J 2009 99(9): 641-2.
- 1.2.31 Myers JE (Guest Editor of Special Issue in Occupational Medicine), Jeebhay MF. Occupational Medicine Guest Editorial. Continuing Medical Education, 27(11):486-487, 2009.
- 1.2. 32 Dalvie MA, Myers JE. <u>Health effects associated with occupational exposure to hexavlent chrome (chromium VI).</u> Continuing Medical Education, 27(11):505-506, 2009.
- 1.2.33. Thomson A, Fine J, Myers JE. <u>Clinical screening and medical surveilance for adverse health effects of manganese exposure</u>. Continuing Medical Education, 27(11):513-516, 2009.
- 1.2.34 Responding to climate change in southern Africa –the role of research. J Myers, T Young, M Galloway, P Manyike, T Tucker S Afr Med J 2011;101:820-822.
- 1.2.35 A public health approach to the impact of climate change on health in southern Africa identifying priority modifiable risks. J Myers, T Young, M Galloway, P Manyike, T TuckerS Afr Med J 2011;101:817-820.

- 1.2.36 Provincial Differences In Infant Deaths In South Africa An Effect Of Antiretroviral Interventions? A Boulle,M L Thompson,R Laubscher, L F Johnson, AR Sayed, LL Brody,B Draper,M F Cotton, F Abdullah, J E Myers,D E Bourne. Southern African Journal of HIV Medicine 2011;12(1):20-23.
- 1.2.37 The South African Burden of Disease and Climate Change. Myers JE. Continuing Medical Education 2012; 30 (3) 72-75.
- 1.2.38 Chokoto L, Matzopoulos R, Myers JE. A call for graduated driver licensing as a road traffic safety intervention based on the age-fatality risk relationship. South African Medical Journal 2012;102(9):749-751.
- 1.3 Publication Outputs Of The Western Cape Province Burden Of Disease Reduction Project http://web.uct.ac.za/depts/oehru/publications/policy2.php
- 1.3.1 Western Cape Burden of Disease Reduction Study Report Summary version in English, Afrikaans and isi-Xhosa, 2009
- 1.3.2 Western Cape Burden of Disease Reduction Study Report Volume 1 June 2007 Overview and Executive Summaries
- 1.3.3 Western Cape Burden of Disease Reduction Study Report Volume 2 June 2007 Mortality Surveillance and Estimating the Burden of Disease
- 1.3.4 Western Cape Burden of Disease Reduction Study Report Volume 3 June 2007Major Infectious Diseases HIV/AIDS and TB
- 1.3.5 Western Cape Burden of Disease Reduction Study Report Volume 4 June 2007Mental Health Disorders
- 1.3.6 Western Cape Burden of Disease Reduction Study Report Volume 5 June 2007Injury due to interpersonal violence and traffic
- 1.3.7 Western Cape Burden of Disease Reduction Study Report Volume 6 June 2007Cardiovascular Diseases
- 1.3.8 Western Cape Burden of Disease Reduction Study Report Volume 7 June 2007Childhood Diseases Overview
 - 1.3.8.1 Western Cape Burden of Disease Reduction Study Report Volume 7 Appendix 1 June 2007 Malnutrition
 - 1.3.8.2 Western Cape Burden of Disease Reduction Study Report Volume 7 Appendix 2 June 2007Low Birth Weight

- 1.3.8.3 Western Cape Burden of Disease Reduction Study Report Volume7 Appendix 3 June 2007 Diarrhoeal Diseases
- 1.3.8.4 Western Cape Burden of Disease Reduction Study Report Volume7 Appendix 4 June 2007Acute Respiratory Infection
- 1.3.8.5 Western Cape Burden of Disease Reduction Study Report Volume 7 Appendix 5 June 2007HIV/AIDS
- 1.3.9 Naledi, KC Househam, JE Myers. State of the province 2008 Chapter Reducing The Burden Of Disease In The Western Cape Province: Enablers And Barriers For Intersectoral Action For Health.

1.4 Publications submitted, accepted or in press

Oesophageal cancer in South Africa: A lethal tumour against a backdrop of deep culture and tradition. Sewram V, Myers JE, Sitas F. Submitted to Lancet Oncology, 2011.

1.5 Peer-reviewed teaching materials

Electronic publication of the interactive coursework in 8 modules on 3 CDs of the Postgraduate Diploma in Occupational Health for UCT teaching and as a global open resource on UCT opencontent. These resources were aimed at a Southern African audience through the Southern African Fogarty Environmental Health Program and more globally via the WHO occupational health division. http://opencontent.uct.ac.za.

2. Other publications

2.1 MD Thesis

The Health effects of working in the brick industry in the Western Cape: A respiratory epidemiologic study in the South African occupational health context, 1988.

2.2 Inaugural lecture

Public Health in the New South Africa: Will Cinderella become queen?. Inaugural lecture. University of Cape Town New Series no. 188, 22 March 1995.

2.3 Guest Editor

Special issue on Occupational Health. South African Journal of Continuing Medical Education, September 1996

Special issue on Occupational Health. South African Journal of Continuing Medical Education, September 2009

2.4 Chapters in books

- 2.4.1 Health and Safety: An emerging issue on the shop floor. J Myers and M Steinberg. Chapter in the South African Review 2, pages 145-155, Braamfontein 1984.
- 2.4.2 Trade union initiatives in health and safety. J Leger, J Maller, J Myers. Chapter in the South African Review 3, pages 79-97, Braamfontein 1986.
- 2.4.3 Health and safety organisation: A Cape perspective on trends in state-management-labour relations. I Macun, J Myers. Chapter in the South African Review 4, pages 305-316, Braamfontein 1987.
- 2.4.4 Myers JE. "Specialised investigations in epidemiology: Occupational epidemiology". J Katzenellenbogen, G Joubert, D Yach eds., Introductory manual for epidemiology in Southern Africa. Cape Town: Medical Research Council 1991. Pages 108-112.
- 2.4.5 Myers JE, Macun I. Strategy and Policy for Occupational Health in South Africa. In ""Protecting workers' health in the Third World: National and International Strategies". MR Reich, T Okubo eds., Auburn House, Westport, Connecticut, 1992.
- 2.4.6 Chapter 9. Occupational and Environmental Health. In "In her lifetime: Female morbidity and mortality in sub-Saharan Africa". Institute of Medicine. National Academy Press, Washington D.C., 1996.
- 2.4.7 Myers JE. Open Educational Resources (OER) and teaching occupational and environmental health at postgraduate level to medical practitioners at the University of Cape Town. Chapter in UNESCO book on OER, In press, 2012.
- 2.4.8 South African Risk and Vulnerability Atlas. Health Chapter. Myers JE and Matzopoulos RG. In preparation, 2012.
- 2.4.9 South African Health Review 2012. Chapter on Climate Change and Health. Myers JE. In preparation, 2012

2.5 Book reviews

Occupational neurology and clinical neurotoxicology. ML Bleecker, JA Hansen (Eds). Americal Journal of Epidemiology 1996; 143(4).

2.6 Research and information reports and brief communications

- 2.6.1 Asbestos and asbestos-related diseases in South Africa. J Myers. SALDRU Working Paper No 28. SALDRU, UCT 1980.
- 2.6.2 Intervention of experts in industrial health: Professionalism or democracy? J Myers. Law in South Africa: Lifting the Veil. Law Students Council, University of Cape Town, 1981.
- 2.6.3 Unhealthy work, unhealthy life. J Myers. Critical Health, No 8, Sept. 1982.
- 2.6.4 Occupational lung disease. Yach D, Myers J. In: Some diseases associated with poverty. Eds. Disler P, Olver C. Carnegie Conference paper 195, 1984.
- 2.6.5 International Labour Office: Working with asbestos. (Explanatory document on ILO Code of Practice for working with asbestos, 1984). IHRG. South African Labour Bulletin 10(3) 1984.
- 2.6.6 Mosa and you: A safety representatives's handbook on the Machinery and Occupational Safety Act. IHRG. South African Labour Bulletin 10(3) 1984.
- 2.6.7 Mortality rates due to ischaemic heart disease in White South Africans (Letter). Myers J. South African Medical Journal 1984; 65: 545-546.
- 2.6.8 MOSA: new regulations. IHRG. South African Labour Bulletin 1985; 10(5).
- 2.6.9 Changes in the compensation system for occupational diseases (Letter). J Myers. South African Medical Journal 1985; 68 (11)778-779. 2.6.10 Workman's Compensation: Changing the rules (letter). IHRG. South African Labour Bulletin 1985; 11(2): 15-19.

- 2.6.11 Rejoinder to the Workmen's Compensation Commissioner (letter). J Myers. South African Medical Journal 1986; 69(9):535-536.
- 2.6.12 Rejoinder to the Workmen's Compensation Commissioner (letter). J Myers. South African Labour Bulletin 1986; 11(5):42-44.
- 2.6.13 Tuberculosis screening in industry (Opinion). J Myers. South African Medical Journal 1986; 70(5): 251-252.
- 2.6.14 Industrial Health Research Group. Health and safety agreement at Turnall: A first in South Africa (Briefing). South African Labour Bulletin 1986; 11 (7): 42-46.
- 2.6.15 Disease and the workplace: Epidemiologists and Union Bargaining. Myers J. Proceedings of the second workshop on "Health of Workers in South Africa" ed P Green pages 78-99, Columbia University, January 1987.
- 2.6.16 Asbestos: US and South African experiences compared. J Myers. Proceedings of the second workshop on "Health of Workers in South Africa" ed P Green pages 108-126, Columbia University, January 1987.
- 2.6.17 Tuberculosis screening in industry. Myers J. In "Privatization: Health at a price." Critical Health 1987; 19: 50-53.
 2.6.18 Asbestos and asbestos-related diseases in South Africa: An update.
 Myers J, Aron J, Macun I. SALDRU Working Paper no 71, SALDRU, UCT, 1987.
- 2.6.19 Mini X-ray screening for Silicosis (Letter). Myers JE. Journal of Occupational Medicine 1988; 30(1):10.
- 2.6.20 The scope and size of the dust problem in South African industry with special reference to Natal. Myers JE. National Safety and occupational hygiene 1989; XLIX (3):21-24.
- 2.6.21 Periodic examination of South African mineworkers (Letter). Frumkin H, Myers JE. Journal of Occupational Medicine 1989;31(6):563-565.
- 2.6.22 Evaluation of lung function in Uranium mineworkers (letter). Myers JE. South African Medical Journal 1989; 75(4):195.
- 2.6.23 Reference values for lung function still much to be done (Editorial). Louw SJ, Myers JE, White N, Davies JCA. South African Medical Journal 1990;77(4):173-174.
- 2.6.24 Women, Health and Urbanisation (opinion). Pick WM, Hoffman MN, Myers JE, Klopper JML, Cooper D. South African Medical Journal 1990;77:553-4.

- 2.6.25 Exercise capacity in coal workers' pneumoconiosis: an analysis using causal modelling (letter). Myers JE, Bachmann OM. British Journal of Industrial Medicine 1990; 47(8):574-575.
- 2.6.26 Cooper D, Pick WM, Myers JE, Hoffman M, KLopper JML. A study of the effects of urbanisation on the health of women in Khayelitsha, Cape Town: Rationale and methods. Department of Community Health, Working Paper No 1. University of Cape Town, 1990.
- 2.6.27 Cooper D, Pick WM, Myers JE, Hoffman M, KLopper JML. A study of the effects of urvanisation on the health of women in Khayelitsha, Cape Town: Indepth interviews with residents in Khayelitsha and their value in informing and complementing quantitative research. Department of Community Health, Working Paper No 2. University of Cape Town, 1990.
- 2.6.28 Occupational health of farmworkers (Editorial). Myers JE. South African Medical Journal 1990; 78:562-563.
- 2.6.29 Occupational health in a changing South Africa A vision for the future. Proceedings of the 7th Annual National Conference (NAMDA), University of Natal, Durban 13-15 July 1990, pages 44-49.
- 2.6.30 Implications of OSHA's reliance on TLVs in developing the air contaminants standard (Opinion). Myers JE. American Journal of Industrial Medicine 1991;19(6):832-833.
- 2.6.31 Control of occupational exposure to lead (Editorial). Ehrlich RI, Myers JE. South African Medical Journal 1991; 80:260¬261.
- 2.6.32 Occupational health belongs in a comprehensive health system (Editorial). Bachmann OM, Delaney C, Louw SJ, Ehrlich R, Levy I, Strauss P, Myers JE, Benatar SR, Klopper JML. South African Medical Journal 1991; 80:475-476.
- 2.6.33 Merchant marine is not such a strange place for asbestos exposure (Letter). Myers JE. American Journal of Industrial Medicine 1992; 21:457.
- 2.6.34 Does non-differential misclassification of exposure always bias a true effect toward the null value? (letter). Myers JE, Ehrlich R. American Journal of Epidemiology 1992;135:1429-1430.

- 2.6.35 Changing attitudes and opinions regarding asbestos and cancer (Opinion). Ehrlich RI, Myers JE. American Journal of Industrial Medicine 1992;
- 2.6.36 Neuropsychological assessment of organic solvent effects in South Africa: Test selection, adaptation, scoring and validation issues. Nell V, Myers JE, Colvin M, Rees D, Radebe N, Seseli L, Sesel J, Booysen M. Health Psychology Unit Technical Report 92/1. Psychology Department, University of South Africa, Pretoria, 1992.
- 2.6.37. New Developments in South African health and safety legis¬lation (Editorial). Myers J, Macun I. South African Medical Journal 1993; 83:1. 2.6.38 Quantifying pesticide hazards in the agricultural sector in the Western Cape, 1989. L London, J Myers. Occupational Health Research Unit, Technical Report 92/1. Department of Community Health, 1992.
- 2.6.39 Women's health and their social well being: Socio-demongraphic profile and social well-being in relation to women's health status, knowledge and use of services. Department of Community Health, Working Paper No 5. University of Cape Town, 1993.
- 2.6.40 Compensation for occupational injuries and diseases Bill, 1993. White N, Bozalek L, Ehrlich R, Myers JE. South African Medical Journal 1993; 83(10):719-720.
- 2.6.41 Occupational disease in mines and works Amendment Act, 1993 (Opinion). Abdullah F, Jeebhay M, Myers J. South African Medical Journal 1994; 84(3):132-133.
- 2.6.42 Conceptualising Health Services. Myers JE. Guest Editor¬ial. Groote Schuur Hospital Region Annual Report 1993/4. Obser¬vatory, Cape Town 1995, pages 3-4.
- 2.6.43 HIV testing in the Workplace (Editorial). South African Medical Journal 1996; 86(4):329-30.
- 2.6.44 HIV infected individuals in industries at high risk for TB: A rejoinder. London L, Maartens G, Myers JE, Berelowitz T. Occupational Health Southern Africa 1996; 2(1):8-10.
- 2.6.45 Guest Editor: Occupational Health. South African Journal of Continuing Medical Education, September 1996.
- 2.6.46 Work related diseases and their prevention. Myers JE (Editorial). African Newsletter on Occupational Health and Safety vol 12 (3) 2002: 47.
- 2.6.47 SIMRAC report 610: Development of lung function reference tables suitable for use in the South African mining industry. R. Ehrlich, N. White, J.

- Myers, ML Thompson, G. Churchyard, , D. Barnes, DB DeVilliers. June 2000. http://www.asosh.org/Research/SIMRAC/oh.htm
- 2.6.48 SIMRAC report 711: Two phase longitudinal or prospective study of the nervous system effects of occupational environmental manganese exposure on mineworkers or processing plant workers at two manganese mines in the Northern Cape Province. J Myers, JM teWaterNaude, HB Abie Zogoe, Mary Lou Thompson, M Fourie, I Naik, P Theodorou, M Daya, H Tassell. April 2002. http://www.asosh.org/Research/SIMRAC/oh.htm
- 2.6.49 SIMRAC report 805: Percentile charts for semi-quantitative tracking of lung functions. J Myers, JM teWaterNaude, Neil White, Mary Lou Thompson. September 2002. http://www.asosh.org/Research/SIMRAC/oh.htm 2.6.50 SIMRAC report 606: Silicosis prevalence and risk factors in long service black miners on the South African goldmines. G Churchyard, K Dekker, R Ehrlich, J te Water Naude, J Myers, April 2003. http://www.asosh.org/Research/SIMRAC/oh.htm
- 2.6.51 The Impact of Globalisation on Occupational Health in the Agricultural Sector. In "The impact on health of global inequalities at work "The Impact of Globalization on Occupational Health in the Agricultural Sector http://www.hsph.harvard.edu/society/images/Myers_Chapter.pdf
- 2.6.52 Nicola M. Sloan, Jonathan E. Myers. Evaluation of an HIV/AIDS Peer Education Programme in a South African Workplace. Published conference paper. HIV/AIDS and the workplace. University of Witwatersrand. 2006.
- 2.6.53 Ehrlich R, Myers J, Sanders D, Carstens S. Mwebu ducks AIDS deaths (letter). South African Medical Journal 2005;95(4):198.
- 2.6.54 A J Flisher, C Mathews, S Guttmacher, F Abdullah, JE Myers. AIDS prevention through peer education (Editorial). South African Medical Journal 2005;95(4):245-248.
- 2.6.55 Myers JE. A statistical analysis of common occupational diseases among South African miners from 2000 to 2003 (Letter). Occupational health Southern Africa 2005;11(2):5-6.
- 2.6.56 MA Dalvie, L London, JE Myers. Respiratory health effects due to long-term low-level paraquat exposure. American Journal of Respiratory and Critical Care Medicine 2005;172:646-647.
- 2.6.57 J Myers. Mercury and thermometers (Editorial). South African Medical Journal 2005;95(10):772-774.

- 2.6.58 A Myers, JE Myers. Rolling out male circumcision as a mass HIV/AIDS intervention seems neither justified nor practicable (editorial). South African Medical Journal 2008.
- 2.6.59 Michele Twomey, Lee A. Wallis, Mary Lou Thompson, Jonathan E. Myers. Triage-weighted kappa: a more appropriate triage reliability measure. Journal of Clinical Epidemiology 2010; Publication ahead of print issue. doi: 10.1016/j.jclinepi.2009.11.005
- 2.6.60 V Sewram, JE Myers, N Gqaleni, R Street, C Connolly. The determination of hexavalent chrome. Oncology Research Unit Technical Report. Medical Research Council, Durban, October 2010.
- 2.6.61 <u>Climate change and health in the SADC Region</u> Young, T, Tucker, T, Galloway, M, Manyike, P, Chapman, A, Myers, J. September 20, 2010. http://opencontent.uct.ac.za.

CONFERENCE AND SEMINAR PAPERS

1. International

- 1.1 Workplace health and safety in South Africa. Myers JE. International conference on the political economy of health and disease in Latin America and Africa. Toluca, Mexico, January 1985.
- 1.2 Disease and the workplace: Epidemiologists and Union Bargaining. Myers JE. Conference on Poverty, Health and the State in Southern Africa: The health of workers. Departments of Epidemiology and History at Columbia University, New York, USA, January 23-24, 1987.
- 1.3 Asbestos: US and South African experiences compared. Myers JE. Conference on Poverty, Health and the State in Southern Africa: The health of workers. Departments of Epidemiology and History at Columbia University, New York, USA, January 23-24, 1987.
- 1.4 Aspects of occupational health and safety in South Africa in the last decade. Myers JE. Distinguished lecture in occupational medicine. Department of Environmental and Community Medicine. UMDNJ-Robert Wood Johnson Medical School, Rutgers University, New Brunswick, New Jersey, USA, January 27, 1987.
- 1.5 The impact of labour participation on survey methodology in occupational epidemiology. Myers JE. Seminar to the Occupational Health Programme of the Harvard School of Public Health, Boston, USA, January 30, 1987.
- 1.6 The impact of labour participation on survey methodology in occupational epidemiology. Myers JE. Joint seminar to staff of the Northern California Occupational Health Programme (Government) and of the School of Public Health (University of California), Berkeley, USA, February 4, 1987.
- 1.7 The respiratory health of brickworkers in the South African social context. Myers JE. Guest lecture at the School of Occupational Health, McGill University, Montreal, Quebec, Canada, March 15 1988.
- 1.8 The social context of occupational health in South Africa. Myers JE. Guest lecture at the University of Cincinnati, March 9, 1988.
- 1.9 The history of occupational health in South Africa. Myers JE. Guest lecture at the Department of History, Tufts University, Medford, USA, 1988.
- 1.10 Strategy and policy for occupational health regulation and health services in South Africa. Myers J, Macun I. Inivited paper to the Fourth Takemi Symposium

- on Working populations and health in the third world: Problems and policies. Harvard School of Public Health September 28- October 1, Boston, USA, 1990.
- 1.11 Grain dust and respiratory health in South African milling workers. Bachmann OM, Myers J. The 23rd International Congress on Occupational Health, Montreal, Canada, 1990.
- 1.12 Acrylamide neuropathy in a South African factory: An epidemiological investigation. Myers J, Macun I. The 23rd International Congress on Occupational Health, Montreal, Canada, 1990.
- 1.13 Development of a neuropsychological test battery for South African workers in the chemical industry. Nell V, Myers JE, Rees D, Colvin M. The 4th International Symposium on Neurobehavioural methods and effects in occupational and environmental health. Tokyo, Japan, 1991.
- 1.14 Neurobehavioural effects of exposure to mixed solvents in the paint manufacturing industry in South Africa. Myers J, Nell V, Colvin M, Rees D, Cronje R. The 4th International Symposium on Neurobehavioural methods and effects in occupational and environmental health. Tokyo, Japan, 1991.
- 1.15 Continuous Ambulatory Peritoneal Dialysis: An option in the developing world. Zent R, Myers JE, Rayner B. 12th International Peritoneal Dialysis Congress, Seattle 18-2- February, 1992.
- 1.16 Musculoskeletal pain and workplace ergonomic stressors in manufacturing industry in South Africa. Schierhout G, Myers JE, Bridger R. International Scientific Conference on Prevention of Work-related Musculoskeletal Disorders (PREMUS-92), Stockholm, July 1992.
- 1.17 An epidemiologic study of neuropsychological and neurological function in paint manufacturing workers with long-term exposure to organic solvents in two South African factories. Myers JE, Colvin M, Nell V, Rees D, Cronje R. International Epidemiological Association, Sydney, September 1993.
- 1.18. Critical issues in chemical safety in agriculture in South Africa. London L, Myers JE. International Conference on Occupational Health, Nice, September 1993.
- 1.19 Neurotoxic effects of long-term agrichemical exposures amongst farmworkers in South Africa. London L, Myers JE, Nell VN, Thomson ML, Mbuli

- S. Fifth International Symposium of Neurobehavioural Methods and Effects in Occupational and Environmental Health, Cairo, 1994
- 1.20 Case control study of mesothelioma in South Africa. Rees D, Goodman K, Myers JE. 11th International Symposium on Epidemiology in Occupational Health, September 5-8, Netherlands, 1995.
- 1.21 Retrospective assessment of chemical exposure: Preliminary findings of a job-exposure matrix for agriculture (Poster). London L, Myers JE. 11th International Symposium on Epidemiology in Occupational Health, September 5-8, Netherlands, 1995.
- 1.22 Occupational fatality underreporting in rural areas of the Western Cape, South Africa. Schierhout GH, Midgley A, Myers JE. Occupational Injury Symposium, Sydney, Australia, February 1996.
- 1.23 The respiratory health effects of the herbicide paraquat on farmworkers in the Western Cape Province, South Africa. Dalvie A, White NR, Raine R, Myers JE. 25th International Congress on Occupational Health, International Commission on Occupational Health, Stockholm, Sweden, September 1996.
- 1.24 Occupational fatality under-reporting in rural areas of the Western Cape Province, South Africa. Schierhout GH, Myers JE. 25th International Congress on Occupational Health, International Commission on Occupational Health, Stockholm, Sweden, September 1996.
- 1.25 Invited Paper: Mini-symposium "Occupational health services in transition challenges to professionalism and ethics. South African challenges". Myers JE. 25th International Congress on Occupational Health, International Commission on Occupational Health, Stockholm, Sweden, September 1996.
- 1.26 The performance of neurobehavioural test methods in low education working populations in South Africa. London L, Thompson ML, Nell VN, Taylor T, Myers JE. 25th International Congress on Occupational Health, International Commission on Occupational Health, Stockholm, Sweden, September 1996.
- 1.27 Effect measures for prevalence data. Mary Lou Thompson, JE Myers. 51st Session of the International Statistical Insitute. Istanbul, Turkey, August 1997.
- 1.2.28 Partial least squares analysis in the investigation of exposure-response effects for multiple outcome and exposure data. Mary Lou Thompson, L London, JE Myers. 51st Session of the International Statistical Insitute. Istanbul, Turkey, August 1997.

- 1.2.29 Invited Keynote Speaker. Pesticides and Occupational Health: Challenges and opportunities in outcome measurement A South African perspective. International Conference on pesticide use in developing countries: Impact on Health and Environment. San Jose, Costa Rica. February 1998.
- 1.2.30 Reproductive health effects of long-term DDT exposure on male malaria control workers in South Africa. JE Myers et al. International Conference on Hazardous substances and male reproductive heallth, May 1998, New York, USA
- 1.2.31 Invited speaker. The impact of globalisation on occupational health in the agricultural sector. Conference on inequalities and health. Harvard Centre for Society and Health. Boston, USA, June 2001. Global Inequalities at Work Conference:

http://www.hsph.harvard.edu/society/conferences.html#GIW

- 1.2.32 Invited speaker. The nervous system effects of occupational & environmental exposure on workers in a south african manganese smelter Infacon 9: Manganese neurotoxicity symposium. Quebec City, Canada, June 2001.
- 1.2.33 Invited speaker. Biomarkers for environmental Mn exposure: useful ranges for different exposure scenarios. Infacon 9: Manganese neurotoxicity symposium. Quebec City, Canada, June 2001.
- 1.2.34. Neurotoxicity in manganese mineworkers. Italy Manganese Neurotoxicity conference. June 2002
- 1.2.35. Silicosis prevalence and exposure response in South African goldminers. Churchyard GC, Ehrlich RE, teWaterNaude JM, bekker J, Myers JE. ICOH conference. Brazil 2003
- 1.2.36. Evaluating and interpreting exposure-response relationships for manganese and neurobehavioral outcomes. Mary Lou Thompson and Myers JE. Living in a chemical world: Conference of the Collegium Ramazzini, Bologna, 2005.
- 1.2.37. Study of Dietary and Medicinal Wild Plants as Potential Risk Factors for Oesophageal Cancer in the Eastern Cape Province of South Africa. V. Sewram, WCA Gelderblom, F. Sitas, D. O'Connell, L. van der Merwe, J. Myers. UICC World Cancer Conference, Washington DC, 2006.
- 1.2.38. South Africa: The first link between asbestos and mesothelioma, but not the last word? J TeWaterNaude, R Abratt, J Myers. International Mesothelioma Interest Group.International Conference IMIG October, 2006, Chicago

- 1.2.39 Manganism screening in a South African manganese smelter. Conference of the Collegium Ramazzini. Carpi Italy 2008
- 1.2.40: Manganism screening in a South African manganese smelter. International conference of the International commission on occupational health, Cape Town, March 2009.
- 1.2.41: Web based learning ICOH 2009
- 1.2.42: Invited lecture on climate change in Southern Africa. School of Public Health, University of Washington, Seattle, USA 25 October 2010;
- 1.2.43: Climate Change and Health in Southern Africa. Invited presentation by the Dean of the School of Public Health in Seattle, USA, in November 2010
- 1.2.44: Lessons from the field: Scenario Planning in Africa. Invited presentation on scenario planning and climate change at San Juan Island, Washington, USA. September 2011. Part of a World Universities Network funded conference on Scenario planning and climate change.

2. South African

- 2.1 Current issues in industrial health. Myers JE. Annual conference, South African Society of Occupational Health Nurses: "Trade Unions and their effect on the Occupational Health Nurse". June 1983, Durban.
- 2.2 Benefits and problems of medical services for workers. Myers JE. Medical Association of South Africa conference, Cape Town, July 1983.
- 2.3 Psycho-social stress and the health of South African industrial workers. Myers JE. University of the Witwatersrand Business School conference on "Wellness at work", Johannesburg, August 1983.
- 2.4 Occupational Health and Medicine: The industrial relations implications. Myers JE. Annual industrial relations seminar of the Natal Chamber of Industry in Durban, June 1984.
- 2.5 The application of the Machinery and Occupational Safety Act from a workers' viewpoint. Myers JE. Industrial relations seminar for management in Cape Town, May 1984.
- 2.6 The dangers of heat stress. Myers JE. Health and safety conference, National Union of Mineworkers, Johannesburg, March 1985.

- 2.7 The scope and size of the dust problem in South African industry with special reference to Natal. Myers JE. Invited paper to the annual conference of the Occupational Hygiene Association of South Africa, Durban September, 1988.
- 2.8 The respiratory health of brickworkers, screening and dust standards. Myers JE. Paper presented to the South African Pulmonology Society conference in the Wilderness, October, 1988.
- 2.9 Occupational health in a changing South Africa A vision for the future. Myers JE. Invited paper to the 7th Annual national conference of the National Medical and Dental Association. Durban, 13-15 July 1990.
- 2.10 What is occupational health? Perceptions and realities. Myers JE. Invited paper to the South African society of Occupational Medicine seminar "Too little too late", Johannesburg, August, 1990.
- 2.11 Recent world trends in occupational health and priorities for South African occupational health. Myers JE. Invited paper at the Annual General Meeting of the Natal branch of the South African Society for Occupational Medicine, October 1990.
- 2.12 A future occupational health system for South Africa. Myers JE. Invited paper at the Association of Societies for Occupational Safety and Health (ASOSH) annual conference. "Occupational Health challenges in a changing Southern Africa". Pretoria, 1991.
- 2.13 AIDS in the workplace: An assessment of developing employer policy approaches. Myers JE. Invited paper presented to the Annual industrial relations seminar of the Natal Chamber of Industry in Durban, June 1991.
- 2.14 Guidelines for compensating occupational diseases. Conference on Changes to the Workmen's Compensation Act conference. Ehrlich RI, Delaney C, Myers JE. Centre for Applied Legal Studies, Witwatersrand University, March 1992.
- 2.15 Pesticide Safety practices on farms in the Western Cape. London L, Myers JE. Association of Societies of Occupational Safety and Health, Pretoria, May 1993.
- 2.16 An epidemiologic study of neuropsychological and neurological function in paint manufacturing workers with long-term exposure to organic solvents in two South African factories. Myers JE, Colvin M, Nell V, Rees D, Cronje R. Epidemiological Society of Southern Africa, Durban, August, 1993.

- 2.17 Critical issues in chemical safety in agriculture in South Africa. London L, Myers JE. Epidemiological Society of Southern Africa, Durban, August, 1993.
- 2.18 Neurobehavioural function and long-term low-dose exposure to organophosphate insecticides in a farm worker population on fruit farms in the Western Cape. London L, Myers JE, Nell V, van Heerden J, Mbuli S. Epidemiological Society of Southern Africa, Bloemfontein, September, 1994.
- 2.19. Agrichemical Hazards in farm work on deciduous fruit farms in the Western Cape. London L, Myers JE. Occupational Health in Southern Africa conference, Zithabiseni, September, 1994.
- 2.20. Ergonomic strain and musculoskeletal disorders in industry in South Africa. Myers JE, Schierhout G. Invited paper. Occupational Health in Southern Africa conference, Zithabiseni, September, 1994.
- 2.21. Occupational neurotoxicity in a range of chemical industries. Myers JE, Colvin M, Nell V, Thompson ML, Rees D. Invited paper. Occupational Health in Southern Africa conference, Zithabiseni, September, 1994.
- 2.22. Agrichemical Hazards in farm work on deciduous fruit farms in the Western Cape. London L, Myers JE. Occupational Health in Southern Africa conference, Zithabiseni, September, 1994.

Health at Work Week whole day conference. South African Society of Occupational Medicine. Myers JE. The uses of epidemiology at the occupational health centre. May, 1996.

Occupational Health Services in SADC countries. Norms, standards and policies for occupational health services. Myers JE. October 2000, Johannesburg.

Neurobehavioural effects of manganese exposure in Mn mineworkers in the Northern Cape. Myers JE, teWaterNaude JM. Phasa conference. Cape Town March 2003.

Silicosis elimination conference, Myers JE. Johannesburg March 2003

Silicosis elimination conference, phase 2. Myers JE. Johannesburg, November 2003

Evaluation of an HIV/AIDS peer education programme in the retail sector in South Africa. Myers JE. HIV/AIDS in the Workplace Conference. University of the Witwatersrand, June 2004.

The mysteries of Manganese: Toxicology, epidemiology and clinical management. Myers JE. Invited speaker to the annual general meeting of the KwaZulu branch of the South African Society for Occupational Medicine, 2005.

Top safety conference 2006

Public Health Association of South Africa, June 2008: Reducing The Burden Of Disease In The Western Cape Province: Enablers And Barriers For Intersectoral Action For Health.

Occupational health and Climate Change. Invited speaker at the South African Society of Occupational Medicine National AGM in Cape Town, November 2011

Key issues in climate change and health in Southern Africa at various societal levels. Invited speaker at the Climate and Health Summit at COP-17, Durban, December, 2011

"Rsa"

SHORTENED CURRICULUM VITAE*: PROF. RODNEY IVAN EHRLICH

*(Selected for relevance to lung disease affecting miners and related matters such as compensation and surveillance.)

July 2012

School of Public Health and Family Medicine Faculty of Health Sciences University of Cape Town Observatory 7925

Tel: 021 406 6435 Fax: 021 406 6459

Rodney.ehrlich@uct.ac.za

CURRENT POSITION

Professor and Senior Specialist, *Department of Public Health and Family Medicine*, University of Cape Town (UCT) (first appointment as Specialist/Lecturer, 1 Nov. 1993).

Professor and Senior Specialist, Department of Medicine (Joint appointment). University of Cape Town, (From 1 Feb. 2004)

Formerly: Director and Head of Department, School of Public Health and Family Medicine, University of Cape Town (1 July, 2002 – 30 June 2007)

INTERNATIONAL AFFILIATIONS

Adjunct Associate Professor, Department of Preventive and Community Medicine, Mount Sinai Medical Center, New York. 1990-1999; 2001-2002;

Adjunct Senior Lecturer, Mailman School of Public Health, Columbia University, 2005-2007

Deputy Editor, American Journal of Industrial Medicine, 2008-

QUALIFICATIONS

- BBusSc, (Bachelor or Business Science) UCT 1972, (First Class Honours, 9 class medals).
- MBChB, UCT 1981 (Distinction in the Second Professional Examination, class medal in Physiology).
- DOH (Diploma in Occupational Health), Wits University 1985 (Distinction/class medal).
- FFCH(SA) (Fellow of the Faculty of Community Health, Colleges of Medicine of South Africa), 1992. Registered as specialist in Community Health 1992, subspecialist in Occupational Health, 1998.
- MFOM, Member of the Faculty of Occupational Medicine of the Royal College of Physicians, UK (By invitation) 1997.
- PhD, UCT 1999. Thesis: The epidemiology of childhood asthma in Mitchell's Plain, Cape Town, with special reference to the role of environmental tobacco smoke.'
- FCPHM(Occ Med)(SA) (Fellow of the College of Public Health Medicine (Occupational Medicine), Colleges of Medicine of South Africa) Fellowship by peer review, 2005.

OTHER TRAINING

1. Oriel College, Oxford University: BPhil (Economics) Programme, 1973-1974.

- 2. Mount Sinai School of Medicine: Fellow in Environmental Epidemiology, 1987 1989.
- 3. Columbia University, New York, Masters courses in epidemiology and biostatistics, 1987-1989.

PREVIOUS ACADEMIC APPOINTMENTS

- 1. Junior Lecturer, Dept of Economics, University of Cape Town, 1973, 1975 June 1976.
- 2. Medical Officer, Dept Occupational Medicine, National Centre for Occupational Health, Johannesburg, Jan. 1984 Aug. 1987. (Head, Jan. 1986 Aug. 1987).
- 3. Honorary Lecturer in Community Health, University of the Witwatersrand, Johannesburg, Jan. 1984 Aug. 1987.
- 4. Instructor, Division of Environmental and Occupational Medicine, Mount Sinai Medical Center, New York, 1989-1990.

PREVIOUS CLINICAL APPOINTMENTS

- 1. Intern, Medicine, Surgery, Obstetrics/ Gynaecology, Groote Schuur and Somerset Hospitals 1982.
- 2. Senior House Officer, Paediatrics, Baragwanath Hospital, Soweto, Jan.- June 1983.
- 3. General Practice: Johannesburg, July Dec. 1983.
- 4. Medical Officer, Occupational Medicine Clinic, National Centre for Occupational Health, 1984-1987.
- 5. Sessional medical officer, Respiratory Clinic, Baragwanath Hospital, Soweto: Jan. 1984 Dec. 1985.
- 6. Sessional medical officer, General Medicine Outpatients, Hillbrow Hospital, Johannesburg: Jan. 1986-Feb. 1987.
- 7. Staff physician, Irving J Selikoff Mount Sinai Clinical Center, New York, 1987-1990.

HONOURS

- Awarded post-specialisation Research Fellowship by Medical Research Council, 1992/93.
- Awarded membership by invitation, Faculty of Occupational Medicine of the Royal College of Physicians, United Kingdom, 1997.
- Nominated for Distinguished Teacher Award, UCT, 1999.
- Special award: South African Society of Occupational Medicine for "outstanding contribution to occupational health in South Africa with publication of Handbook of Occupational Health Practice in South Africa", Nov. 2002.
- Allergy Society of South Africa: award for best article in Current Allergy and Clinical Immunology in 2002.
- Elected Fellow by Peer Review, College of Public Health Medicine (Occupational Medicine), Colleges of Medicine of South Africa, 2005.
- Elected Collegium Ramazzini, 2005.

SABBATICALS

Department of Community and Preventive Medicine, New York, and Center for the Biology of Natural Systems, Queen's College, New York, Sep. 2000 – July 2001.

PUBLICATIONS

Peer reviewed articles (selected)

- Ehrlich RI, Gerston K, Lalloo U. Accelerated silicosis in a foundry shotblaster A case report. S Afr Med J 1988; 73:128-130.
- 2. <u>Ehrlich RI</u>, Rees D, Zwi AB. Silicosis in non-mining industry on the Witwatersrand: A case series. S Afr Med J 1988;73:<u>704-708</u>.
- 3. <u>Ehrlich</u> RI. The Occupational Medicine Clinic of the National Centre for Occupational Health. S Afr Med J 1989;75:227-230.
- 4. White N, Ehrlich RI, Rees D. A guide to spirometry as applied to occupational health S Afr Med J 1996;86:807-13.
- 5. <u>Ehrlich RI</u>, Lilis, R, Nicholson WJ, Chan E, Selikoff IJ. Long-term radiological effects of short-term exposure to amosite asbestos among factory workers. Brit J Ind Med 1992;49:268-75.
- Steen TW, Gyi KM, White NW, Gabosianelwe T, Ludick S, Mazonde GN, Mabongo N, Ncube M, Monare N, Ehrlich RI, Schierhout G. Prevalence of occupational lung disease among Botswana men formerly employed in the South African mining industry. Occup Environ Med 1997;54:119-26.
- 7. White N, Ehrlich RI. Regression of PVC pneumoconiosis. Thorax 1997;52:748-9.
- 8. Govender M, Ehrlich RI, Mohammed A. Notification of occupational diseases by general practitioners in the Western Cape. S Afr Med J 2000; 90:1012-1014.

- 9. Badri M, Ehrlich R, Pulerwitz T, Wood R, Maartens G. Association between tuberculosis and HIV disease progression in a high tuberculosis prevalence area. Intern J Tuberculosis Lung Dis 2001; 5: 225-232.
- 10. Badri M, Ehrlich R, Wood R, Maartens G. Initiating co-trimoxazole prophylaxis in HIV-infected patients in Africa: an evaluation of the provisional WHO/UNAIDS recommendations. AIDS 2001; 15:1143-1148.
- 11. Badri M, Ehrlich R, Pulerwitz T, Wood R, Maartens G. Tuberculosis should not be considered an AIDS-defining disease in areas with a high tuberculosis prevalence. Int J Tuberc Lung Dis 2002; 6:231-237.
- 12. Ehrlich RI, Norman R, Laubscher R, White N, Steyn K, Lombard C, Bradshaw D. Predictors of chronic bronchitis in adults in South Africa. Int J Tuberc Lung Dis 2004; 8:369-376.
- 13. Mohammed A, Ehrlich R, Wood R, Cilliers F, Maartens G. Screening for tuberculosis in adults with advanced HIV infection prior to preventive therapy. Int J Tuberc Lung Dis 2004; 8:792-795.
- 14. Churchyard G, Ehrlich RI, teWaterNaude J, Pemba L, Dekker K, Vermeijs M, White N, Myers J. Prevalence of silicosis and exposure response associations among goldminers in South Africa. Occ Env Med 2004; 61:811-816.
- 15. te Water Naude J, Ehrlich RI, Churchyard G, Pemba L, Dekker K, Vermeijs M, White N, Myers J. Tuberculosis and silica. Occup Environ Med 2006; 63:187-192.
- 16. Mohammed A, Myer L, Ehrlich R, Wood R, Cilliers F, Maartens G. Randomised controlled trial of isoniazid preventive therapy in South African adults with advanced HIV disease. Int J Tuberc Lung Dis 2007; 11: 1114-20.
- 17. Harling G, Ehrlich R, Myer L. The social epidemiology of tuberculosis in South Africa: a multilevel analysis. Social Epidemiology 2008; 66(2):492-505.
- 18. Girdler Brown B, Ehrlich RI, White NW, Churchyard G. The burden of silicosis, tuberculosis and COPD among former Basotho gold miners. Am J Ind Med 2008; 51(9):640-7.
- 19. <u>Ehrlich RI</u>. A hundred years of miners' phthisis on the South African gold mines: any end in sight? [Available as peer-reviewed Conference Proceedings]. 2007. http://www.collegiumramazzini.org/crolj.asp
- 20. Harling G, Ehrlich R, Myer L. The social epidemiology of tuberculosis in South Africa: a multilevel analysis. Social Epidemiology 2008; 66(2):492-505.
- 21. Girdler Brown B, Ehrlich RI, White NW, Churchyard G. The burden of silicosis, tuberculosis and COPD among former Basotho gold miners. Am J Ind Med 2008; 51(9):640-7.
- 22. Park HH, Girdler-Brown BV, Ehrlich RI, White N, Churchyard G. Incidence of tuberculosis and HIV and progression of silicosis and lung function impairment among former Basotho gold miners. Am J Ind Med 2009; 52:901-8.
- 23. Maiphetlho L, <u>Ehrlich R.</u> Claims experience of former gold miners with silicosis a clinic series. Occ Health Southern Afr 2010;16: 10-16.
- 24. Ross J, Ehrlich RI, Hnizdo E, White N, Churchyard GJ. Excess lung function decline in gold miners following pulmonary tuberculosis. Thorax; 2010. Doi: 10.1136/thx.2009.129999.
- 25. <u>Ehrlich RI</u>, Myers JE, te Water Naude J, Thompson ML, Churchyard GJ. Lung function loss in relation to silica exposure among South African gold miners. Occ Environ Med; 2011: 68:96-101.
- 26. Mahomed H, Hawkridge T, Verver S, Geiter L, Hatherill M, Abrahams D, <u>Ehrlich R</u>, Hanekom W, Hussey GD. Predictive factors for latent tuberculosis infection among adolescents in a high burden area in South Africa. Int J Tuberc Lung Dis 2011: 15(3):331-6
- 27. <u>Ehrlich RI</u>, Baatjies R, Adams, S, Jeebhay M. Tuberculosis as a cause of chronic airflow obstruction and respiratory symptoms. Int J Tubercle Lung Dis 2011; doi:10.5588/ijtld.10.0526.
- 28. Mahomed H, Hawkridge T, Verver S, Abrahams D, Geiter L, Hatherill M, Ehrlich R, Hanekom W, Hussey GD. The tuberculin skin test versus QuantiFERON TB Gold in predicting subsequent tuberculosis disease in an adolescent cohort. PLoS One 2011; Mar 29;6(3):e17984.
- 29. Ehrlich RI. Failure of the compensation system for occupational disease in South Africa. S Afr Med J; 2012;
- 30. Ehrlich RI. A century of miners' compensation in South Africa. Am J Ind Med; 2012:55(6):560-9.

Commentaries and letters (selected)

- 1. Ehrlich RI, Myers JE. Changing attitudes and opinions regarding asbestos and cancer (comment). Am J Ind Med 1992;22:279-80.
- 2. White N, Bozalek L, Myers J, Ehrlich RI. Compensation for Occupational Injuries and Diseases Bill (opinion). S Afr Med J

- 1993;83:719-20.
- 3. Ehrlich RI, White N. Obstacles to submitting occupational disease claims (letter). S Afr Med J 1994;84:227-8.
- 4. White N, Ehrlich R. The respiratory health of goldminers. S Afr Med J 1996;86:793-4.
- 5. Ehrlich R, White N, Kerfoot W. Compensation for occupational disease (reply). Occup Health Southern Afr 1996;2:29.
- 6. Ehrlich RI. Occupational health and public health (editorial). S Afr Med J 1998;6:781-2.
- 7. Badri M, Maartens G, Wood R, Ehrlich R. Co-trimoxazole prophylaxis decreases morbidity and mortality of HIV-infected patients with tuberculosis in Cape Town, South Africa (letter). Lancet, 25 July 1999
- 8. Ehrlich RI. Commentary: "Ten easy steps to successful spirometry". Occ Health Southern Afr 2010; 16: 8.

Books edited (selected)

- 1. Guild R, Ehrlich RI, Ross M, Johnston J (eds.). A Handbook of Occupational Health in the South African Mining Industry. Safety in Mines Research Advisory Committee (SIMRAC): Johannesburg, 2001.
- 2. Joubert G, Ehrlich RI (eds.) Epidemiology: A Research Manual for South Africa (2nd edn.). Cape Town: Oxford, 2007.

Book chapters (selected)

- 1. Felix M, Leger JP, Ehrlich RI. Three minerals, three epidemics mining and asbestos related disease in South Africa. In: Mehlman MA, Upton A, eds. The identification and control of Occupational and Environmental Diseases. Princeton: Princeton Scientific Publishing, 1994.
- Yew G, Ehrlich RI. Fitness, disability and compensation. In: Guild R, Ehrlich RI, Ross M, Johnston J (eds.). A Handbook of Occupational Health in the South African Mining Industry. Safety in Mines Research Advisory Committee (SIMRAC): Johannesburg, 2001.
- 3. <u>Ehrlich RI, Jithoo A</u>. Chronic respiratory diseases in South Africa. In: Steyn K (ed). Chronic diseases of lifestyle in South Africa since 1995-2005. Cape Town: Medical Research Council of South Africa. Cape Town, 2006.
- 4. Ehrlich RI, Katzenellenbogen J, Tollman S, Gear J. Why study epidemiology? A South African perspective. In: Joubert
- 5. Adams S, <u>Ehrlich RI</u> and Rees D. South Africa. In: Elgstrand K, Petersson N, eds. Occupational Health and Safety and Development, (1st edn). Stockholm: National Institute for Working Life (in press).

Major policy and research documents (as contributor) (selected)

- Henchie S, Ehrlich RI. An evaluation of the Compensation Fund for Occupational Injuries and Diseases: what is its capacity fund prevention activities such as research? Monograph, Occupational and Environmental Research Unit, Dept of Community Health, UCT, Jan 1998. (For WHO-SA Technical Cooperation Programme).
- Ehrlich R, White N, Myers J, Thompson ML, Churchyard G, Barnes D, DeVilliers DB. Development of lung function reference tables suitable for use in the South African mining industry. Johannesburg: Safety in Mines Research Advisory Committee (SIMRAC), Report 610a, 2000.
- 3. Guidelines for the prevention of transmission of tuberculosis in health care facilities in the Western Cape Province. Cape Town: TB Control Programme, Department of Health: Western Cape Province. 2004.
- 4. (Sections). Adolescent Health: Chronic respiratory symptoms and peak expiratory flow rates in adolescents (p. 186-7). Mortality and Morbidity in Adults: Self-reported prevalence of tuberculosis (p. 204-5), Chronic obstructive pulmonary diseases and asthma (p. 249-57). In: Department of Health, Medical Research Council, OrcMacro. 2007. South African Demographic and Health Survey, 2003 (Full Report). Pretoria; Department of Health. 2007.
 - 5. Work and Health in Southern Africa (WHASA). Guideline on isoniazid preventive therapy for patients with silicosis in Southern Africa. 2007. Available: http://www.wahsa.net/Uploads/Policy%20briefs/IPT%20silicosis%20guidelines-20September%20Gaborone%202008.pdf
 - 6. International Council on Mining and Metals. Good practice guidance on HIV/AIDS, Tuberculosis and Malaria. 2008. [Online]. Available: www.icmm.com. (28 August, 2008).
 - 7. Work and Health in Southern Africa (WHASA). Medical surveillance for silicosis. (In press).

Articles in non peer reviewed publications (including Conference Proceedings): (selected)

- 1. Zwi S, Ehrlich RI, Rees D, Zwi AB. The Pneumoconioses. S Afr J Continuing Med Educ 1986; 4:93-99.
- 2. Du Toit RSJ, Ehrlich RI. [Asbestos in the environment: concentration and effects](Afrikaans) In: Papers of the Symposium, Air Pollution Challenges of Southern Africa. National Association for Clean Air, Pretoria 1986.
- 3. Ehrlich RI. Procedures for assessing diagnosis, compensability, impairment and disability in cases of work-related disease a proposal. Industrial Law J 1993; 13:1372-1375.
- 4. Ehrlich RI, White N, Kerfoot W. Compensation for occupational disease: insult to injury. Occup Health Southern Afr

- 1995:5:18-19.
- 5. Ehrlich RI. Occupational medical surveillance. S Afr J Cont Med Ed 1996;14:1301-10.
- 6. Africa 2002; 8 (1):8-11.
- 7. <u>Ehrlich RI</u>. Silica, silicosis and tuberculosis recognizing the clinical link. South Afr J Continuing Medical Education 2009; 27:510-1.

CONGRESSES

Presentations (international): (selected)

- 1.. Long-term x-ray outcome among short-term amosite factory workers 8th International Conference on Occupational Lung Diseases, Prague, Czechoslovakia, Sep. 14-17, 1992.
- .2. A hundred years of miner's phthisis on the South African goldmines: any end in sight? Ramazzini Days (Meeting of the Collegium Ramazzini), Carpi, 27-29 Oct. 2007.
- 3. <u>Invited presentation</u>: Murray J, <u>Ehrlich R.</u> Silica, silicosis and tuberculosis unanswered questions. 29th ICOH International Congress on Occupational Health, Cape Town. 22-27 Mar. 2009.
- 4. <u>Invited presentation</u>: te Water Naude J, <u>Ehrlich R</u>, Franzblau A. Establishing the equivalence of digital and analog chest radiography in medical surveillance of a workforce with a high silicotuberculosis prevalence. 29th ICOH International Congress on Occupational Health. Cape Town. 22-27 Mar. 2009.
- 5. One hundred years on: a new epidemic of miner's phthisis among South African gold miners. 29th ICOH International Congress on Occupational Health, Cape Town. 22-27 Mar. 2009.
- 6. Silica and tuberculosis in a globalising world: Forgotten but not gone. Meeting of the Collegium Ramazzini, Carpi, 22-24 Oct. 2010.
- 7. Not a benign disease. Impairment following silica dust exposure, silicosis and tuberculosis in South African gold miners. 22nd EPICOH Congress on Epidemiology in Occupational Health, Oxford, UK, 7-9 Sep. 2011.

Presentations (local) (selected)

- 1. Silicosis in non-mining industry on the Witwatersrand. Congress of the South African Pulmonology Society. Ceres, April 1987.
- 2. Procedures for assessing compensability of occupational disease. Conference on Changes to the Workmen's Compensation Act, Midrand, Transvaal, March 26-28, 1992.
- 3. Invited presentation. Occupational medical surveillance primum non nocere. Occupational Health in Southern Africa, Zithabiseni, Transvaal, Aug 28-Sep 2, 1994.
- 4. *Invited presentation:* Progressive massive fibrosis. Annual Congress of the South African Society of Occupational Medicine, Cape Town, March 5-6, 2007.
- 5. *Invited presentation*. What should we be aiming for in occupational health surveillance? Webster Memorial Day Seminar, Johannesburg, Nov 22, 2007.
- 6. <u>Invited presentation:</u> Tuberculosis in the mining industry. Symposium on The Crisis of Tuberculosis in South Africa. Treatment Action Campaign and other organisations. Johannesburg, Aug 10, 2012.

Congress abstracts - not presented personally (selected)

- 1. Ehrlich RI, teWaterNaude J, Churchyard G, Pemba L, Dekker K, Vermeijs M, White N, Myers J. Prevalence of silicosis and exposure response associations among goldminers in South Africa. 17th International Symposium on Epidemiology in Occupational Health, Melbourne, 13-15 Oct., 2004.
- 2. teWaterNaude J, Ehrlich RI, Churchyard G, Pemba L, Dekker K, Vermeijs M, White N, Myers J. Silicosis and lung function. 17th International Symposium on Epidemiology in Occupational Health, Melbourne, 13-15 Oct., 2004.
- 3. Park H, Girdler-Brown BV, Ehrlich RI, White N, Churchyard G. Silicosis, COPD, TB and HIV in a cohort of Basotho gold miners followed for one year after lay-off. Congress of the International Union against Tuberculosis (UNION). Paris, Oct., 2008.

EDITORIAL AND REVIEWING

Editorships

1. Deputy Editor, American Journal of Industrial Medicine (USA), 2009-, (International Contributing Editor, 1991-2009).

Boards

Scientific Review Board, South African Society for Epidemiologic Modelling and Analysis, 2004-2005.

Regular reviewer

- 1. Occupational and Environmental Medicine (UK)
- 2. American Journal of Industrial Medicine

Occasional reviewer

- 1. Lancet
- 2. Thorax
- 3. International Journal of Tuberculosis and Lung Disease
- 4. Social Science and Medicine (UK).
- 5. Biomed Central
- 6. Pediatrics (USA).
- 7. South African Medical Journal
- 8. Ethnicity and Health (UK)
- 9. Allergy
- 10. South African Journal of AIDS Research
- 11. PLoS ONE
- 12. BMC Public Health

Professional organisations/ discipline building activity

- 1. Director of WorkHealth, founded in 1989 to promote the interdisciplinary practice of occupational health at UCT and the academic hospital complex linked to Groote Schuur Hospital.
- 2. Member of Steering Committee to develop Occupational Medicine as a free standing specialty, College of Public Health Medicine of South Africa.
- 3. Member, South African Fogarty Liaison Committee (1995-2000), and Scientific Review Committee (2001-). Advises on allocation of Fogarty International grant to training activities in South African by University of Michigan faculty, and identification of suitable candidates for training in environmental and occupational health.
- Elected member, Council of the College of Public Health Medicine of the Colleges of Medicine of South Africa, 2005-2011.
- 5. Convenor, College of Public Health Medicine (Occupational Medicine) examination, Aug.- Oct. 2007
- 6. Elected member, Executive of the Public Health Association of South Africa, 2008-2011.

SERVICES TO GOVERNMENT, THE BROADER COMMUNITY AND THE PUBLIC

International (selected)

- 1. Consultant to WHO on Global Burden of Disease and Injury from Occupational Factors, Geneva, June 28-29, 2001.
- 2. Contributor: WHO/ILO Guidelines for workplace TB control activities. Geneva: WHO 2003.

Government

National:

- 1. Member, Advisory Council on Occupational Health and Safety (advises Minister of Labour, vets new legislation), 1995-2000.
- 2. Member, Committee on Occupational Health, (report to Minister of Health), 1995-1996.
- 3. Member and vice-chair, Provincial Medical Advisory Panel, appointed by Director-General of Labour, under Compensation for Occupational Injuries and Diseases Act, 2003-2008.

Provincial:

- 1. Member, Strategic Management Team on (provincial) Occupational Health, 1995.
- 2. Consultant, Division of District Health Systems and Health Programmes, PGWC Department of Health, 1998 date *Local*:

Cape Town Metropolitan Air Pollution Co-ordinating Committee, 1993-1997.

City of Cape Town Air Quality Advisory Committee (Health), 2008-

Thesis supervision (* = current) (selected)

PhD:

- 1. Dick J. Compliance with anti-tuberculous therapy. UCT, 1995.
- 2. Mohammed A. Effectiveness of INH chemoprophylaxis of tuberculosis in tuberculin negative stage III AIDS patients: a randomised controlled trial. UCT, 2008
- 3. *Mahomed H. Epidemiology of tuberculosis among adolescents in the context of tuberculosis vaccine trials. UCT, 2007-
- 4. * Adams, S Evaluation of immunodiagnostic tests for tuberculosis infection and determinants of TB infection in a population of South African healthcare workers. 2008.

Masters:

- 1. Badri M. Prognosis of tuberculosis among HIV infected patients. MSc (Med), UCT 1999.
- 2. Mkwandawire T, MPH, UCT 2009. Alcohol as a risk factor for tuberculosis: analysis of the 2003 Demographic and Health Survey.
- 3. Knight D, MMed (Occ Medicine), UCT 2009. Variation in silicosis prevalence in South African gold miners an industry-wide study. MMed (occ Med).
- 4. Mothemele M. MMed (Occ Med), UCT, 2012. Analysis of geography and characteristics of mesothelioma cases identified by two asbestos compensation trusts in South Africa.

CLINICAL SERVICES (selected)

- 1. Director, Occupational Diseases Clinic, Groote Schuur Hospital. Weekly clinic. 1990 -
- 2. Member, Specialist Occupational Medicine Panel, Asbestos Relief Trust, Cape Town. 2004-
- 3. Convenor of special project to provide benefit medical examination services for former mineworkers at UCT Lung Institute, 2005-2007.
- 4. Panel member and vice-chairperson, Provincial Medical Advisory Panel (appointed by Director-General, Dept of Labour). 2004-2008

CURRICULUM VITAE

(18 January 2012)

Name : DAVID WILLIAM STANTON

Address: 401 Queensgate, 2 Queens Road,

Parktown 2193, Johannesburg, South Africa.

Telephone : 011 484 5040 (home)

Cell : 082 903 6785 Email : davidws@me.com

Age : 64 (Born 23 May 1947) Health: Excellent

Qualifications: CChem, FRSC, MSc, PhD, FFOH, Dip.Occ.Hyg.

MSc (London) and PhD (Strathclyde) Both in Occupational Hygiene Registered Occupational Hygienist with BOHS (and formerly with SAIOH)

Computer Skills: Advanced Mac and PC user.

Membership: ACGIH, BOHS, RSC

African Representative on the International Committee of the ACGIH (USA)
Former President: Association of Societies for Occupational Safety and Health (ASOSH, RSA)
Fellow of the Faculty of Occupational Hygiene (FFOH), BOHS (UK)
Former Fellow of the Institution of Occupational Safety and Health (FIOSH, UK)

Fellow of the Royal Society of Chemistry (FRSC, UK)

First President of the Southern African Institute for Occupational Hygiene (SAIOH, RSA)

Work Experience

Environmental work started in 1964 as a laboratory trainee in a water/air pollution laboratory. Health and Safety experience gained as an industrial chemist on chemical plants late 1960's early 1970's. Full time industrial hygiene experience, over 30 years (gained in Europe, Middle East, Africa and USA). Accredited Safety Auditor (ISRS) when coordinating occupational hygiene in Western Europe and West Africa for Texaco Inc. Served on Government, Industry, Society, Standards and Tripartite Committees.

Papers

Have served on the Editorial Board of the Journal Occupational Health Southern Africa for almost a decade and acted as Guest Editor on a number of occasions. Contributed over 50 articles, fifteen of the articles written on behalf of the WHO/ILO Joint Effort on Health and Safety for Africa (AJE).

Awards in South Africa

- OHASA 1997 Certificate of Outstanding Achievement for contributions to the occupational health discipline in Southern Africa
- ASOSH 2000 for the ASOSH website
- SASOM Ramazini Prize 2000 for ASOSH website
- SAIOH 2002 for the SAIOH website
- SAIOH 2004 for the South African Chapter in the International Commission on Occupational Health (ICOH) book on the history of occupational health associations worldwide
- SAIOH 2006 for organizing the IOHA 2005 International Scientific Conference in RSA.

WORK EXPERIENCE

SOUTH AFRICA

2009 - 2011

Chairman of the Body Corporate, Queensgate Court Building, 2 Queens Road, Parktown. Renovation of the Queensgate Building, a 50 apartment complex (interior and exterior common areas) and complete renovation of my large Flat at Queensgate. Designed and had built the Queensgate sign in front of building (from stainless steel, granite and face brick). Researched the history of the building, its Parktown Plot, the history of Queen's Road and other areas of Parktown. Joined the Parktown and Westcliffe Heritage Trust to access its research centre. Gathering information for future historical books connected with occupational hygiene including collecting books on mining and airborne dust. In December 2011/January 2012 recreated the 1903 Weldon Report of the Miners' Phthisis Commission 1902-1903. Currently working on the Reports of the Miners' Phthisis Prevention Committee Reports 1913-1919 (continuing work to create electronic copies of OHS Commissions as discussed on page 8 of this CV).

External Examiner Wits University DPH/MPH Occupational Hygiene Course (External Examiner since course established). African Representative on the ACGIH International Committee. (African Representative for several years). One of two members of the Mine Health and Safety Council (MHSC) Expert Panel for Silicosis Prevention Research (resigned in 2010 because of the poor quality of work produced on this under the MHSC). Consultant for Legal Team.

2008

Consultant for Legal Team

Extensive historical review on aspects of mining industry work on airborne dust from the end of the nineteenth century to 2008. Compared work in SA Gold Mining compared to work in other gold and coal mining countries.

December 2006 - March 2008

Project manager, lead editor, and author (five chapters) for the Mine Health and Safety Council (MHSC) Handbook on Mine Occupational Hygiene Measurements. Contains 27 chapters on measurements conducted by mine environmental control/ occupational hygiene personnel for chemical, physical and biological agents. Had to rewrite all but six of the chapters. Prepared all the Handbook illustrations and laid out the Handbook for printing. Handbook launched March 2008.

November 1999 - November 2006

Occupational Hygienist, Chamber of Mines of South Africa

Lobbying and advocacy work conducted in the health and safety field. Regularly interacted with staff from the Mining Companies and Government Departments such as the Department of Minerals and Energy (DME), Department of Labour (DoL), the National Institute for Occupational Health (NIOH) - formerly NCOH, Department of Health, the WHO, ILO and many other international and local organisations.

Member of Chamber mining industry employer committees (Health Policy, Occupational Health Working Group, Group Environmental Engineers (Secretary)), to obtain employer views to take into the Mine Health and Safety Council (MHSC) Tripartite Committees: Mining Occupational Health Advisory Committee (MOHAC), Occupational Hygiene Subgroup and Safety in Mines Research Advisory Committee (SIMRAC). Past Chair of the SIMRAC SIMHEALTH Committee. Employer Convenor for SIMRAC, the Occupational Health Technical Advisory Committee (OHTAC) - a SIMRAC sub-committee and MOHAC.

On arrival at the Chamber was tasked with reviewing for the DME the DoL extensive listing of Occupational Exposure Limits (OELs). These limits were added to an Excel spreadsheet, the Chemical Abstracts Service (CAS) number added and the OELs sorted by CAS number. All the numerous DoL errors were corrected for the DME listing and the values were published in the DME Regulations in 2002. Care taken to ensure compatibility with the DoL listing, to ensure that the values were valid and comparable internationally. This was the first time OELs for particulates (including crystalline silica) and numerous gases and vapours were included in the SA mining legislation.

The DME listing of OELs was added to the Internet and linked to the ASOSH.org SiteSearch page so that additional information on each of the 600 or so chemicals could be rapidly located. A Flash example page was added to show ease of use.

The DME 2002 listing of OELs was again reviewed in 2005/6 and updated in the Government Gazette in 2006. This involved the generation of an Excel spreadsheet with OELs from around the world for comparison with the South African Limits. Where differences existed between South African limit values and those of other countries they were highlighted in the spreadsheet. Some 90 chemicals were then reviewed for updating. Obtained background documentation required to review these substances.

Appointed in July 2004 by the Chief Inspector of the DoL on their Technical Committee 7 to review the OELs and BEIs listed under their Hazardous Chemical Substances Regulations.

See Pages 7-13: for "Further Initiatives by Dr. David W. Stanton While at the Chamber".

SOUTH/SOUTHERN AFRICA

1995 - 1999

Head Occupational Hygiene and Toxicology Directorate, National Centre for Occupational Health (NCOH), Department of Health (DoH), Johannesburg

The Directorate had some 44 positions and consisted of the following components: Occupational Hygiene, Analytical Services, Technical Advisory Services, and Toxicology and Biochemistry Research. Within the Information component was the CIS-ILO National Health and Safety Information Centre for South Africa, the AJ Orenstein Library (6,500 books and 80 journals) and the NCOH Computer Network.

Principal author and Programme Manager for the WHO/South Africa Technical Cooperation Programme 1996-1997: Occupational Health (budget approximately 1.7 million US\$ for 1996-1999). Variety of workshops around the country organised and over 1500 places on short courses sponsored. Programme helped establish the British Institute of Occupational Hygienists (BIOH) professional qualifications in occupational hygiene in South Africa by sponsoring candidates on the core modules and the BIOH examinations. Funded the start up of the Industrial Ergonomics Diploma course at Pretoria University.

South African Coordinator for the BIOH examinations and Chief Oral Examiner, Council member of the Occupational Hygiene Association of Southern Africa (OHASA), member of the Examination Board for the Institute of Occupational Hygienists of Southern Africa (IOHSA – now SAIOH), Honorary Lecturer/ Examiner on the University of the Witwatersrand/ NCOH Diploma in Occupational Health (DOH) course for doctors and nurses and a lecturer on the University of Cape Town DOH course. OHASA representative on the Council of the Association of Societies for Occupational, Safety and Health (ASOSH). Elected Vice President of ASOSH in 1998. Awarded in 1997 the 1996 OHASA Certificate of Outstanding Achievement for contributions to the occupational health discipline in Southern Africa. Elected Vice President of OHASA in 1999.

Organised in 1997 a Southern African meeting on OHS Education and Training to develop a coordinated approach to address the acute shortage of OHS personnel and the lack of OHS education and training opportunities in Southern Africa. Meeting attended by representatives

from thirteen of the fourteen SADC Member States, the WHO, ILO and the SADC Employment and Labour Sector (ELS) Coordinating Unit. The resolutions of the Johannesburg meeting were approved by the ELS and the SADC Council in 1998 in Mauritius (first person to have a report on OHS approved through the SADC system). Guest editor for a special feature on SADC OHS activities in the July/August 1999 edition of the journal Occupational Health Southern Africa (OHSA).

Designed, constructed and published in January 1999 the very extensive web site ASOSH.org (http://www.asosh.org), which was listed at the time in the top fifty OHS sites in the world by two international OHS experts on the Internet in the third edition of their book *Safety & Health on the Internet* (1999). ASOSH.org was the only site in Africa listed and consisted of a Southern African component and through the World Links page, a World component. Awarded ASOSH special award 1999 for the web site and the SASOM Ramazini award. Proposed and had accepted the need for a regular feature on the Internet (NetPage) in the journal OHSA. Elected to the Editorial Board of OHSA 1999.

Successfully worked with others to obtain one occupational hygiene society in South Africa with an independent examination board (instead of two competing societies). Through written and oral presentations to IOHSA, key driving force for IOHSA to raise the standards of its written and oral examinations. Organised the OHASA (Incorporating IOHSA) Conference programme for 1999 titled *The Development of Occupational Hygiene in Southern Africa* in which the International Occupational Hygiene Association (IOHA) Board members participated. Member of a small ASOSH task team to organise the ASOSH '99 Conference held in conjunction with a major EHS Exhibition organised by RAI International (South Africa).

BELGIUM AND SOUTH AFRICA

1993 - 1995

Major work - renovation of my villa in four acres in Belgium while waiting to return to South Africa. Requested in the 4Q91 to return to South Africa by the Chief Director and NCOH Head, Professor JCA Davies. However, he could not process my contract in 1993 as all the vacant positions at the NCOH were frozen due to the change of government in South Africa. Contract with the Department of Health finally processed in 1994 but it then took six months to process permission with the Department of Home Affairs to work in South Africa. During this period a major consultancy was undertaken to advise a large platinum smelter in South Africa on how to improve occupational health performance. Overseas expert to the 1994 Southern African workshop on Occupational Health, South Africa. Responsible for the section in the proceedings on occupational hygiene education and training.

KINGDOM OF SAUDI ARABIA

1992 - 1993

Senior Consultant, Arthur D. Little, to set up an occupational health department for SAMAREC (Saudi Arabian Marketing and Refining Company), the downstream arm of the Saudi Oil Industry. Baseline occupational hygiene programme surveys of the refining and distribution facilities conducted. Advice provided on legislation, and on the information resources, staffing and occupational hygiene field monitoring equipment required. Recruited occupational hygiene and occupational medicine personnel in Houston (USA), London (UK) and the Middle East. Action plan prepared to establish an industry standard occupational hygiene programme by 1996. The Consultancy (ADL) charged SAMAREC one million US dollars for this one-year assignment.

WESTERN EUROPE/ WEST AFRICA/ USA

1986 - 1992

Coordinator Industrial Hygiene Europe, EHS-Europe, EHS Division, Texaco Inc.

Responsible for coordinating occupational hygiene activities throughout Texaco's petroleum. and petrochemical operations in Western Europe. In 1990 EHS-Europe also given Middle East and West African responsibility. Represented Texaco at CONCAWE's Health Management Group, Industrial Hygiene Subgroup and on special Task Forces (Benzene, Air Sampling Strategies, Catalyst Handling, EEC Health and Safety legislation). Also represented Texaco at E & P Forum, London, and American Chamber of Commerce, Brussels. Established from scratch an occupational hygiene field monitoring capability and small health and safety library for EHS-Wide variety of occupational hygiene work carried out including safety and occupational hygiene reviews (audits) using International Safety Rating System (ISRS). Occupational hygiene surveys and or ISRS reviews conducted in Angola, Belgium, Denmark, Germany, Greece, Ireland, Netherlands, Nigeria, Sweden and U.K. Occupational hygiene coordination work also conducted in Italy, Spain, France, Luxembourg, and Norway. Accredited Safety Auditor (ASA) for Texaco. Manager Computer Systems and Manager Total Quality Process for EHS-Europe. Founder member and board member of the Belgium Society for Occupational Hygiene (BSOH) in 1988/89. Proposed and had accepted some of the initial meetings of the Society.

Following the repeated requests of Professor JCA Davies and Mr. REG Rendall, NCOH, to return to the NCOH, South Africa, left Texaco, CONCAWE and Belgium to contribute to occupational hygiene in South and Southern Africa (after one year contract in the Middle East).

SOUTH AFRICA/ NAMIBIA

1985 - 1986

Occupational Hygienist carrying out (with assistance) all occupational hygiene field work for the National Centre For Occupational Health (NCOH), Johannesburg

Very extensive range of occupational hygiene work carried out as would be expected by a Centre serving the whole of South Africa. Organized one-day seminars on Asbestos in Johannesburg and Cape Town. Assisted in the organization of a Foundry Forum at the NCOH. Investigated causes of chemical poisoning at a plant in Namibia.

Lecturer and examiner in occupational hygiene for the Wits University/NCOH DOH course for medical officers. Reviewed relevant draft national legislation and advised Ministry of Manpower and Mining Inspectorate from time to time. Member of the South African Bureau of Standards (SABS) Committee on Respiratory Protection.

JUBAIL INDUSTRIAL CITY, KINGDOM OF SAUDI ARABIA

1983 - 1985

Industrial Hygiene Engineer for a Public Health Contractor (Almana Medical Services) to the Royal Commission for Jubail Industrial City (largest industrial complex ever built). Principle author of the Royal Commission Occupational Health Code designed to impact on all industries at Jubail. This document laid down requirements on all employers, detailed exposure limits, and gave guidance on environmental surveillance, health hazard control, and detailed National Legislation and Standards. Member of emergency planning committees to prepare for hazardous material spillage on roads, pipeline incidents, etc. Implemented a materials inventory for the Industrial City to make employers more aware of their occupational health hazards and provide information to assist occupational health and emergency planners. Large number of health/safety/ environmental activities from establishing a library and monitoring capability, preparation of MSDS information, to carrying out surveillance in a wide range of work places for health and safety hazards (air contaminants, noise, ionizing radiation, etc.). Control measures

recommended where necessary. Conducted various occupational hygiene/safety training sessions.

Advice given to Primary and Support Industry personnel on the handling, storage, transportation, and disposal of hazardous materials. Worked closely with other SHE/EHS professionals in Industry and the City organization. Advised Ministry of Health personnel from time to time and assisted with the organization of a Ministry of Health Symposium on *Chemical Poisoning in Industry, Agriculture, and the Home*. Designated on-call person for hygiene problems at Jubail Industrial City. Organized informal meetings of the many health and safety personnel at Jubail.

GLASGOW/ WEST OF SCOTLAND

1975 - 1982

Research, teaching and consultancy work in occupational hygiene and environmental monitoring carried out at the Department of Environmental Engineering, University of Strathclyde, Glasgow. Very extensive annotated chronological bibliography 1656–1975 on airborne particulate sampling prepared partly sponsored by the Health and Safety Executive (required extensive library work in the U.K. and USA). Ph.D thesis prepared titled *Airborne Particulate Sampling: An Indepth Review With Specialized Studies On Welding Fume*, which looked at the fume exposure of welders and in detail at various air sampling techniques. Extensive consultancy work in occupational hygiene and environmental pollution problems carried out for small companies to large corporations at the request of management, union officials, safety officers, environmental personnel, insurance companies, solicitors, etc. Internal problems at the University of Strathclyde also investigated.

Lectures and demonstrations given to undergraduate Mining and Petroleum Engineering students, Environmental Health students, school children, and safety officers in addition to undergraduate/ postgraduate Environmental Engineering students.

One month's self funded temporary stay at the Scottish Occupational and Environmental Health Services Ltd., Dundee (to gain consultancy experience).

SHOTTON, NORTH WALES, U.K.

1964 - 1974

Ten years in a large fully integrated steelworks at Shotton from Laboratory Trainee (Age 16) to Development Chemist. Variety of positions held serving both steel/ iron making and chemical plants. Extensive experience gained with wet and physical methods of analysis for air, water, and gas monitoring. Experience gained with the control of water and air pollution, protective clothing, respiratory protection, and other aspects of environmental/hygiene work. Part-time study from 'O' Level Chemistry to Graduate Membership of the Royal Institute of Chemistry. One-year day-release course completed on the Detection and Control of Pollution which qualified for Licentiate membership (not applied for as already Graduate member).

Awarded Gallaher Scholarship by Professor Schilling to attend the 1974-75 MSc Occupational Hygiene course at the London School of Hygiene and Tropical Medicine, London University.

SOME FURTHER INITIATIVES BY DR. DAVID W. STANTON WHILE AT THE CHAMBER OF MINES

1999 - 2006

SAFETY IN MINES RESEARCH ADVISORY COMMITTEE (SIMRAC)

Served on SIMHEALTH shortly after joining the Chamber and was then elected Chairperson of this standing SIMRAC sub-committee and employer convener. Visited the SIMRAC offices to go through the large number of reports and over a number of weeks created a detailed topic index to the large number of research reports. This topic index was added to the Internet and linked to each SIMRAC report. Later this index was updated and linked to a similar index to all the Health and Safety Executive (HSE) Research Reports in the UK. At that time no simple index existed to the extensive HSE research. The next step (not completed) was a detailed index to all the NIOSH Research Reports in the USA so one could quickly see the SIMRAC (RSA), HSE (UK) and NIOSH (USA) Research Reports.

Prior to joining SIMRAC a considerable amount of industry funds (many millions of Rands) were wasted on SIMRAC projects that simply reproduced information already readily available. By the presence of a well-qualified occupational hygienist with skills to quickly gather information on SIMHEALTH, the milking of SIMRAC funds for occupational hygiene related projects that simply reproduced existing information was stopped at that time. An example is *GEN 408 Respiratory hazard risk assessment methods* which simply reproduced what was in the DME Guidelines and the ACGIH TLV bookiet. This project was stopped on the recommendation of Dr. Stanton, although SIMRAC had paid by mistake one million pounds Sterling instead of one million Rands for the work when stopped!

Arranged various Employer Research Task Group (RTG) workshops to plan future research and then arranged for all the employer recommendations to be adopted through the tripartite system.

SIMRAC Project Heath 605 on Welding Fumes (2002)

The final report from this project was rejected by SIMRAC and Dr. Stanton was requested to see what could be done to salvage the situation. Worked on the report with Professor Mary Ross, SIMRAC, to create a report that could at least be added to the SIMRAC website. As an extensive amount of information resources with regard to welding health and safety was collected during correction of the Health 605 Report, proposed and had accepted that the Health 605 report be supplemented by a Booklet on Welding Fume and a Welding Resources CD.

Produced both of these and obtained endorsement for them from the Southern African Institute of Welding. The CD contains information from around the world on health and safety for welding and allied processes. This includes links to national and International Standards on welding health and safety, South African legislation and Internet resources. In recent years several International Standards on the measurement and control of welding fume have been published by the International Standards Organization. Reference to these was included in the booklet and CD.

SIMRAC Project on the History of MMOA and MVS

The Mine Medical Officers Association (MMOA) journal was first published in 1921 and continued for over sixty years providing a valuable source of clinical information and on the health protection of a large body of men.

A SIMRAC project SIM 02 09 02 Collation of historical occupational health and accident information in the SA mining industry included full text copies of all the MMOA journals. Unfortunately the way the CDs were constructed required all the contents of the CDs to be loaded onto a PC (about 1 GB). Asked by SIMRAC to sort this problem out and created a two CD set which were self starting and did not load any files other than an initial home page onto the PC. While working on the improved CDs, requested by the MMOA to create an electronic

copy of *Doctors of the Mines* (1971 history of the MMOA) and add to the CD. To compliment this he also created and added an electronic copy of the *History of the Mine Ventilation Society of South Africa* (MVS).

Obtained the ten-year indexes to the MVS Bulletin/Journal and created PDF files of these for rapidly searching the MVS journal index from 1948 to the present day. The revised Historical CD set was launched and presented at the MMOA 2004 Congress.

The extensive MVS publication *Environmental Engineering in South African Gold Mines* is to be updated by the MVS. Provided (with the assistance of the Chamber) the MVS with electronic copies of the various chapters and published to a website for the MVS to have access to copies of the original chapters. Asked by the MVS to contribute as a chapter author to the revised manual and created a chapter on OELs.

Electronic Copies of the OHS Commissions

In South Africa there are over twenty key health and safety Commissions of Enquiry yet a simple listing of all the enquiries did not exist and even the most recent, the *Leon Commission Report* was not available in electronic format. Dr. Stanton has corrected this and a comprehensive listing of South African health and safety enquiries is now available and full electronic text of the last five major Commissions/Committees was made available on the web at the Commissions section at asosh.org and on a SIMRAC CD. This includes the Marais 1963 (Mine Safety) Erasmus 1976 (Occupational Health), Nieuwenhuizen 1981 (Compensation), Leon 1995 (Mine Health and Safety) and the Benjamin 1997 (National Health and Safety Council) reports. This was no small task as the reports were totally recreated rather than use of PDF page images of the reports.

The Commission reports were added to the Internet and included on the SIMRAC Historical two CD set. The availability of these electronic copies makes it very easy to quickly obtain a variety of information. For example in July 2004 requested by Brink Cohen le Roucx Inc to provide information on the legislation and controls in place in South Africa in the 1970s for asbestos.

Work to Improve Chemical Control

Proposed and had accepted the SIMRAC project SIM 04-09-02 to compile an inventory of all chemical substances and trade name products found on SA mines, the annual usage rate of each chemical substance and to estimate the number of mine workers potentially exposed to chemical hazards. This was based on an occupational health survey in mining conducted in the USA.

Prepared the Chapter on "Chemical Hazards" in the 2001 SIMRAC Handbook of Occupational Health Practice in the South African Mining Industry.

EUROPEAN REACH PROGRAMME

Followed the developments in Europe and South Africa on the European REACH programme and prepared a summary on the issues for Chamber HPC Committee.

NOISE AND VIBRATION

Chamber of Mines/ASOSH Noise Seminar

With all the changes in noise legislation requested by the Chamber in December 2001 to organise a Noise seminar at short notice. This one-day seminar was organised under the Chamber/ ASOSH banner and held on the 26th February 2002. Some 330 persons attended the seminar, which is one of the most successful noise seminars with regard to attendance ever arranged in South Africa. Dealt with Audiometry, Compensation, Hearing Conservation Programmes, Noise Control and Hearing Protective Devices. All the papers presented were published on the Internet.

National Standard SANS 10083:2003

Through a working group under SABS TC 76, Acoustics, electro-acoustics and vibration, coordinated mining industry input into the Draft South African National Standard SANS 10083:2003 The measurement and assessment of occupational noise for hearing conservation purposes. Three additions to the earlier SABS 083 standard were specifically requested by the mining industry (1) Personal dosimetry to be allowed (2) Type 2 Sound Level Metres to be allowed and (3) compatibility with Instruction 171. All three requirements were met in SANS: 10083:2003.

DME Noise Guidelines Published 2002

Contributed to this extensive document through the Occupational Hygiene Sub-Committee of MOHAC.

Noise and Vibration Internet Page

Extensive links to noise and vibration information from around the world was provided via the asosh.org web site and its mirror at sheafrica.info.

Noise and Vibration Information Resources CD

Prepared an extensive Noise and Vibration Information Resources CD published under the SIMRAC Project Health 806 on Technology Transfer in Noise and Vibration. The CD contains a vast amount of information on noise and vibration from around the world with emphasis on mining. All the Health 806 deliverables are included on the CD including a Best Practice document on hearing conservation prepared by the CSIR plus all the published SIMRAC reports on noise and vibration and related. The CD also lists the ISO, IEC, CEN and SANS standards on noise and vibration and provides copies of the EU Directives on Noise and Vibration plus all the SA legislation on noise and vibration and the publications of the RMA on Compensation.

CD also contains extensive resources on noise and vibration from Coal Services (Australia), HSE (UK), ILO, WHO, OSHA (USA), MSHA (USA), NIOSH (USA), DoL (New Zealand) and WorkSafe (Australia).

The CD was published in March 2006.

SILICOSIS PREVENTION

SIMRAC SIM 02-06-03

Largely initiated this project and headed the project team for Phase 1 to scope the Phase 2 work. Included regional workshops on silicosis elimination in 2002/03 and National Workshops in 2003/4. Links to information on silicosis and silicosis elimination from around the world was added to a website http://silicosis.sheafrica.info and the Silica page at ASOSH.org.

Industry Work on Silicosis

Reviewed the mining industry work on silicosis prevention from 1902 to the present day, provided a detailed chronological listing of efforts in South Africa to combat airborne respirable dust and made recommendations for the future. Presented on South African activities in April 2004 at the ASTM *Symposium on sampling and analysis of silica* held in Salt Lake City, USA. In June 2004 prepared the core contents for a Business Unity South Africa (BUSA) presentation at the launch of the South African National Silicosis Elimination Programme.

Information Package on Silicosis Prevention

Prepared package for OHS practitioners, which consists of an A4 size Booklet (50 pages) on Best Practice for Silicosis Prevention, a CD with extensive information resources from around the world plus two DVDs with eleven silicosis prevention videos. The package obtained tripartite approval through the MHSC and was issued in April 2006.

The Silicosis Prevention Information Resources CD contains relevant information from Australia, Europe, North America and South Africa. The section on the Chamber of Mines of South Africa includes information on dust control efforts in South African mines from 1902. The Mine Ventilation Society of South Africa (MVS) section includes a full listing of dust related papers published in the Bulletin/ Journal of the MVS from 1948 (over 250 papers). A selection of important papers from the MVS Bulletin/ Journal on dust are included as full text PDF page image files (some 100 papers) on the CD. Further information on SIMRAC Project SIM 03-06-03 and completed SIMRAC reports on airborne dust and related are in the SIMRAC section. The CD/ DVD labels and CD/ DVD case inserts are based on the images of old Chamber Posters.

The majority of the Chamber documents in the public domain on dust are included on the CD from 1904 (International competition on dust control) up to 2006 (Best Practice Document on Silicosis Prevention). The extensive anti-dust campaign established by the Chamber in 1965 has been reviewed and all the publicly available documents in English from the 1960s campaign are on the final CD including:

Booklets, scripts of the film *Dust is Dangerous* and the associated gramophone records and 35 mm Slide Sets on dust issued, examples of Postcards and Message cards used by management to provide congratulatory messages on good dust control, the 1968 Poster collection, all the articles in *The Reef* magazine and *Mining News* and all the anti-dust competitions arranged (including Colouring, Lectures, Posters, Record, Slogans, Spot the Errors and Vintage Car Cards).

Key films on dust produced by the Chamber have been obtained from the National Film Archives including the 1921 silent film *The Dust That Kills* and the 1967 cartoon film *Dust is Dangerous* in Afrikaans, English and Fanakalo. The English version was added to DVD 2 as a sixth video (Silicosis Prevention Information Resource). The author has had difficulty in tracking down the Chamber 1960s anti-dust material and was unable to locate copies of the slide sets and gramophone records developed.

It was planned that a Bonus CD would be issued with the 1960s slide sets as PowerPoint files and some other material from the HSE in the UK (Silica Essentials) and DME (Airborne Pollutants Guideline) when published.

The work of the mining industry to combat airborne dust has now been properly documented and shows clearly the vast volume of work done. From the 1960s files, examples have also been obtained of the work done by Anglo American to combat dust.

A chronological listing of events that have occurred on dust control in the SA mining industry has been prepared and further information is provided in a document on *Efforts in South Africa* to Combat Silicosis 1902 - 2005. Both are on the *Information Resources CD*.

National Working Group (NWG) on Silicosis Elimination

Appointed in July 2004 by the Chief Inspector, Department of Labour, on the National Working Group for Silicosis Elimination. Presentations made on the Socio-Economic Aspects of Silicosis at the North-West and Limpopo provincial workshops. Workshop at the Chamber in October 2004 to develop budget for NWG and National Programme.

PhD on Silicosis and SORDSA Booklet on Silicosis (at NCOH)

Obtained permission from the University of the Witwatersrand to complete and submit for a posthumous PhD the thesis of Mr. REG Rendall, NCOH, who died in 1995. The thesis titled *The nature of dusts in the air of gold mines and foundries and the risk of silicosis* was completed in June 1999 and submitted to the University. Presentations to Wits on thesis while at Chamber.

Principle author for NCOH Alert on Crystalline Silica: Health Hazards and Precautions.

Guest Editor: Guest editor for the Journal Occupational Health Souther Africa for a special edition (January/February 2006) on Silicosis Prevention.

ISO Working Group on Sampling Strategies, Analysis and Quality Control for Silica

Met with the SABS and DME in 2005 to explain the importance of South African representation on the ISO Working Group dealing with Silica. Following these meetings the SABS obtained member status on the ISO Technical Committee 146 Sub-Committee 2 Workplace Atmospheres. South Africa thus now has member status on the Working Group 6 (WG 6) dealing with Silica. The SABS now have a mirror committee in South Africa to monitor the work of WG 6. The SABS also fund delegates from the mirror committee to attend the WG 6 meetings around the world.

The chairman of the ISO Technical Committee 146 (from USA) and the Chairman of the WG 6 (from UK) came to the IOHA 2005 International Conference and presented on the work of TC 146 and WG 6. Their abstracts, papers and presentations are on the IOHA 2005 website.

OCCUPATIONAL HYGIENE EXAMINER

Prior to joining the Chamber Dr. Stanton together with Prof. Rees, NCOH, held the first discussions with the University of the Witwatersrand to establish a higher degree in occupational hygiene. Left the NCOH to join the Chamber of Mines so was not involved in the course development but has acted as the External Examiner for the Wits DPH, MPH Occupational Hygiene course since its development.

Established (1996) and has been the lead BOHS Examiner for South Africa for their professional occupational hygiene examinations and was until 2003 on the Examination Board and an Examiner for SAIOH.

In July 2004 acted as an External Examiner for a PhD thesis from the Victoria University of Technology, Australia. Title of PhD submission: *The Control Of Diesel Particulates In Underground Coal Mines*.

The establishment of the BERBOH (now BOHS) examinations in South Africa has led to the first professionally qualified occupational hygienists in the mining industry. The DPH/MPH course has allowed DME and mining industry staff to attend a part-time university course and obtain a higher degree in occupational hygiene. Many mining industry personnel have sat and obtained the SAIOH occupational hygiene examinations.

PROVISION OF INFORMATION

Regularly receives from around the world requests for information and with the extensive Internet resources he has created he has to date never failed to be able to provide the information rapidly. The asosh.org website was listed in the top 20 OHS websites in the world.

While at the Chamber created a web page called Quick Links at asosh.org to rapidly source health and safety information on any subject from around the world and a web page called SiteSearch to rapidly search the top health and safety sites around the world for health and safety information. Quick Links and SiteSearch are probably the only two webpage's required to

rapidly obtain health and safety information from South Africa and around the world. Regularly received thanks from health and safety practitioners from around the world for the creation of these two pages.

During stay at the Chamber, created the most extensive web pages with regard to links to mine health and safety information and silicosis prevention.

WHO/ILO JOINT EFFORT ON OHS FOR AFRICA (AJE)

Webmaster for the WHO/ILO Joint Effort on OHS for Africa (AJE). The website SHEAfrica.info included country pages for all African countries. Also created for the AJE an online 2004 calendar with OHS (including mining) events from around the world and two PDF versions of this, one with images of South Africa.

SOCIETIES

Final Amalgamation of two Opposing Occupational Hygiene Societies

In the 1990s there were two competing occupational hygiene societies in South Africa (OHASA formed in 1983 and IOHSA formed in 1991). After some years of often-heated discussion a joint statement regarding amalgamation of OHASA and IOHSA was agreed and an interim society OHASA (Incorporating IOHSA) was formed in 1999.

At a special OHASA (Incorporating IOHSA) Council meeting arranged and prepared for by Dr. Stanton in 2000 a new name and logo were finally agreed upon. The Southern African Institute for Occupational Hygiene (SAIOH) with an independent Certification Board (SAIOH-CB) was finally formed with Dr. DW Stanton as the SAIOH President. Also served on the Certification Board to try to ensure a plan was in place to raise the examinations standards.

The SAIOH examinations were incorporated into regulations by the DME and to be an Approved Inspection Authority (AIA) under the DoL, SAIOH registration as an occupational hygienist is required.

ASOSH and Member Societies

Reelected the President of the Association of Societies for Occupational Safety and Health (ASOSH) on a number of occasions and has established websites for all the core disciplines in health and safety in South Africa (Occupational Health Nurses, Occupational Health Doctors, Safety Officers, Occupational Hygienists, Mine Medical Officers and Safety Officers). South Africa was the 4th country in the world with all the core disciplines in OHS on the web at their own domains.

HISTORY OF OCCUPATIONAL HEALTH ASSOCIATIONS

In 2003 the International Commission on Occupational Health (ICOH) published a book on the history of occupational health associations around the world. The South African chapter was written by Dr. Stanton, which covers the formation of the Mine Medical Officers Association (MMOA), the Mine Ventilation Society of South Africa (MVSSA), the South African Society of Occupational Health Nursing Practitioners (SASOHN), the South African Society of Occupational Medicine (SASOM) and the Southern African Institute for Occupational Hygiene (SAIOH). The history of occupational health in South Africa is intrinsically linked to the development of the mining industry and a section on the Chamber of Mines of South Africa and its important role in the development of occupational health in South Africa is included.

Personally thanked by the Editor Prof. A.G. Grieco at ICOH 2003 in Brazil for a very valuable contribution to the ICOH Book from South Africa.

IOHA 2005 INTERNATIONAL SCIENTIFIC CONFERENCE

The International Occupational Hygiene Association (IOHA) has been instrumental in recent years in working with the ILO in the development of health and safety management systems and is currently working with the WHO on Silicosis Elimination. To promote occupational hygiene globally IOHA holds every two to three years International Scientific Conferences around the world. South Africa through SAIOH made a bid to host the IOHA 6th International Scientific Conference. The bid was successful and IOHA 2005 was hosted in South Africa in the Pilanesberg National Park 19-23 September 2005. This was the first IOHA Conference in Africa. The bid was prepared and presented to IOHA in Norway by Dr. Stanton, who was then appointed President and Chair of the Organising Committee and later Chair of the International Scientific Committee to vet the papers (due to the withdrawal of the originally appointed Scientific Committee Chair). Conference was hosted by SAIOH in conjunction with the Mine Ventilation Society of South Africa (MVS) and IOHA.

A meeting of the WHO Network of Collaborating Centres in Occupational Health from around the world was held in Johannesburg prior to IOHA 2005 and the ILO and WHO discussed progress on their Joint Initiative on Promoting Occupational Health and Safety in Africa. Special sessions held at IOHA 2005 on Silicosis Elimination.

IOHA 2005 also included the 3rd International Control Banding Workshop (3ICBW).

EMPLOYER MINING HEALTH AND SAFETY SUMMIT 2006

Organised the Employer Mining Health and Safety Summit in June 2006 at the Johannesburg Country Club. Included the CEOs, executive management and senior OHS personnel from the major mining companies plus some thirty exhibitors. Held largely to address the MHSC occupational health milestones for silicosis prevention and prevention of noise induced hearing loss.

Final Note:

Dr. Stanton stopped web development work in 2007 and is no longer involved with society websites (iosm.org, mmoa.org.za, saioh.org, sasohn.org.za, sasom.org.za, sastm.org, etc.). The asosh.org (for ASOSH) and sheafrica.info (for the WHO) sites are now closed down.