

Unit IDB - Hazardous substances and agents

Reference information provided, in particular web links, was correct as of 03/04/17.

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Element IB1 - Managing occupational health

Occupational Health Services Convention (No. 161), C161, 1985, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_ILO_CODE:C161

Promotional Framework for Occupational Safety and Health Recommendation R197, 2006, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:R197

Occupational Safety and Health Convention, C155, 1981, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C155

Occupational Safety and Health Recommendation, R164, 1981, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312502:NO

Protocol of 2002 to the Occupational Safety and Health Convention, P155, 1981, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312338:NO

A healthy return, Good practice guide to rehabilitating people at work,

<http://www.iosh.co.uk/~media/Documents/Books%20and%20resources/Guidance%20and%20tools/A%20healthy%20return.pdf>

Technical and ethical guidelines for workers' health surveillance, ILO guidance,

http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/normativeinstrument/wcms_177384.pdf

Safe, Effective, Quality Occupational Health Service (SEQOHS), <https://www.seqohs.org/>

Workplace health: long-term sickness absence and incapacity to work, NICE guidelines (PH19),

<https://www.nice.org.uk/guidance/PH19>

Encyclopaedia of Occupational Health and Safety, ILO <http://www.iloencyclopaedia.org/preface-69563>

Element IB2 - Identification, assessment and evaluation of hazardous substances

Chemical Convention, C170, 1990, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312307

Chemical Recommendation R177, 1990, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312515

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), 18 December 2006 and subsequent amendments,

<https://osha.europa.eu/en/legislation/directives/regulation-ec-no-1907-2006-of-the-european-parliament-and-of-the-council>

Ambient factors in the Workplace, International Labour Organisation (ILO) Code of Practice (CoP),

ISBN 92-2-11628-X, http://www.ilo.org/safework/info/standards-and-instruments/WCMS_107729/lang--en/index.htm

Encyclopaedia of Occupational Health and Safety, ILO, <http://www.iloencyclopaedia.org/preface-69563>

Globally Harmonized System of Classification and Labelling of Chemicals (GHS),

http://www.unece.org/trans/danger/publi/ghs/ghs_rev06/06files_e.html#c38156

Safety in the Use of Chemicals at Work, International Labour Office (ILO) Code of Practice (CoP), ILO, 1993:

Section 6: Operational control measures

Section 7: Design and installation

ISBN: 92-2-108006-4 http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/normativeinstrument/wcms_107823.pdf

Working with substances hazardous to health, INDG136, HSE Books,

<http://www.hse.gov.uk/pubns/indg136.pdf>

Element IB3 - The control of hazardous substances

Asbestos Convention, C162, 1986, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312307:NO

Asbestos Recommendation, R172, 1986, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312510:NO

Chemicals Convention, C170, 1990, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312315:NO

Chemicals Recommendation, R177, 1990, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312515:NO

Directive 89/656/EEC - use of personal protective equipment,

<https://osha.europa.eu/en/legislation/directives/4>

Occupational Health Services Convention C161, 1985, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C161

Promotional Framework for Occupational Safety and Health Recommendation R197, 2006, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:R197

Occupational Safety and Health Convention, C155, 1981, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C155

Occupational Safety and Health Recommendation, R164, 1981, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312502:NO

Protocol of 2002 to the Occupational Safety and Health Convention, P155, 1981, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312338:NO

Ambient factors in the Workplace, International Labour Organisation (ILO) Code of Practice (CoP),

ISBN 92-2-11628-X, http://www.ilo.org/safework/info/standards-and-instruments/WCMS_107729/lang--en/index.htm

Safety in the use of asbestos, ILO Code of Practice, ISBN: 92-2-103872-6,

http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/normativeinstrument/wcms_107843.pdf

Safety in the Use of Chemicals at Work, International Labour Office, Code of Practice (CoP), 1993, ILO, ISBN: 92-2-108006-4:

Section 6: Operational control measures

Section 7: Design and installation

Asbestos: The survey guide, HSG264, HSE, ISBN: 978-0-7176-6502-0,

<http://www.hse.gov.uk/pubns/priced/hsg264.pdf>

Controlling airborne contaminants at work; A guide to local exhaust ventilation (LEV), HSG258, HSE,

ISBN: 978-0-7176-6415-3, <http://www.hse.gov.uk/pubns/priced/hsg258.pdf>

Control of lead at work, Approved Code of Practice and guidance, L132, HSE, ISBN: 978-0-7176-2565-6

<http://www.hse.gov.uk/pubns/priced/l132.pdf>

Managing asbestos in buildings: A brief guide, INDG223(rev5), HSE,

<http://www.hse.gov.uk/pubns/indg223.pdf>

Personal protective equipment (PPE) at work; A brief guide, INDG174, HSE,

<http://www.hse.gov.uk/pubns/indg174.pdf>

Respiratory protective equipment at work; A practical guide, HSG53, HSE, ISBN: 978-0-7176-6454-2

<http://www.hse.gov.uk/pubns/priced/hsg53.pdf>

Working with substances hazardous to health, INDG136, HSE,

<http://www.hse.gov.uk/pubns/indg136.pdf>

Encyclopaedia of Occupational Health and Safety, ILO, [http://www.iloencyclopaedia.org/preface-](http://www.iloencyclopaedia.org/preface-69563)

[69563](http://www.iloencyclopaedia.org/preface-69563)

Element IB4 - The monitoring and measuring of hazardous substances

Occupational Health Services Convention C161, 1985, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C161

Promotional Framework for Occupational Safety and Health Recommendation R197, 2006, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:R197

Ambient factors in the Workplace, International Labour Organisation (ILO) Code of Practice (CoP), ISBN 92-2-11628-X, [http://www.ilo.org/safework/info/standards-and-](http://www.ilo.org/safework/info/standards-and-instruments/WCMS_107729/lang--en/index.htm)

[instruments/WCMS_107729/lang--en/index.htm](http://www.ilo.org/safework/info/standards-and-instruments/WCMS_107729/lang--en/index.htm)

Documentation of the Threshold Limit Values for Physical Agents, ACGIH, ISBN: 978-1-607260-45-5

Encyclopaedia of Occupational Health and Safety, ILO, <http://www.iloencyclopaedia.org/preface-69563>

NIOSH Manual of Analytical Methods, <http://www.cdc.gov/niosh/docs/2003-154/method-i.html>

Occupational exposure to airborne substances harmful to health, ILO Code of Practice, ISBN: 92-2-102442-3 http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/normativeinstrument/wcms_107851.pdf

Permissible Exposure Limits (PELs), OSHA, <https://www.osha.gov/dsg/annotated-pels/index.html>

Safety in the Use of Chemicals at Work, International Labour Office (ILO) Code of Practice (CoP), ILO, 1993:

Section 6: Operational control measures

Section 7: Design and installation

ISBN: 92-2-108006-4 http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/normativeinstrument/wcms_107823.pdf

Technical and ethical guidelines for workers' health surveillance, ILO guidance, ISBN: 92-2-110828-7 http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/normativeinstrument/wcms_177384.pdf

EH40/2005 Workplace exposure limits (as amended), HSE Books, ISBN: 978-0-7176-6446-7, <http://www.hse.gov.uk/pubns/books/eh40.htm>

HSE's Health Surveillance Cycle, <http://www.hse.gov.uk/health-surveillance/>

Methods for the Determination of Hazardous Substances (MDHS) guidance, <http://www.hse.gov.uk/pubns/mdhs/>



Monitoring strategies for toxic substances, HSG173, HSE Books, ISBN: 978-0-7176-6188-6,
<http://www.hse.gov.uk/pubns/books/hsg173.htm>

Working with substances hazardous to health, INDG136, HSE Books,
<http://www.hse.gov.uk/pubns/indg136.pdf>

Element IB5 - Biological agents

Ambient factors in the Workplace, International Labour Organisation (ILO) Code of Practice (CoP), ISBN 92-2-11628-X, http://www.ilo.org/safework/info/standards-and-instruments/WCMS_107729/lang--en/index.htm

Encyclopaedia of Occupational Health and Safety, ILO, <http://www.iloencyclopaedia.org/preface-69563>

Health, Safety and Environment, A Series of Trade Union Educational Manuals for Agricultural Workers, ILO, ISBN: 92-2-115192-1, http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/instructionalmaterial/wcms_110199.pdf

An ILO code of practice on HIV/AIDS and the world of work, ILO, ISBN: 92-2-112561-0, http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---ilo_aids/documents/publication/wcms_113783.pdf

Control of Substances Hazardous to Health, Approved Code of Practice and guidance, L5, HSE, ISBN: 978-0-7176-6582-2, <http://www.hse.gov.uk/pubns/priced/l5.pdf>

Element IB6 - Noise and vibration

Working Environment (Air, Pollution, Noise and Vibration) Convention, 1977 (No 148) (C148) and Recommendation (R156),

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C148

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:R156

Ambient factors in the Workplace, International Labour Organisation (ILO) Code of Practice (CoP), ISBN 92-2-11628-X, http://www.ilo.org/safework/info/standards-and-instruments/WCMS_107729/lang--en/index.htm

Encyclopaedia of Occupational Health and Safety, ILO, <http://www.iloencyclopaedia.org/preface-69563>

Protection of workers against noise and vibration in the working environment, ILO Code of Practice, ISBN: 92-2-101709-5, http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/normativeinstrument/wcms_107878.pdf

Technical and ethical guidelines for workers' health surveillance, ILO guidance, ISBN: 92-2-110828-7 http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/normativeinstrument/wcms_177384.pdf

Hand-arm vibration exposure calculator, HSE, <http://www.hse.gov.uk/vibration/hav/vibrationcalc.htm>

Noise calculators, HSE, <http://www.hse.gov.uk/noise/calculator.htm>

Rapid Upper Limb Assessment Tool (RULA), <http://www.rula.co.uk/>

Whole body vibration calculator, HSE, <http://www.hse.gov.uk/vibration/wbv/calculator.htm>

Element IB7 - Radiation

Radiation Protection Convention (No. 115), C115, 1960, ILO

http://www.ilo.org/dyn/normlex/en/f?p=1000:12100:0::NO::P12100_ILO_CODE:C115%20

Radiation Protection Recommendation, R114, 1960, ILO

http://www.ilo.org/dyn/normlex/en/f?p=1000:12100:0::NO::P12100_ILO_CODE:R114

Ambient factors in the Workplace, International Labour Organisation (ILO) Code of Practice (CoP),

ISBN 92-2-11628-X, http://www.ilo.org/safework/info/standards-and-instruments/WCMS_107729/lang--en/index.htm

Encyclopaedia of Occupational Health and Safety, ILO, <http://www.iloencyclopaedia.org/preface-69563>

Guidance for Employers on the Control of Artificial Optical Radiation at Work Regulations (AOR), HSE, 2010, <http://www.hse.gov.uk/radiation/nonionising/employers-aor.pdf>

Laser radiation: safety advice, <https://www.gov.uk/government/publications/laser-radiation-safety-advice/laser-radiation-safety-advice>

Radon in the workplace, HSE, <http://www.hse.gov.uk/radiation/ionising/radon.htm#testingradon>

Safety of laser products; equipment classification and requirements, BS 60825-1:2014, ISBN: 978-0-580-77969-5

Element IB8 - Mental ill-health and dealing with violence and aggression at work

Encyclopaedia of Occupational Health and Safety, ILO, <http://www.iloencyclopaedia.org/preface-69563>

Management of alcohol and drug related issues in the workplace, ILO Code of Practice, 1999, ISBN: 92-2-109455-3 http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/normativeinstrument/wcms_107799.pdf

Workplace violence in services sectors and measures to combat this phenomenon, ILO, http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/normativeinstrument/wcms_107705.pdf

Drug misuse at work a guide for employers, INDG91, ILO, <http://www.hse.gov.uk/pubns/indg91.pdf>

HSE Management Standards, HSE, <http://www.hse.gov.uk/stress/standards/>

Managing the causes of work-related stress; A step by step approach to using the management standards, HSG218, HSE, ISBN: 978-0-7176-6273-9 <http://www.hse.gov.uk/pubns/priced/hsg218.pdf>

Violence at work: A guide for employers, INDG69, HSE, <http://www.hse.gov.uk/pubns/indg69.pdf>

Element IB9 - Musculoskeletal risks and controls

Encyclopaedia of Occupational Health and Safety, ILO, <http://www.iloencyclopaedia.org/preface-69563>

Ergonomic Checkpoints: Practical and easy-to-implement solutions for improving safety, health and working conditions, second edition, ILO Geneva 2010, ISBN 978-92-2-122666-6, http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_120133.pdf

Assessment of Repetitive Tasks (ART) Tool, <http://www.hse.gov.uk/pubns/indg438.pdf>

Ergonomic Guidelines for Manual Material Handling, NIOSH, <http://www.cdc.gov/niosh/docs/2007-131/pdfs/2007-131.pdf>

Manual handling assessment charts (MAC Tool), <http://www.hse.gov.uk/msd/mac/>

Manual Handling, Manual Handling Operations Regulations 1992 (as amended), Guidance on Regulations, L23, HSE Books, ISBN: 978-0-7176-2823-0, <http://www.hse.gov.uk/pUbns/priced/l23.pdf>

Seating at Work, HSG57, third edition 2002, HSE Books, ISBN: 978-0-7176-1231-4, <http://www.hse.gov.uk/pUbns/priced/hsg57.pdf>

Understanding ergonomics at work, INDG90(rev2), HSE Books, <https://www.soas.ac.uk/healthandsafety/computers/file61451.pdf>

Upper Limb Disorders in the Workplace - A Guide, second edition 2002, HSG60, HSE Books, ISBN: 978-0-7176-1978-8, <http://www.hse.gov.uk/pubns/books/hsg60.htm>

Variable manual handling assessment chart (V-MAC) tool, <http://www.hse.gov.uk/msd/mac/vmac/>

Work Related Upper Limb Disorders - A Guide, HSG60, HSE Books, ISBN: 978-0-7176-1978-8, <http://www.hse.gov.uk/pubns/books/hsg60.htm>

Working with display screen equipment, L26, HSE Books, ISBN: 978-0-7176-2582-6, <http://www.hse.gov.uk/pubns/books/l26.htm>

Element IB10 - Work environment risks and controls

Hygiene (Commerce and Offices), ILO Convention (No 120), C120, 1964, ILO

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C120

Hygiene (Commerce and Offices) Recommendation, R120, ILO, 1964

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312458:NO

Welfare Facilities Recommendation (No. 102), R102, 1956, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=1000:12100:0::NO::P12100_ILO_CODE:R102

Working Environment (Air, Pollution, Noise and Vibration) Convention (No 148), C148, 1977, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C148

Working Environment (Air, Pollution, Noise and Vibration) Recommendation R156, 1977, ILO,

http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:R156

Ambient factors in the Workplace, International Labour Organisation (ILO) Code of Practice (CoP), ISBN 92-2-11628-X

Encyclopaedia of Occupational Health and Safety, ILO

Lighting at Work, HSG38, second edition 1997, HSE Books, ISBN: 978-0-7176-1232-1

<http://www.hse.gov.uk/pubns/priced/hsg38.pdf>