



## Health surveillance requirements in the electroplating industry

### Engineering Sheet No 5 (rev)

#### Introduction

Regulation 5 of the Management of Health and Safety at Work Regulations 1992 and regulation 11 of the Control of Substances Hazardous to Health Regulations 1994 (COSHH) require that, where appropriate for the protection of the health of employees, employers shall ensure they have suitable health surveillance. The need for health surveillance should be established at the time of the risk assessment.

Health surveillance should be used alongside the prevention or adequate control of exposure, not as a substitute.

The primary purpose of health surveillance is to protect the health of individual employees who may be at risk. By gathering information on their state of health, any deterioration may be identified at an early stage and appropriate measures taken to rectify the situation or prevent further significant harm.

Problems revealed by health surveillance may also indicate failures in control measures or unsuitable working practices requiring prompt review.

#### Health surveillance and records

Health surveillance is a collective term for a wide range of procedures including:

- Collecting, maintaining and reviewing health records, which should always be kept whenever health surveillance is appropriate;
- Checks for signs of harm by a responsible person (eg specially trained supervisor or first aider);
- Enquiries, eg pre-employment enquiries about present or past history of asthma etc, inspections and examinations by a qualified person (eg: occupational health nurse);
- Medical surveillance under the supervision of a doctor with knowledge of occupational health.

Not all of these procedures are always necessary and will depend on the level of health surveillance considered appropriate for any particular risk.

Health records required by COSHH should include the following information for all employees subject to surveillance:

- Surname, forenames, permanent address and postcode;

- Sex and date of birth;
- National Insurance number;
- Date of commencement of present employment; and
- Record of previous jobs involving exposure to those substances which require health surveillance in present employment.

The COSHH health records should also include conclusions of all other health surveillance procedures, the date on which they were carried out, and by whom. They should indicate the employee's fitness for work and may include records of medical or nursing decisions but not any confidential clinical data.

Such clinical records made from the health surveillance procedures are confidential to the occupational health professional concerned. Records should be kept for 40 years after the last recorded entry and should be offered to HSE if your business ceases trading. Employers should ensure that the people they employ to give occupational health advice are properly qualified to do so.

Details of qualified occupational health practitioners able to provide health surveillance may be obtained from your local Employment Medical Advisory Service of HSE.

The table overleaf gives some examples in electroplating where, unless the assessment shows otherwise, health surveillance will normally be necessary.

People working with electroplating solutions who are under health surveillance should be trained to recognise any harmful effects and to report them to a named responsible person. Early action can then be taken to initiate further medical investigation and, if appropriate, make changes to the work process to protect their health.

#### HSC/HSE publications

Management of Health and Safety at Work Regulations 1992 Approved Code of Practice L21 HSE Books 1992 ISBN 0 7176 0412 8

General COSHH ACOP (Approved Code of Practice) and Carcinogens ACOP and Biological Agents ACOP : Control of Substances Hazardous to Health Regulations 1994 L5 HSE Books 1997 ISBN 0 7176 1308 9

COSHH: The new brief guide for employers INDG136(rev) (single copies free; ISBN 0 7176 1189 2 for priced packs of ten copies)

Health risk management: a practical guide for managers in small and medium sized enterprises HSG137 HSE Books 1995 ISBN 0 7176 0905 7

| Hazardous substance/process  | Health risks                       | Health surveillance required   |
|--|------------------------------------|--|
| Chromium VI compounds (including chromic acid and chromate solutions, or the mist/spray from their use in electrolytic plating or oxidation of metals) | Ulceration of the nose/skin        | Regular inspection of skin by responsible person at intervals advised by a doctor, or at least once a month (more frequently where the rate of incidence or severity demands it). In some cases it may be more effective for this to be done by an occupational health nurse. Employees should report sore, red or itching skin and cases of suspected dermatitis must be referred to a doctor or nurse. |
|  | Occupational asthma                | Employees should report any respiratory symptoms to a responsible person; positive symptoms must be referred to a doctor or nurse.   |
| As for above, but excluding passivation  | Occupational cancer                | Health records as previously described must be maintained.   |
| Nickel<br>(Plating and electroforming operations)  | Dermatitis and occupational asthma | Health surveillance by a doctor is required where exposure cannot be prevented and remains significant. Initial and regular health checks are required of skin condition and respiratory functions. (EH60 revised, paragraphs 44-52.)  |
| Strong acids and alkalis and other plating solutions/additives   | Dermatitis/burns/ulceration        | Inspection of skin on hands and forearms by a responsible person, as advised by a doctor or at least once a month.   |
| Degreasers and cleaners  | Dermatitis                         | As above.  |
| Cyanide solutions and sludge   | Acute poisoning                    | Health surveillance is not required for acute knock-down poisons but employers must make adequate first-aid and emergency treatment arrangements.  |
| Cadmium-containing powders and plating solutions   | Acute poisoning                    | Adequate first-aid facilities needed. For significant low level chronic exposure, measurements of kidney function are advisable (EH1 revised, paragraphs 28-32).   |
| Cadmium oxide  | Occupational cancer                | Health records as previously described must be maintained.   |
| Platinum salts   | Occupational asthma                | As for Cr VI compounds above.  |
| Oxides of nitrogen   | Respiratory effects                | Enquiries by a responsible person seeking evidence of respiratory symptoms related to work.  |

Surveillance of people exposed to health risks at work HSG61  
HSE Books 1990 ISBN 0 7176 0525 6

Nickel and its inorganic compounds: health and safety precautions EH60 (rev) HSE Books 1991 ISBN 0 11 885687 1

Chromium and its inorganic compounds: health hazards and precautionary measures EH2 (rev) HSE Books 1998  
ISBN 0 7176 1502 2

Cadmium: health and safety precautions EH1 (rev)  
HSE Books 1995 ISBN 0 7176 0825 5

Health surveillance of occupational skin disease MS24  
HSE Books 1991 ISBN 0 11 885583 2

Medical aspects of occupational asthma MS25 HSE Books  
1991 ISBN 0 11 885584 0

Health and safety in engineering workshops HSG129  
HSE Books ISBN 0 7176 0880 8

Nickel and you MSA14 (rev) \*

Chromium and you MSA16\*

Cadmium and you MSA7 (rev)\*

Preventing asthma at work L55 HSE Books 1994  
ISBN 0 7176 0661 9

\* Free leaflet available from HSE Books

## Other Publications

Safer Chromium Finishing - code of good practice for electrolytic hexavalent chromium processes and decorative chromium plating - a time for change? Metal Finishing Association Tel: 0121 237 1122/3 Fax: 0121 237 1124

The future availability and accuracy of the publications listed in this Information Sheet cannot be guaranteed.

HSE priced and free publications are available by mail order from HSE Books, PO Box 1999, Sudbury, Suffolk CO10 6FS  
Tel: 01787 881165 Fax: 01787 313995

HSE priced publications are also available from good booksellers.

For other enquiries ring HSE's InfoLine Tel: 0541 545500, or write to HSE's Information Centre, Broad Lane, Sheffield S3 7HQ.

HSE home page on the World Wide Web:  
<http://www/open.gov.uk/hse/hsehome.htm>

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