
STATUTORY INSTRUMENTS

1998 No. 543

The Control of Lead at Work Regulations 1998

Citation and commencement

1. These Regulations shall be cited as the Control of Lead at Work Regulations 1998 and shall come into force on 1st April 1998.

Interpretation

2.—(1) In these Regulations, unless the context otherwise requires—

“action level” means a blood-lead concentration of—

- (a) in respect of a woman of reproductive capacity, 25 µg/dl;
- (b) in respect of a young person, 40 µg/dl;
- (c) in respect of any other employee, 50 µg/dl;

“appointed doctor” means a registered medical practitioner appointed for the time being in writing by the Executive for the purpose of these Regulations;

“biological monitoring” includes the measuring of a person’s blood-lead concentration or urinary lead concentration in accordance in either case with the method known as atomic absorption spectroscopy;

“control measure” means a measure taken to prevent or reduce exposure to lead (including the provision of systems of work and supervision, the cleaning of workplaces, premises, plant and equipment, the use of engineering controls and the provision of personal protective equipment);

“employment medical adviser” means an employment medical adviser appointed under section 56 of the Health and Safety at Work etc. Act 1974;

“the Executive” means the Health and Safety Executive;

“glaze” does not include engobe or slip;

“lead” means lead (including lead alkyls, lead alloys, any compounds of lead and lead as a constituent of any substance or material) which is liable to be inhaled, ingested or otherwise absorbed by persons except where it is given off from the exhaust system of a vehicle on a road within the meaning of section 192 of the Road Traffic Act 1988(1);

“lead alkyls” means tetraethyl lead or tetramethyl lead;

“leadless glaze” means a glaze which contains less than 0.5 per cent lead by weight of the element lead calculated with reference to the total weight of the preparation;

“low solubility glaze” means a glaze which does not yield to dilute hydrochloric acid more than 5 per cent of its dry weight of a soluble lead compound when determined in accordance with a method approved in writing for the time being by the Health and Safety Commission;

“medical surveillance” includes clinical assessment and biological monitoring;

“occupational exposure limit for lead” means—

- (a) in relation to lead other than lead alkyls, a concentration of lead in the atmosphere to which any employee is exposed of 0.15 mg/m^3 ; and
- (b) in relation to lead alkyls, a concentration of lead contained in lead alkyls in the atmosphere to which any employee is exposed of 0.10 mg/m^3 ,
in either case—
 - (i) assessed by reference to the content of the element lead in the concentration; and
 - (ii) assessed in relation to an 8 hour time weighted average reference period when calculated by a method approved by the Health and Safety Commission;

“personal protective equipment” means all equipment which is intended to be worn or held by a person at work and which protects that person against one or more risks to his health or safety, and any addition or accessory designed to meet that objective;

“relevant doctor” means an appointed doctor or an employment medical adviser;

“significant” in relation to exposure to lead means exposure in the following circumstances—

- (a) where any employee is or is liable to be exposed to a concentration of lead in the atmosphere exceeding half the occupational exposure limit for lead; or
- (b) where there is a substantial risk of any employee ingesting lead; or
- (c) where there is a risk of contact between the skin and lead alkyls or other substances containing lead which can be absorbed through the skin;

“suspension level” means—

- (a) a blood-lead concentration of—
 - (i) in respect of a woman of reproductive capacity, $30 \text{ } \mu\text{g/dl}$;
 - (ii) in respect of a young person, $50 \text{ } \mu\text{g/dl}$;
 - (iii) in respect of any other employee, $60 \text{ } \mu\text{g/dl}$; or
- (b) a urinary lead concentration of—
 - (i) in respect of a woman of reproductive capacity, $25 \text{ } \mu\text{g Pb/g creatinine}$;
 - (ii) in respect of any other employee, $110 \text{ } \mu\text{g Pb/g creatinine}$;

“woman of reproductive capacity” means an employee in respect of whom an entry has been made to that effect in that employee’s health record pursuant to regulation 10(9) by a relevant doctor;

“young person” means a person who has not attained the age of 18 and who is not a woman of reproductive capacity.

- (2) Any reference in these Regulations to either—

- (a) an employee being exposed to lead; or
- (b) any place being contaminated by lead,

is a reference to exposure to or, as the case may be, contamination by lead arising out of or in connection with work which is under the control of the employer of such employees as may be affected by such exposure or contamination.

- (3) In these Regulations, unless the context otherwise requires—

- (a) a reference to a numbered regulation or Schedule is a reference to the regulation or Schedule in these Regulations so numbered; and
- (b) a reference to a numbered paragraph is a reference to the paragraph so numbered in the regulation or Schedule in which that reference appears.

Duties under these Regulations

3.—(1) Where any duty is placed by these Regulations on an employer in respect of his employees, he shall, so far as is reasonably practicable, be under a like duty in respect of any other person, whether at work or not, who may be affected by the work carried on by the employer except that the duties of the employer—

- (a) under regulation 10 (medical surveillance) shall not extend to persons who are not his employees other than employees of another employer who are working under the direction of the first-mentioned employer; and
- (b) under regulations 9 (air monitoring) and 11 (information, instruction and training) shall not extend to persons who are not his employees, unless those persons are on the premises where the work is being carried on.

(2) These Regulations shall apply to a self-employed person as they apply to an employer and an employee and as if that self-employed person were both an employer and an employee, except that regulation 9 (air monitoring) shall not apply to a self-employed person.

(3) The duties imposed by these Regulations shall not extend to the master or crew of a sea-going ship or to the employer of such persons in relation to the normal shipboard activities of a ship's crew under the direction of the master.

Prohibitions

4.—(1) No employer shall use any glaze other than a leadless glaze or a low solubility glaze in the manufacture of pottery.

(2) No employer shall employ a young person or a woman of reproductive capacity in any activity specified in Schedule 1.

Assessment of health risks created by work involving exposure to lead

5. Without prejudice to regulation 3 of the Management of Health and Safety at Work Regulations 1992(2), an employer shall not carry on any work which is liable to expose any employees to lead at work unless he has made a suitable and sufficient assessment of whether the exposure of any employees to lead is liable to be significant.

Prevention or control of exposure to lead

6.—(1) Every employer shall ensure that the exposure of his employees to lead is either prevented or, where this is not reasonably practicable, adequately controlled by means of appropriate control measures.

(2) So far as is reasonably practicable, the prevention or adequate control of exposure of employees to lead shall be secured by control measures other than the provision of personal protective equipment.

(3) Where, notwithstanding the control measures taken in accordance with paragraph (2), the exposure of any employee to lead is, or is liable to be, significant, the employer shall provide such employee with suitable and sufficient protective clothing.

(4) Where the control measures taken in accordance with paragraph (2) do not prevent, or provide adequate control of, exposure to airborne lead, then, in addition to taking those measures, the employer shall provide those employees with such suitable respiratory protective equipment as will adequately control such exposure.

(2) S.I. 1992/2051; as amended by S.I. 1994/2865 and S.I. 1997/135.

(5) Without prejudice to the generality of paragraph (1), in this regulation control of exposure shall, so far as the inhalation of lead is concerned, only be treated as being adequate if the occupational exposure limit for lead is not exceeded.

(6) Any personal protective equipment provided by an employer in pursuance of this regulation shall—

- (a) comply with any provision in the Personal Protective Equipment (EC Directive) Regulations 1992⁽³⁾ which is applicable to that item of personal protective equipment; or
- (b) where no provision referred to in paragraph (a) above applies, be of a type approved or conform to a standard approved, in either case, by the Executive.

(7) Every employer who provides any control measure, personal protective equipment or other thing or facility pursuant to this regulation shall take all reasonable steps to ensure that it is properly used or applied as the case may be.

(8) Every employee shall make full and proper use of any control measure, personal protective equipment or other thing or facility provided pursuant to this regulation and shall take all reasonable steps to ensure it is returned after use to any accommodation provided for it and, if he discovers any defect therein, shall report it forthwith to his employer.

(9) In the event of the failure of a control measure or an unforeseen event which, in either case, is likely to lead to a significant increase in exposure to lead, the employer shall ensure that only those persons who are responsible for the carrying out of repairs and other necessary work are permitted in the affected area and they are provided with suitable personal protective equipment.

(10) In this regulation, “adequate” means adequate having regard only to the nature and degree of exposure to lead and “adequately” shall be construed accordingly.

Eating, drinking and smoking

7.—(1) Every employer shall take such steps as are adequate to ensure, so far as is reasonably practicable, that his employees do not eat, drink or smoke in any place which is, or is liable to be, contaminated by lead.

(2) An employee shall not eat, drink or smoke in any place which he has reason to believe to be contaminated by lead.

(3) Nothing in this regulation shall prevent the provision and use of drinking facilities in a place which is liable to be contaminated by lead provided such facilities are not liable to be contaminated by lead and where they are required for the welfare of employees who are exposed to lead.

Maintenance, examination and testing of control measures

8.—(1) Every employer who provides any control measure to meet the requirements of regulation 6 shall ensure that it is, where appropriate, maintained in a clean condition, in an efficient state, in efficient working order and in good repair.

(2) Where engineering controls are provided to meet the requirements of regulation 6, the employer shall ensure that thorough examinations and tests of those controls are carried out—

- (a) in the case of local exhaust ventilation plant, at least once every 14 months; and
- (b) in any other case, at suitable intervals.

(3) Where respiratory protective equipment (other than disposable respiratory protective equipment) is provided to meet the requirements of regulation 6, the employer shall ensure that at suitable intervals thorough examinations and, where appropriate, tests of that equipment are carried out.

(3) [S.I. 1992/3139](#).

(4) Every employer shall keep a suitable record of the examinations and tests carried out in pursuance of paragraphs (2) or (3) and of any repairs carried out as a result of those examinations and tests, and that record or a suitable summary thereof shall be kept available for at least 5 years from the date on which it was made.

(5) Except where protective clothing is cleaned in accordance with paragraph (6), every employer shall ensure that protective clothing which may be contaminated by lead remains within the premises.

(6) Where an undertaking does not carry out cleaning of protective clothing on the premises, the employer shall ensure that—

- (a) the cleaning is carried out only by a suitably equipped laundry; and
- (b) contaminated clothing is transported in closed containers.

Air monitoring

9.—(1) Where any employees are liable to receive significant exposure to lead, the employer shall ensure that the concentration of lead in air to which his employees are exposed is measured in accordance with a suitable procedure.

(2) Where the exposure referred to in paragraph (1) is to lead other than lead alkyls, the procedure required by that paragraph shall accord with Articles 3 and 7 of, and Annex II to, Council Directive [82/605/EEC](#)(4) (on the protection of workers from the risks related to exposure to metallic lead and its ionic compounds at work) and with any specification established in accordance with the requirements of Article 4.4(b) of, and paragraph 4 of Part B of Annex IIa to, Council Directive [80/1107/EEC](#)(5) (on the protection of workers from the risks related to exposure to chemical, physical and biological agents at work).

(3) Subject to paragraph (4), the monitoring referred to in paragraph (1) shall be carried out at least every 3 months.

(4) Except where the exposure referred to in paragraph (1) arises wholly or in part from exposure to lead alkyls, the interval between each occasion of monitoring may be increased to a maximum of 12 months where—

- (a) there has been no material change in the work or the conditions of exposure since the last occasion of monitoring; and
- (b) the lead in air concentration for each group of employees or work area has not exceeded 0.10 mg/m^3 on the two previous consecutive occasions on which monitoring was carried out.

(5) The employer shall keep a suitable record of any monitoring carried out for the purpose of this regulation and that record or a suitable summary of it shall be kept available for at least 5 years.

Medical surveillance

10.—(1) Every employer shall ensure that each of his employees who is or is liable to be exposed to lead is under suitable medical surveillance by a relevant doctor where—

- (a) the exposure of the employee to lead is, or is liable to be, significant; or
- (b) a relevant doctor certifies that the employee should be under such medical surveillance.

(2) Medical surveillance required by paragraph (1) shall be carried out at such intervals and in accordance with such provisions as are set out in Schedule 2.

(4) OJ No. L247, 23.8.82, p. 12.

(5) OJ No. L327, 3.12.80, p. 8; as amended by Directive [88/642/EEC](#) (OJ No. L356, 24.12.88, p. 74).

(3) The employer shall ensure that an adequate health record in respect of each of his employees to whom paragraph (1) applies is made and maintained and that the record or a copy thereof is kept in a suitable form for at least 40 years from the date of the last entry made in it.

(4) Where the blood-lead concentration for any employee equals or exceeds the appropriate action level, the employer shall take steps to determine the reason or reasons for the high level of lead in blood and shall, so far as is reasonably practicable, give effect to measures designed to reduce the blood-lead concentration of that employee to a level below the appropriate action level.

(5) Where a relevant doctor has certified by an entry in the health record of any employee that in his professional opinion that employee should not be engaged in work which exposes the employee to lead or that the employee should only be so engaged under conditions specified in the record, the employer shall not permit the employee to be engaged in work which exposes that employee to lead except in accordance with the conditions, if any, specified in the health record, unless that entry has been cancelled by a relevant doctor.

(6) Where medical surveillance is carried out on the premises of the employer, the employer shall ensure that suitable facilities are made available for the purpose.

(7) An employee to whom this regulation applies shall, when required by his employer and at the cost of the employer, present himself during his working hours for such medical surveillance procedures as may be required for the purposes of paragraph (1) and shall furnish the relevant doctor with such information concerning his health as the relevant doctor may reasonably require.

(8) Where for the purpose of carrying out his functions under these Regulations a relevant doctor requires to inspect any workplace or any record kept for the purposes of these Regulations, the employer shall permit that doctor to do so.

(9) The employer shall ensure that in respect of each female employee whose exposure to lead is or is liable to be significant an entry is made in the health record of that employee by a relevant doctor as to whether or not that employee is of reproductive capacity.

(10) Where an employee or an employer is aggrieved by a decision recorded in the health record by a relevant doctor—

- (a) under paragraph (5) that an employee should not be engaged in work which exposes that employee to lead (or which imposes conditions on such work); or
- (b) under paragraph (9) that a female employee is of reproductive capacity,

the employee or employer may, by an application in writing to the Executive within 28 days of the date upon which the decision was notified to the employee or employer as the case may be, apply for that decision to be reviewed in accordance with a procedure approved by the Health and Safety Commission, and the result of that review shall be notified to the employee and employer and entered in the health record in accordance with the approved procedure.

Information, instruction and training

11.—(1) Every employer who undertakes work which is liable to expose any of his employees to lead shall provide that employee with such information, instruction and training as is suitable and sufficient for him to know—

- (a) the risks to health created by such exposure; and
- (b) the precautions which should be taken.

(2) Without prejudice to the generality of paragraph (1), the information provided under that paragraph shall include—

- (a) information on the results of any monitoring of exposure to lead carried out in accordance with regulation 9; and

- (b) information on the collective results of any medical surveillance undertaken in accordance with regulation 10 in a form calculated to prevent it from being identified as relating to any particular person; and
- (c) an explanation as to the significance of the information given pursuant to sub-paragraphs (a) or (b) above.

(3) Every employer shall ensure that any person (whether or not his employee) who carries out any work in connection with the employer's duties under these Regulations has the necessary information, instruction and training.

Exemption certificates

12.—(1) Subject to paragraph (2) and to any of the provisions imposed by the Communities in respect of the protection of workers from the risks related to exposure to lead and its compounds, the Executive may, by a certificate in writing, exempt any person or class of persons from all or any of the requirements or prohibitions imposed by these Regulations and any such exemption may be granted subject to conditions and to a limit of time and may be revoked by a certificate in writing at any time.

(2) The Executive shall not grant any such exemption unless having regard to the circumstances of the case and, in particular, to—

- (a) the conditions, if any, which it proposes to attach to the exemption; and
- (b) any other requirements or prohibitions imposed by or under any enactments which apply to the case,

it is satisfied that the health and safety of persons who are likely to be affected by the exemption will not be prejudiced in consequence of it.

Extension outside Great Britain

13. These Regulations shall apply to and in relation to any activity outside Great Britain to which sections 1 to 59 and 80 to 82 of the Health and Safety at Work etc. Act 1974 apply by virtue of the Health and Safety at Work etc. Act 1974 (Application outside Great Britain) Order 1995⁽⁶⁾ as those provisions apply within Great Britain.

Repeals and revocations

14.—(1) Sections 74, 128, 131 and 132 of the Factories Act 1961⁽⁷⁾ are hereby repealed.

(2) The instruments specified in column 1 of Schedule 3 are revoked to the extent specified in the corresponding entry in column 3 of that Schedule.

⁽⁶⁾ S.I. 1995/263.

⁽⁷⁾ 1961 c. 34.

Status: This is the original version (as it was originally made). This item of legislation is currently only available in its original format.

Signed by order of the Secretary of State.

3rd March 1998

Angela Eagle
Parliamentary Under-Secretary of State,
Department of the Environment, Transport and
the Regions