

WATCH COMMITTEE PAPER		WATCH/2008/6	
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Exemptions:			

## WATCH COMMITTEE

### Poultry Dust – A Control Approach

#### Issue

1. HSE's approach to reducing the risk of respiratory disease amongst workers on poultry farms.

#### Timing Considerations

2. Routine

#### Recommendation

3. WATCH is invited to consider the issue noted in this cover paper and to respond to the actions in paragraph 18.

#### Background

4. A study carried out by the Institute of Occupational Medicine on behalf of HSE into the baseline incidence of occupational ill health in agriculture in Great Britain showed that about 40% of farm workers exposed to organic dusts experienced respiratory symptoms. The prevalence of chronic bronchitis amongst farm workers was reported to be 6.5%. The study was completed in March 2005 – HSE Research Report RR370 'The Baseline Incidence of Occupational Health in Agriculture in Great Britain' (Annex 1; paper copies not available, link to web provided).

5. The National Statistics report "Occupational Health Statistics Bulletin 2002/03" confirmed that cases of work-related asthma were higher amongst agricultural workers than other groups, although the numbers were relatively low. Thirty four new cases of asthma were reported under THOR (SWORD and OPRA) between January 1996 and December 2002.

6. The agricultural workforce is about 404,000 (Defra census June 2003) with the majority exposed to organic dust during the course of their work.

7. In 2006 HSE's Agriculture and Food Sector proposed a three-year project to reduce the risk of respiratory disease in agriculture. A project plan was prepared (Annex 2). The project was approved under the Disease Reduction Programme but commuted to focus on workers on poultry farms so that the approach could be tested on a high risk group accessible through a well-established stakeholder network including other Government agencies which was already engaged through the initiative to prevent/control outbreaks of avian influenza.

#### Argument

8. There are about 24,000 poultry units (each with 50 or more birds) registered with Defra. It is estimated that about 30,000 people work in the poultry industry, although not all on farms.

9. Research suggests that working in poultry housings is associated with higher exposures to organic dusts than for cow or swine housing and prevalence of symptoms among poultry workers is also higher. The IOM review reported a high prevalence of respiratory symptoms in poultry farm workers including a 15% prevalence of chronic bronchitis.

10. Poultry production methods have moved towards industrial large-scale confinement facilities and studies have demonstrated that poultry workers' exposure to organic dust can be substantial. Many of the tasks that involve high exposures are carried out by contractors. High levels of dust or ammonia may produce non-specific inflammation, and allergic airways response is likely to occur with exposure to bacteria, fungi and endotoxins, and to allergens from mites and poultry.

11. The main objectives of the project are:

- (i) to secure the commitment and support of the key industry stakeholders.
- (ii) to identify the work activities that expose workers to high doses/levels of poultry dust.
- (iii) to develop a better understanding of the social factors that determine and influence the behaviour of poultry workers.
- (iv) to agree 'good practice' measures (benchmark standards) to reduce exposure and control the risk.
- (v) to promote awareness of the hazards and risks and encourage uptake of the benchmark standards.

12. The first four objectives have been met and have resulted in several products including:

- (i) a definition of 'poultry dust' (Annex3) . Poultry dust can vary in composition from a single substance e.g. wood dust to a complex mixture of organic and inorganic particles, bacteria and endotoxins, fungi and fungal spores and mites. Elements of the dust are recognised allergens and in some cases asthmagens e.g. mites.
- (ii) HSL Sampling Report OH2008/09 'Exposure to dust and bioaerosols in poultry farming; summary of observations and data' (Annex 4; paper copies only provided). HSL completed a task-based sampling survey and at the same time examined current work practices and control measures.
- (iii) HSL Report RSU/08/07 'Audience scoping study to inform communications with Poultry Farm Workers (Phases 1 and 2)' (Not included but available on request). This research was undertaken to understand more about the barriers to change in this specific group so that future interventions can be correctly targeted.
- (iv) A 'Statement of Evidence' (Annex 5) which explains the hazards associated with exposure to the constituents of poultry dust and confirms the risks of respiratory disease amongst poultry workers.
- (v) Benchmark control standard (Annex 6). A Joint HSE/Industry Working Group was set up to agree 'good occupational hygiene practice' to reduce exposure to as low as reasonably practicable in accordance with COSHH Regulation 7(7) (c)
  - (ii). (A copy of the latest working draft of the standard is attached but the format of the final standard will be different).

13. The project has adopted a risk-based approach directed at workers who are currently exposed to high concentrations of poultry dust. This approach has been used to convince a sceptical industry of the need for action. The project has also focussed on specific work activities.

14. A large amount of information about the exposure of poultry workers to airborne contaminants has been collected but less conclusive direct evidence of ill health effect. As a result, the project adopted a pragmatic approach by working with the industry stakeholders to explore reasonably practicable measures to achieve adequate control of exposure, drawing upon earlier work that led to the publication of an agricultural series of control guidance sheets in *COSHH Essentials*.

### **Link to HSC Strategy**

15. This project falls under the Disease Reduction Programme (DRP) of HSE's 'Fit 3 Strategic Programme'. It contributes to both the Asthma and long latency disease strands of the DRP's Respiratory Disease Project.

### **Consultation**

16. The principal stakeholders, namely the British Poultry Council (BPC), the British Egg Industry Council (BEIC) and the National Farmers Union (NFU), who have the ability to influence the performance of the poultry industry, have been involved in the project from the outset. Latterly, UNITE (formerly T&GWU) has also been engaged.

### **European Context**

17. There are no specific links to EU procedures or activities.

### **Action**

18. WATCH is asked to consider the issues described in this paper and to:

- i) consider if it will endorse the approach to reducing the risk of respiratory disease amongst workers on poultry farms.
- ii) express an opinion on a proposal to extend the approach to other relevant groups of agricultural workers as appropriate.
- iii) comment on the 'statement of evidence' and, in particular, its usefulness and value.
- iv) suggest further measures that may be adopted to achieve good control practice.
- v) provide a view on how best to evaluate the effectiveness of the intervention.

### **Contact:**

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### **References / Attachments**

Annex 1 – HSE Research Report RR370 - The Baseline Incidence of Occupational Health in Agriculture in Great Britain.

<http://www.hse.gov.uk/research/rrhtm/rr370.htm>

Annex 2 – Disease Reduction – Respiratory Disease in Agriculture – Project Initiation Document and Project Plan.

Annex 3 - Definition of Poultry Dust

Annex 4 – HSL Sampling Report OH2008/09 ‘Exposure to dust and bioaerosols in poultry farming; summary observations and data’.

Annex 5 – Statement of Evidence – Poultry Dust – Evidence of Health Hazards/Risks

Annex 6 – Benchmark Standard for Controlling Exposure to ‘Poultry Dust’ (Working draft only)