

ORR occupational health programme update for rail dutyholders

June 2011:

This quarterly brief aims to bring you up to date on progress with some of the activities in the ORR [Occupational Health programme 2010-14](#), and help inform discussions on health at routine liaison meetings with ORR inspectors. We have identified key messages for rail dutyholders, and would welcome feedback. This issue focuses on:

- **Legionella risk; and**
- **ORR's baseline assessment of occupational health management in the rail industry.**

1. Legionella risk

ORR guidance to its inspectors ([RGD 2010-01](#)) identifies a number of non-railway specific matters of evident concern that ORR inspectors should pursue if observed or brought to their attention, and which may merit formal enforcement action. Control of exposure to Legionella bacteria from wet cooling towers is one of these. The potential risk from Legionella bacteria in railway settings may extend beyond wet cooling towers to include other hot and cold water systems including:

- operation and maintenance of other wet cooling systems at railway premises, including air conditioning/evaporative condensers, and hot water systems in stations, depots, and offices;
- automatic train washes/manual under frame cleaning, and emergency showers at maintenance depots; and
- operation and maintenance of on-train toilet water systems (lower risk).

ORR inspection work with selected TOCs in 2010/11 looked at the control of chemical and microbial hazards during train under frame cleaning; an Improvement Notice was served on First Great Western Ltd in March 2010 for failure to adequately assess health risks from manual cleaning of train under frames. In addition to the well recognised hazards from chemicals and faecal matter and human/animal fatalities, a recent inspection of train under frame cleaning at a TOC depot also identified significant potential for Legionella growth from train washing operations.

HSE specialist advice to ORR is that auto train washes (similar to car/bus washes) should be regarded as significant risk systems for Legionella exposure, and therefore measures to comply with the ACOP and [HSE guidance L8 'Legionella disease – the control of Legionella bacteria in water systems'](#) should be in place – this will include regular cleaning and disinfection of the whole system including the pipe work and drains/sump. The generation of aerosol spray; use of hot water (temperatures 20-45° C are ideal for microbial growth); and the presence of nutrients in sludge, scale etc, are likely to encourage Legionella proliferation in both manual and automatic train washes. Although manual power washing is likely to present a lower risk, particularly if water is mains fed rather than recycled, a risk assessment is needed to ascertain the need for regular (6 monthly) cleaning and disinfection of the pressure lance and associated pipe work, as well as use of suitable PPE/RPE by the operator. Use of powered hood RPE (eg airstream helmet) with assigned protection factor of 20 for operators involved in manual power cleaning working in pits is recommended.

The potential for Legionella growth in on-train toilet water systems has been reported recently in the national and regional press, after a National Incident Report confirmed two cases of Legionella bacteria within one train operator's fleet. Sampling across TOC fleets nationally showed one in three of the 150 trains tested positive for Legionella bacteria, and a number of TOCs have begun disinfection and chlorination of toilet water systems. Risk will depend upon a number of factors including water temperature; residence time in tanks; debris in water systems; and potential for aerosol generation (e.g. in toilet flushes and use of integral hand dry units). The Health Protection Agency has indicated that the risk to the general public is very low.

Key messages:

- **Dutyholders should have identified all water systems with a significant potential for Legionella growth, and carried out a specific risk assessment for Legionella exposure under COSHH and the ACOP.**
- **Where there is a significant risk, has a responsible person should be appointed and trained to manage the risk, including implementation and monitoring of a control strategy. Is routine disinfection carried out and records kept?**
- **ORR would expect a suitable cleaning and disinfection regime to be in place and monitored, for high risk systems including evaporative cooling systems (including wet cooling towers) and for train washing operations. Other water systems with potential for Legionella growth should be risk assessed and appropriate controls put in place to minimise the risk.**

2. ORR publishes baseline assessment of occupational health management in the rail industry and invites industry response

ORR has published a [baseline review](#) of work related ill health and its management in the rail industry. The aim in publishing this baseline paper, which reflects a snapshot view during the first year of our health programme, is to encourage improved leadership and awareness on occupational health (OH) and to act as a benchmark for the railway industry. We welcome comments from the industry and will publish these alongside the baseline paper.

We would also encourage any rail companies who are keen to act as exemplars in OH management to measure their progress year on year against the external

indicators in our baseline review (those on incidence, cost, and public reporting on health) and share these with us. Ian Prosser, Head of Railway Safety at ORR, has written to the MDs of key dutyholders (except heritage) encouraging them to respond and participate.

Our review identifies key weaknesses around industry leadership on OH; public visibility/reporting on worker health; and an apparent reluctance to look for solutions outside the rail industry. We also found evidence of a largely reactive approach to ill health, with an emphasis on pre-employment screening, palliative care and managing for attendance, rather than prevention of work related ill health.

Key messages:

- **Publication of ORR's baseline paper provides an opportunity for rail companies to review their own performance on OH against our assessment of the industry in general. We would encourage rail companies to benchmark themselves against the baseline indicators on incidence, cost, and public reporting, and to share this with us and the rest of the industry, as examples of good practice.**
- **We know from our December 2010 OH survey that many rail companies do not currently report publicly on worker health; have health based KPIs; or monitor work related sickness absences, but many are now planning to do so. In moving towards 'excellence' ORR expects to see companies improving their OH management in these areas, as well as securing a shift in emphasis from reactive OH management to prevention. What needs to happen with individual dutyholders to make this change?**