

Second World War Gas Masks and First World War Military Helmets

The **Museum Development Yorkshire** E-bulletin recently carried a note from a museum wishing to dispose of a Second World War gas mask. These are common items in museum social, local and military history collections.

This note is to highlight health and safety concerns about asbestos in such objects for museums

Second World War Gas Masks

It has been known for some time by many working in museums that the gas masks produced for military and civilian use during the Second World War contain hazardous substances. This is in the filter units which were originally intended to reduce the injury caused by gas or other attacks from enemy action. Over 25 million were issued including types for adults, children and infants. Fortunately, most were rarely, if ever used. They were, however, retained by members of the public after the war and over the last few decades many have been passed to local museums as curiosities and symbols of a momentous period in twentieth century history.

British gas masks from the Second World War pose a problem today, as many incorporate asbestos (both crocidolite (blue asbestos), chrysotile (white asbestos) both Category One carcinogens) within their filters. Although considered relatively safe when new, the asbestos is now recognized as a significant health hazard. The asbestos may also now be starting to break down, and asbestos fibres may be expelled from the filters, especially if they are damaged or if a mask is tried on and air is drawn through the filter.

For these reasons it is recommended that old gas masks are never put on, by anyone.

Handling gas masks may also pose a hazard. The risk may also apply to their boxes or bags which are potentially contaminated by stray asbestos fibres from contact over the years. **To minimise the risk of contamination it should be assumed that all WW2 gas masks contain asbestos unless proven otherwise through documentation or certification.** They should ideally only be handled by those that have had training in asbestos awareness and how to take the appropriate precautions based on the condition of the objects.

The Imperial War Museum (IWM) has, in the past, chosen to seal the filters on all gas masks in its collections, whether on display or used in handling collections and has been more recently going through a programme of sealing or de-contamination by specialist asbestos contractors. Sealing encapsulates any asbestos or other hazardous chemicals within the filter and stops the gas mask from functioning but does not change its outward appearance. However, de-contamination is the only way to ensure the total removal of the hazard. **Asbestos removal may only be undertaken by a specialist licensed contractor.**

For collection storage the IWM recommends that all gas masks are double bagged in robust polythene bags with either a very good self-seal or taped closed. The masks and the enclosures should be labeled with the approved asbestos warning label: "Warning Contains Asbestos". Only when de-contamination has taken place can the hazard be considered as removed: this should also be recorded in documentation and a label on the object.

Museums which have suspect gas masks in their collections should follow this advice, take appropriate measures to manage the hazard and seek external advice where appropriate.

This issue was highlighted further recently by the potential hazards posed by taking gas masks into schools for educational use and the Joint Union Asbestos Committee issued a

warning notice to schools in October 2013. This can be found at: <http://juac.org.uk/wp-content/uploads/2013/12/Gas-Masks-Warning.pdf>

First World War Military Helmets

Many museums are currently developing exhibitions and events to commemorate the Great War of 1914-19 and preparing military items for display. The Imperial War Museum has also recently advised of a further asbestos hazard contained in the standard military helmet “tin hat” issued to most army servicemen in the First World War. Many of the British Brodie Mk. 1 WWI steel helmet linings contain a thin sheet of white asbestos (chrysotile) under the felt liner. This can pose a hazard after a century of deterioration, especially as the felt liner, which generally covers it, is frequently damaged through wear, decay or insect attack. **These objects should be treated with similar caution as the gas masks** and external specialist should advice sought were appropriate.

General Note

The management of asbestos by museum organizations is subject to the **Control of Asbestos Regulations 2012** which set out the health and safety obligations of employers and other duty holders to ensure protection of human health.

The management of asbestos is also covered by the EU **Registration, Evaluation, Authorisation and restriction of Chemicals Enforcement Regulation (REACH), 2008**, which imposes strict limitations on what can be done with objects containing asbestos. The UK government has a derogation from this regulation (under the **REACH Enforcement (Amendment) Regulations 2013 (on asbestos provisions)**) for “museum artifacts, especially industrial and transport items” to allow museums to transport etc. such items. This is subject to the provision “that certain safeguards are put into place to protect human health and the environment” and this may still require an asbestos exemption certificate. (Regulation 8A)

Appropriate specialist advice on the management of asbestos hazards in museum collections should be sought to ensure the minimising of hazards to human health and the environment and compliance with relevant legislation.

DWH
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