

Green waste collection - health issues



This 'best practice' guidance was written in consultation and with the support of the Waste Industry Safety and Health Forum (WISH).^{*} It is written for managers, supervisors and operators working with recyclable vegetation ('green waste') in the waste management and recycling industries. It aims to comment on and help reduce the health risks associated with the collection of green waste.

This leaflet contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do. It cannot cover every risk and is not comprehensive. Your risk assessment may reveal other risks associated with your undertaking which are not covered by this guidance.

Green waste dust

When green waste is left, microbes grow quickly in the warm, moist, environment.

Collecting and handling green waste creates bioaerosols (microbes suspended with dust in the air) and these are breathed in when working.

Research¹⁻¹⁶ suggests that the health risks of breathing in these microbes from handling green waste are no greater than those from handling any other mixed household waste.

Compared to other waste handling work, green waste collectors are less likely to breathe in large concentrations of bioaerosols because:

- outdoor work helps aerosols to disperse;
- automated bin emptying equipment, where used, can separate workers from exposure; and
- the amount of material being handled at any one time is relatively small.

Breathing dusts and bioaerosols

All reasonably practicable methods should be used to prevent the breathing of dusts and bioaerosols by adopting:

- systems of work that minimise the amount of dust becoming airborne;
- working practices that minimise dust and bioaerosols being breathed in.

Systems of work

The following systems of work, used where reasonably practicable, can help to minimise the dust clouds created:

- Using compostable green waste sacks which do not need to be removed from the waste stream before composting.
- Avoiding working methods which involve double tipping (eg emptying bags into bins which are then tipped into the vehicle).
- Avoiding using sacks and bins that are designed to be shoulder carried (eg 'sleps', 'skips' and other wide mouthed shoulder carried bins). These can create dust clouds when emptying.
- Avoiding working methods which encourage tipping from unnecessarily high heights (eg hand-loading green waste into bin lift equipped vehicles).
- Fitting and maintaining rubber/plastic strip curtains to larger container chambers. These can help to contain any dust clouds created during tipping.

Working practices

To minimise dust and bioaerosols entering the lungs, employees should try to:

- Avoid opening sacks and containers. As far as possible, keep bags closed while carrying them, and open them only prior to tipping.
- Avoid leaning over bags and bins which are being tipped. As far as possible, face away from the tipping point.
- Avoid 'loitering' at the back of the vehicle after unloading bags and bins.

Finally, employees might want to consider wearing suitable respiratory protective equipment. Such equipment should always be available to employees wishing to use it. It should be worn correctly in accordance with the manufacturer's instructions, and be kept clean and well maintained.

Other health hazards

The following table illustrates other health hazards associated with green waste collection.

Protect your health - protect your skin

<i>Problem</i>	<i>Cause</i>	<i>Route into the body</i>	<i>Preventive measures</i>
Infections			
Rat fever (leptospirosis)	Rat urine	Cuts and grazes	Good hygiene
Tetanus (lockjaw)	Soils and organic material	Deeper cuts and wounds	Wear protective clothing
Botulism	Soils	Ingestion: hand to mouth contact	Cover cuts and grazes
Pasteurella multocida	Dog bites	Skin pierced by bite	Clean up any wounds quickly and apply antiseptic
Chemicals			
Pesticide and insecticide residues	Garden sprays Slug killers etc	Cuts, grazes, hand to mouth contact	Cover up Wear protective clothing Good hygiene
Skin problems			
Premature skin ageing	Excessive exposure to strong sunlight	Through unprotected skin	Cover up Wear hats and long sleeved shirts
Skin cancer			Use sunscreen

Note

* The Waste Industry Safety and Health (WISH) forum is a committee formed of representatives from the Waste Management and Recycling industry. It exists as a forum to exchange information, and discuss and resolve prevailing health and safety problems existing within the industry. It consists of representatives from the main trade associations, professional associations, trade unions, recycling organisations and national and local government bodies involved in waste management and recycling.

References

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- 2 *Mapping health and safety standards in the UK waste industry* RR240 HSE Books 2004 ISBN 0 7176 2865 5 www.hse.gov.uk/research/rrhtm/rr240.htm
- 3 Defra Guidance for Waste Collection Authorities on the Household Waste Recycling Act 2003 April 2005
<http://www.defra.gov.uk/environment/waste/legislation/hwra/hwra-guidance.pdf>
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This document contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

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This document is one of a planned series of 'best practice' advisory documents for the waste management and recycling industries, and will be reviewed periodically. Suggestions for improvements should be directed to Trevor Hay of HSE (trevor.hay@hse.gsi.gov.uk).