

**Insight - a closer look at**

# Estate management activities



# Education



## Estate management activities contents

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Safety in the school kitchen



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Estate management activities



Maintenance



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## Estate management activities

Many schools have significant grounds to maintain and sports fields to keep in pristine condition. Health and Safety Executive (HSE) records indicate that ground-keeping and estate management activities have as high an accident incidence rate as the agriculture sector. Between 2001 and 2009 there were 21 deaths in ground keeping and amenity work.

Key areas of concern in ground keeping activities include ride on mowers overturning on slopes, chainsaw use, associated noise and vibration exposures and pesticide use. The main focus areas for preventing problems occurring are to ensure that operators are trained and that suitable risk assessments are in place.



HSE records indicate that most accidents to employees undertaking estate management activities occur due to manual handling activities, slips and trips, and being hit by moving objects. These causes of accident are common across all industry sectors and added to the specific issue note above, they make estate management an important aspect of school management.



### Using pesticides

The use of pesticides includes the use of herbicides; insecticides, rodenticides and fungicides can be common practice in estate management. Not only do the grounds maintenance team need to be protected from pesticide exposure but care needs to be taken to prevent exposure to members of the public and pupils.

The school must ensure that estate management teams are trained and competent to use pesticides. Formal certification will be needed before professional pesticide products can be used. This requirement will come into greater focus after the 26th November 2015 as those purchasing professional pesticide products will have to ensure that the user holds a certificate of competence to use the product. Further details on training provision can be obtained from City & Guilds at [www.nptc.org.uk](http://www.nptc.org.uk). Be sure to keep a copy of the certification in the training records kept at the school.

The Sustainable Use Directive is resulting in a requirement that vehicle mounted equipment used for applying pesticide needs to be formally tested on an annual basis by 26th November 2016. The test body in the UK is NSTS at [www.nsts.org.uk](http://www.nsts.org.uk)

There is certain equipment used for applying pesticides that does not need to be tested, this equipment includes knapsack sprayers, hand held sprayers and pedestrian controlled machines.

It is recommended that pesticides are only used when necessary and an integrated approach to pest and weed control is ideal. If there are considerable grounds to be managed the school should consider working with a specialist to develop a strategy for using pesticides.

Only buy authorised products and ensure that the users read the instructions labels carefully as products with the same uses have different formulations. The store for the pesticides needs to have enough capacity to ensure that all pesticide products can be accommodated.

Points to consider in relation to pesticide storage include:

- Locate the store way from drains.
- Ensure that the fire brigade can gain easy access to the store.
- Ensure that the estate management team know what to do in the event of a chemical spillage or fire. Ensure that there are spillage kits; sand and a shovel are available at the store.
- The store should have 30-minute fire resistance and be bunded to enable 110% of the volume of the content of the store to be contained in the store. Purpose built proprietary pesticide stores provide a good option.
- Manage stock rotation and appropriately dispose of waste packaging promptly.
- Mark the store door with a warning sign and a no smoking sign.

The equipment used to apply pesticides will need to be appropriately maintained and checked on a regular basis. Knapsack sprayers are commonly used for applying pesticides in estate management applications. The following checklist can be used to develop a pre use check on knapsack sprayers.

Check	Result		Remedial action/problem
	Yes	No	
Is the sprayer clean and undamaged?			
Are the straps secure and in good condition?			
Is the sprayer leaking if its on its side or upright?			
Is the pressure relief valve working effectively?			
Is the nozzle undamaged and providing an adequate spray pattern?			
Is the flow rate in line with the manufacturers specification +/- 10%			
Is residue liquid volume less than a cupful?			
Has the tank been rinsed out with detergent?			
Has the tank and lance been adequately washed out?			
Have the nozzle and filters been washed and cleaned with a brush?			
Have the tank and straps been cleaned after use?			
Have the washings from the sprayer wash been safely disposed of?			



When pesticides are to be used it is advisable to monitor the weather. Strong winds may not be such an issue for pesticide use at schools but heavy rain could wash the pesticide down the storm drains if a downpour follows spraying.

Ensure that those using pesticides have adequate personal protective equipment including bib and brace overall with elbow length nitrile gloves. Alternatively a two-piece suit and gloves with water proof safety boots. Both the glove cuffs and boots need to be inside the suit. Remember to thoroughly wash down the personal protective equipment after each use.

Don't forget the COSHH assessments for pesticide use and make records of all use of pesticides including the date of use, the pesticide used, how it was applied, where it was applied and that the weather conditions were like.



### Ground keeping activities

Ride on mowers are often used to cut grass on school sites and give a particular risk of rolling over. Risk assessments need to be undertaken for grass mowing activities and include the steepness of slopes, the scale of the operation, the surface conditions and the equipment available. A safe system of work including a plan of operation is also needed and operators need to be competent and must know the safe operating parameters of the machine.

#### The plan should evaluate the slopes on site and the following guidance should be noted:

- Slopes up to 15° can be managed with normal ride on mowers.
- Slopes of 16 to 20° should be cut with pedestrian operated machines.
- Slopes of 20 to 30° need specialist equipment such as a pedestrian operated bank mower.
- Steeper slopes can be tackled with a side arm flail or a remote control mower.

All staff using estate management equipment should note the following points:

- Do not attempt to remove blockages or undertake maintenance work without isolating the equipment and removing the ignition key.
- Ensure that suitable stand off guards are used with mowers to prevent access to moving blades.
- Ensure that skirts to prevent projectiles being ejected from mowers are in place.
- Ensure that the tractor controls are disengaged and the tractor has stopped before leaving the seat.
- Ensure that manufacturer's instructions are followed when servicing plant and changing parts. Adhere to manufacturer service and maintenance schedules.
- Wear gloves when handling blades and always be aware of equipment run down time.
- Do not override the operator seat cut out switches on the tractors or any other ride on plant.
- Ensure that there is roll over protection and a driver restraining system.
- Ensure that trailers are supported by their draw bar jack when not in use.
- If equipment uses a power take off (PTO) shaft, ensure that the guard is in good condition and covering the whole shaft. Remember not to wear loose clothing near the PTO shaft.

School management teams should be aware of the increase in occupational health related insurance claims since the introduction of the governments claim-handling portal at the end of 2013. The use of grounds maintenance equipment can give significant noise exposure so the use of hearing protection should be closely managed and the level of noise exposure should be understood. If new employs at the school are provided with a medical check at the time of employment it would be worthwhile including an audiometry test at that stage to understand if the new employee has any degree of work induced hearing loss.



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## Using chainsaws

Only persons with a suitable degree of physical fitness should be allowed to use chainsaws in estate management activities. Trainees below the age of 16 cannot use chainsaws; those between 16 and 18 can only use a chainsaw if they have the physical capacity, maturity, awareness of risks and are closely supervised by a responsible person who holds a chainsaw competence certificate.

All chainsaw users must hold a relevant certificate of competence or national competence award. Refresher training shall be provided on a three yearly basis.

The chainsaw must be maintained and serviced according to the manufacturer's instructions and users must be competent in chain sharpening techniques and guide bar maintenance. Before use, the chainsaw should be checked over with particular emphasis on:

- On/off switch
- Chain brake
- Chain catcher
- Silencer
- Guide bar, drive sprocket and chain links
- Side plate, front and rear hand guards
- Anti vibration mounts
- Starting cord tension
- Saw chain tension throttle cannot be squeezed unless throttle lock out is pressed
- All nuts and screws are tight.

Once the chainsaw has started, check:

- The saw chain stops moving when the engine is idling
- The chain brake is effective
- The engine continues when the saw is turned through 90 degrees
- The stop switch works
- The guide bar and chain is adequately lubricated

Protective equipment cannot give total protection against a chainsaw cut but all users will wear the appropriate personal protective equipment no matter how small the job. Suitable personal protective equipment should be issued with instructions for use on a signed receipt basis and should include:

- Safety helmet to EN 397
- Hearing protection to EN 352-1
- Eye protection mesh visor to EN 1731 or safety glasses to EN 166
- Chainsaw jacket to BS EN 381-11
- Gloves to EN 381-7
- Leg protection to EN 381-5
- Chainsaw boots to EN 381-3 or protective gaiters to EN 381-9 worn with steel toe capped safety boots.

## General points:

- Avoid working alone with a chainsaw. If it cannot be avoided carry a whistle to raise the alarm.
- Ensure that one of the persons using the chainsaw holds an Emergency First Aid Certificate to enable control of major bleeding.
- Use suitable petrol containers in good condition with securely fitting lids and auto filler spouts. Ensure that the containers are stored 4 metres away from ignition sources (including the saw itself).
- Avoid kick back by not over reaching, keeping the saw below chest height, preventing the nose accidentally contacting objects, using the appropriate chain speed and keeping the left hand thumb around the back of the front handle.
- The chainsaw should not be used off the ground unless the operator has received adequate training. The chainsaw must not be used from a ladder.
- Remember the noise effects of chainsaw use and enforce hearing protection use through reminders issued on a signed receipt basis and consider audiometry checks for those experienced grounds men who are employed by the school for the first time.

The risk assessment should be completed before commencing chainsaw work which should consider weather conditions, overhead and underground power cables, public rights of way, the condition of the tree and health effects such as hand arm vibration syndrome, noise and manual handling. The significant findings of the risk assessment should be brought to the attention of all persons involved in the work activity through a toolbox talk that can be signed for by the chainsaw users.

## Did you know..?

Between 2001 and 2009 there were



# 21 deaths

in ground keeping and amenity work



### Conclusion

The three issues of ride on powered machines, chainsaws and pesticide use are high hazard activities with the potential for injuring health and causing serious accident. The estate management operatives not only have to deal with these issues but also manual handling activities, slips and trips hazards and hit by moving object accidents, three issues that cause most of the employers liability claims in the UK. Training, supervision, suitable risk assessments and control of health exposures are key risk management issues and they all play an important in accident and insurance claim prevention.





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