



Sheep louse control for ewes and lambs

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The sheep body louse (*Bovicola ovis*) spreads by infested sheep coming in direct contact with non-infested sheep. Treatments for ewes and/or lambs need to be selected carefully to avoid starting a new infestation in the lambs, or continuing an infestation that could have been eradicated in the ewes. Product labels should be checked very carefully with key considerations including:

- High risk of transfer from ewe to lamb. Isolation periods (the time when treated sheep should not be mixed with uninfested untreated sheep) for different insect growth regulator (IGR) products vary, either three or four weeks, see label). However, to reduce the risks of lice being transferred to lambs, at least six weeks should elapse between treating pregnant ewes with an IGR and lambing.
- Use restrictions. Some products, such as Eureka Gold, cannot be used in late pregnancy.
- Resistance. Avoid using chemicals with known resistance, such as synthetic pyrethroids. There is also evidence of emerging resistance to IGRs.
- Residues in meat and wool. Before using a product, check that the meat and wool withholding periods can be met, particularly the Export Slaughter Interval (ESI) which can be a problem for prime lambs that are treated. The ESI is now included on the label but for older products, the ESI is listed on the National Sheep Vendor Declaration, or the Australian Pesticides and Veterinary Medicines Authority website (www.apvma.gov.au).
- Animal welfare concerns with dipping. We recommend you do not dip late pregnant ewes or young lambs due to the risk of stress and subsequent consequences.

Chemical groups and application methods

The table below shows the chemical groups and methods of application available to treat sheep lice in breeding ewe flocks. If a long wool treatment is used, then eradication is unlikely and ewes and lambs will need to be treated after shearing (see Tables on next page).

Registered methods of application					
Chemical group	Short wool – should eradicate		Long wool – control (handjet)		
	Off-shears backliner	Short wool dip (up to 6 wks wool)	HJ up to 6 mths	HJ up to 10.5 mths	HJ up to 12 mths
Insect growth regulator (IGR)	Zapp, Magnum, Triffik, etc.	Fleececare, Strike, etc.	Fleececare, Strike etc. Pour-on – Magnum	NR ¹	NR
Organophosphate ²	Eureka Gold	Di-jet, Jetdip, etc.	NR	NR	NR
Magnesium fluorosilicate	NR	Flockmaster II, etc.	NR	NR	NR
Ivermectin	NR	NR	Paramax, Coopers Blowfly & Lice Jetting Fluid	Paramax, Coopers Blowfly & Lice Jetting Fluid	NR
Spinosyn	NR	Extinosad	Extinosad	Extinosad	Extinosad
Synthetic pyrethroid ³	Clout S, Spurt, etc.	NR	Vanquish	Vanquish (to 10mths)	NR

¹NR – Not registered.

²In May 2007, the Australian Pesticides and Veterinary Medicines Authority (APVMA) announced a suspension of the registered claim for diazinon to be used as a short wool dip for sheep lice and long wool jetting for blowflies. Products manufactured before May 2007, which display the registered label claim, can still be used according to label directions but new product will no longer include this claim and must not be used for dipping or jetting. Most older products will expire by mid-2009.

³Synthetic pyrethroids are not recommended due to resistance and high residues from use.

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Louse control options for ewes treated off-shears or in short wool with lambs

Ewe and/or lamb status	Ewe Treatment	Lamb treatment
Ewes treated more than 6 wks before lambing	Any registered treatment.	No treatment required.
Ewes treated less than 6 wks before lambing	Non-IGR dip if possible for the ewes.	No treatment required.
Ewes treated less than 6 wks before lambing but too close to lambing to dip ewes	IGR backliner.	Registered IGR backliner† for use on unshorn lambs.
Ewes shorn & lambs unshorn & up to 3 mths old	Off-shears IGR backliner or a short wool dip*	Registered IGR backliner† for use on unshorn lambs.
Ewes shorn & lambs unshorn & 3–6 mths old	Off-shears IGR backliner or a short wool dip*	Handjet with an IGR†, ivermectin or spinosyn. If close to shearing, consider no treatment until shearing.
Ewes & lambs shorn	Off-shears IGR backliner or a short wool dip*	Off-shears backliner or short wool dip*.

* Short wool dip—apply within 6 weeks after shearing, preferably at 2–3 weeks.

† If infested ewes are to be shorn with unshorn, unweaned lambs older than 3 months, then an IGR off-shears backliner can be used on the ewes at shearing provided the lambs are to be shorn and weaned within 2–3 weeks at which time an off-shears backliner or short wool dip can be used.

Effective treatment for both ewe and lamb which may achieve eradication.

Louse control options for ewes treated in long wool, with or without lambs at foot

Ewes have 6 wks to 6 mths wool	Handjet with an IGR, ivermectin or spinosyn.
Ewes have 6–10 ^{1/2} mths wool	Handjet with ivermectin or spinosyn.
Ewes have 10 ^{1/2} –12 mths wool	If severe, handjet with spinosyn OR premature shear & treat. If a light infestation, consider no treatment until shearing.

Louse control options for lambs when ewes have been or will be treated in long wool

Lambs unshorn & up to 3 mths old	Registered IGR backliner† for use on unshorn lambs.
Lambs unshorn & 3–6 mths old	Handjet with an IGR†, ivermectin or spinosyn. If close to shearing, consider no treatment until shearing.
Lambs shorn	Off-shears backliner or dip.

NOTE: Only treat unshorn lambs if rubbing and potential wool damage is significant.

† IGRs should not be used if lambs are to be shorn within six months after treatment.