

## BACKGROUND

### The risks:

#### Unwashed Fleeces : Guidance and Background

Raw, unwashed fleece contains lanolin (grease produced by the sheep), suint (dried sweat), dust and farmyard dirt, and fragments of vegetable matter. Spinning without washing traps some of this material deep in the twisted fibres, and even soap-and-water washing will not remove all of it from the finished yarn. Plus the colour and character of the yarn will change during the washing process.

In addition to these simple additions/conditions here are very real biohazards linked to handling unwashed fleece. Zoonotic diseases (infections that can pass between animals and humans) such as those caused by the Orf virus, and the Anthrax bacterium, can survive for years away from an infected animal, and infect a person through even small skin wounds. It is vital that, when handling raw fleece, that skin is unbroken, that hands are kept away from the face, and are immediately washed afterwards.

As well as naturally occurring biohazards there are also chemical hazards to consider when working with unwashed fleeces.

The Health and Safety Executive advise that sheep are not sheared for a minimum of three months after dipping, and in practice this period can often be longer. The advice given by the British Coloured Sheep Breeders Association and others is not to apply Crovect or any other product to the fleece within three months before shearing. This is for the safety of the shearer, the wool handler and the craft worker, all of whom will be in close contact with either a lot of fleeces, or one fleece over a long period. However, it is impossible to tell definitively if this is the case. These chemicals may be toxic. For example - *The active ingredient in Crovect, cypermethrin, is bound directly to the lanolin in the wool. Unfortunately, work on the breakdown of cypermethrin has been only on the animal and there is no data on the breakdown once the wool is stored. The recommendation is therefore to wash the fleece to remove any residue.*

Significantly at Guild demonstration – the Association Public Liability Insurance is invalidated if there is any unwashed fleece involved.

[www.gov.uk/government/collections/orf-characteristics-and-diagnosis](http://www.gov.uk/government/collections/orf-characteristics-and-diagnosis)

[www.gov.uk/guidance/anthrax-how-to-spot-and-report-the-disease](http://www.gov.uk/guidance/anthrax-how-to-spot-and-report-the-disease)

## Zoonoses - Related to working with raw fleece

<u>Disease</u>	<u>Organism</u>	<u>Carrier</u>	<u>Mode of transmission to humans</u>	<u>Occurrence in Humans</u>	<u>Occurrence in Animal</u>
Anthrax	Bacillus anthracis	Animal Products	Direct contact, ingestion and inhalation	Very Rare	Sporadic
Caseous lymphadenitis, pseudotuberculosis	Corynebacterium. Pseudotuberculosis	Sheep and goats	Direct to skin wounds	Common	Common and endemic
Dermatophilosis (mycotic dermatitis)	Dermatophilus congolensis	Sheep and Cattle	Direct contact	Unknown	Endemic
Lyme disease	Borrelia burgdorferi	Sheep	Tick Bite	Common	Endemic
Orf	Orf parapox virus	Sheep	Direct contact	Rarely reported	Very common
Q fever	Coxiella burnetii	Sheep	Aerosol, parturition products	Uncommon	Uncommon in sheep
The ringworm parasite may be transmitted from affected wool to humans. The cause, a spore bearing organism, can live dormant in the earth for periods in excess of one hundred years.					

The following "Code of Practice" is suggested. Guild members as individuals or working in groups using untreated fleece must be aware of the risks. Guildlines are given for washing and/or scouring of fleece. Observing each point will not guarantee protection from risk but will show awareness and a responsible concern for health and safety.

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## **CODE of PRACTICE - Main Features**

1. Unwashed and/or unscoured fleece should not be used on public demonstrations. This WILL invalidate the Public Liability Insurance supplied by affiliation to the Association.

It is vitally important that Guilds ensure all members present at a closed guild meeting are informed that unwashed and/or unscoured fleece is being used. In addition to this Guilds have a duty to inform any visitors to such a meeting that such a fleece is being used and of the implications regarding this.

2. All spinners and felters must be aware of the health risks to those working with unwashed or unscoured natural fleece. Untreated fleece should only be used in exceptional circumstances where the end result can justify the practice. Those involved must be aware of the risks to themselves and to their immediate environment.

**Pregnant women, those with allergic reactions and/or respiratory problems eg: asthma, bronchitis, and skin complaints may aggravate these conditions by working with unwashed/unscoured fleece.**

**Those receiving chemotherapy, radiation therapy or taking immune suppressant drugs must avoid all contact with unprocessed fleece**

N.B. Any ill effects following washing or scouring fleece - gastro-intestinal disturbance, skin reaction or respiratory distress affecting you or others in the environment should be reported to a GP without delay.

Further technical advice of the possible risks and the procedure for handling fleece may be obtained from your regional office of the Health and Safety Executive

3. Precautions:

- a. Whenever possible fleece should be obtained from disease free animals and flocks. Wool should NOT be handled within four months of 'dipping' or similar chemical treatment.

- b. Heavily soiled fleeces, or those containing loose soil or particles, should not be handled in confined spaces. Handle fleece carefully to avoid releasing debris into the air. Avoid handling the buttock region particularly if it is heavily soiled.
- c. Babies and young children should not have access to areas where treated fleece are being stored, washed or scoured.
- d. Wash, rinse and dry hands (and arms if exposed) before and after processing untreated fleece and visits to the toilet. Avoid scratching or touching the lips or any skin whilst treating the fleece.
- e. Do not prepare or consume food or drink in the work area until the processes involving fleece are complete and the area cleared and thoroughly cleaned and allowed to dry.
- f. Healthy spinners, dyers and felters should protect themselves during washing and scouring by –
  - covering all skin lesions - cuts burns, bites, abrasions - with adhesive dressings.
  - wearing a protective (preferably washable or waterproof) apron
  - wearing household gloves whenever possible.
  - A mask worn over the nose and mouth offers some additional protection when dealing with dry or dusty fleece.

4. The procedure for washing / scouring fleece:-

- a. The work area should be cleared of all unwanted items. Worktops or the floor on which the fleece is laid out should be covered with paper or other disposable sheeting.
- b. The sink, baths or receptacles must be large enough to accommodate the fleece.
- c. The soap/detergent or scouring agent is added and mixed into the water to make a solution of the strength and temperature recommended by the manufacturer avoiding splashing. Containers of washing/scouring agents must be sealed after use and returned to a safe storage place.
- d. The fleece must be completely submerged beneath the surface of the solution. Careful positioning will release any entrapped air and ensure a consistent effect.
- e. Washing or scouring must be followed by one or more rinses in clear water no hotter than the original solution. Again careful positioning will ensure a consistent effect.
- f. The rinsed fleece may be drained and allowed to dry.
- g. Sinks, receptacles and tanks should be cleaned with detergent, rinsed and dried before further use.

- h. Protective coverings should be disposed of, or if reusable, washed and dried for further use.
- i. Thoroughly clean the work area, allow to dry and maximise ventilation.
- j. Remove and clean any reusable protective clothing. Single use items can be disposed of before washing all exposed skin surfaces to reduce any reaction to splashes of chemicals, debris or organisms.

**Anyone involved with 'unwashed' fleece should have a tetanus injection, and keep it up to date. (10 yearly)**

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References: Details and content of both the background and the Code of Practise are taken from the following:

**Public Health England (PHE)**

Website: [www.gov.uk/phe](http://www.gov.uk/phe)

☐ 020 8200 4400 (24 hours), Zoonoses section: 020 8327 7771

PHE Zoonoses Section email: [zoonoses@phe.gov.uk](mailto:zoonoses@phe.gov.uk)

<https://www.gov.uk/health-protection-team>

**Public Health Wales (PHW)**

Website: [www.publichealthwales.wales.nhs.uk](http://www.publichealthwales.wales.nhs.uk)

☐: 02920 402471

Email: [surveillance.data@wales.nhs.uk](mailto:surveillance.data@wales.nhs.uk); [zoonoses@wales.nhs.uk](mailto:zoonoses@wales.nhs.uk)

**Local Authorities**

Find your LA: <http://local.direct.gov.uk/LDGRedirect/Start.do?mode=1>

Map of all LAs: <http://www.ons.gov.uk/ons/guide-method/geography/beginner-sguide/maps/index.html>

**Animal and Plant Health Agency**

Website: [www.gov.uk/apha](http://www.gov.uk/apha)

☐ 01932 341111 (Weybridge Head Office)

All enquiries concerning notifiable zoonoses and incidents should be made to the relevant Regional Field Services Office.

**Department for Environment Food and Rural Affairs (Defra)**

Website: [www.gov.uk/defra](http://www.gov.uk/defra)

☐ Defra Helpline 0845 933 5577

Defra Helpline Email: [helpline@defra.gsi.gov.uk](mailto:helpline@defra.gsi.gov.uk)

Defra zoonoses team email: [zdri@defra.gsi.gov.uk](mailto:zdri@defra.gsi.gov.uk) (please Email FAO Zoonoses VA)

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**Office of the Chief Veterinary Officer, Welsh Government**

Website: [www.wales.gov.uk](http://www.wales.gov.uk) then search for "animal health"

☐ 01267 245001

email: [Endemics@Wales.GSI.Gov.UK](mailto:Endemics@Wales.GSI.Gov.UK) (please mark "FAO zoonoses VA")

**Health and Safety Executive (HSE)**

Website: [www.hse.gov.uk](http://www.hse.gov.uk)

☐ Contact number: 0845 300 9923

**Health Protection Scotland (HPS)**

Website: <http://www.hps.scot.nhs.uk/index.aspx>

☐ 0141 300 1100

Email: [hpsenquiries@hps.scot.nhs.uk](mailto:hpsenquiries@hps.scot.nhs.uk)

Link to the Scottish Zoonoses Guidelines:

<http://www.documents.hps.scot.nhs.uk/about-hps/hpn/zoonoses-guidelines.pdf>

**Northern Ireland Public Health Agency**

Website: <http://www.publichealth.hscni.net/>

☐ 0300 555 0119

E-mail: [PHA.DutyRoom@hscni.net](mailto:PHA.DutyRoom@hscni.net)

**Department of Agriculture and Rural Development Northern Ireland (DARD NI)**

AGWSD Unwashed Fleeces – Guidance 2018

Website: <http://www.dardni.gov.uk/index/contact-us.htm>

☐ Helpline 0300 200 7852

Email: [dardhelpline@dardni.gov.uk](mailto:dardhelpline@dardni.gov.uk)