

Technical Note No 27

Animal Welfare Advice for Small-scale and/or Seasonal Processors on the Electrical Stunning and Bleeding of Poultry

Small-scale and/or seasonal poultry producers and processors are subject to animal welfare legislative requirements in a similar way to large-scale, commercial poultry producers/processors. However, in relation to welfare at the time of slaughter, the application of certain requirements is dependent on the nature and scale of the operation. This technical guidance highlights and explains the particular requirements applicable to those carrying out seasonal and/or small-scale slaughter of poultry¹. The guidance is primarily aimed at producers in the UK but may also be useful to producers elsewhere.

*EC Regulation 2009/1099 on the Protection of Animals at the Time of Killing and The Welfare of Animals at the Time of Killing (England) Regulations 2015 (WATOK)** are the main pieces of legislation which regulate welfare at slaughter. Copies of these pieces of legislation can be downloaded using the following links:

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02009R1099-20180518&qid=1572947017118&from=EN>

<http://www.legislation.gov.uk/uksi/2015/1782/contents/made>

They include provisions to ensure that:

- animals are not subject to avoidable pain, distress or suffering;
- animals are stunned before slaughter, with unconsciousness lasting until death; and
- bleeding takes place in a profuse and rapid manner, to protect the welfare of the animals stunned with simple stunning methods.

****Producers in Scotland, Wales and Northern Ireland must refer to their respective versions of WATOK.***

¹You are classed as a small-scale supplier if all these apply:

- you slaughter less than 10,000 birds per year on your farm;
- you supply the birds, rabbits or hares directly to the final consumer or to local shops; and
- you supply meat within your own county and the adjoining counties (or no further than 50 kilometres from your county's border).

Further information is available at <https://www.gov.uk/guidance/slaughtering-poultry-rabbits-and-hares-on-farms-for-small-scale-suppliers>

Stunning and bleeding in poultry slaughter

Annex 1, Chapter II of Council Regulation (EC) 1099/2009 on the protection of animals at the time of killing states:

4 Head-only electrical stunning

4.1 When using head-only electrical stunning, electrodes shall span the brain of the animal and be adapted to its size.

Schedule 2 of WATOK (England) sets out the requirements for killing animals other than in slaughterhouses and applies to small-scale/seasonal producers slaughtering poultry on-farm. The following provisions of Schedule 2 of WATOK (England) provide clarification about the correct methods of stunning and bleeding to be used for poultry slaughter.

Schedule 2, Part 5, paragraph 37(1) states that no person may use electrodes to stun an animal unless:

- (a) appropriate measures are taken to ensure that there is good electrical contact; and**
- (b) the strength and duration of the current used is such that the animal is immediately rendered unconscious and remains so until it is dead.**

Paragraph 37 (2) No person may use electrodes to stun an animal individually unless the apparatus:

- (a) incorporates an audible or visible device indicating the length of time of its application to an animal; and**
- (b) is connected to a device indicating the voltage and the current under load, positioned so as to be clearly visible to the operator.**

Electrical stunners for use on-farm are generally hand-held, with two electrodes which are placed across the bird's head (Figure 1). Less common are single-electrode systems used in conjunction with an earthed shackle or similar alternative – these are only used for stunning turkeys. In order to comply with the legislative requirements mentioned above, when stunning turkeys using a single-electrode system, the electrode should be placed on the side of the bird's head, between the eye and the ear, to ensure the current flows directly through the brain to produce an effective stun and immediate loss of consciousness (Figure 2). Placing the electrode directly into the mouth through the beak is **NOT** compliant with legal requirements.



Figure 1: Correct positioning of twin electrodes



Figure 2: Correct positioning of single electrode

Schedule 2 of WATOK (England) applies to seasonal and small-scale producers. A WATOK licence is required by a person who restrains animals for the purpose of stunning or killing; shackles or hoists live animals; undertakes stunning or bleeding; uses electrical stunning, gas stunning or mechanical stunning methods as a slaughter or killing method (this includes neck dislocation when it is used as back-up to the primary stunning method); or assesses effective stunning.

Schedule 2, Part 5, paragraph 42(2) requires that a person engaged in the bleeding of an animal which has been simple stunned² must ensure that the bleeding is:

- a) rapid, profuse and complete;**
- b) completed before the animal regains consciousness; and**
- c) carried out by *severing the two carotid arteries* or the vessels from which they arise.**

A transverse cut across the neck is best to achieve this requirement. Applying a cut inside the beak (ie beak or mouth sticking) cannot guarantee to sever both carotid arteries or the vessels from which they arise, consequently the use of this method will **NOT** comply with the legal requirement of cutting both carotids and ensuring a rapid death. This is because cutting the blood vessels via the mouth could allow blood to continue to flow to the brain, delaying the onset of death and birds could begin to recover during this process and so experience avoidable pain, suffering and distress.

Cutting both carotid arteries, or the vessels from which they arise, ensures a rapid and complete death. A deep horizontal cut into the neck muscle, across the front and both sides of the throat just below the jaw line (ventral cut) is a reliable method of severing both common carotid arteries and both external jugular veins in turkeys (see HSA publication *Effective Neck-cutting of Poultry* overleaf).

IMPORTANT

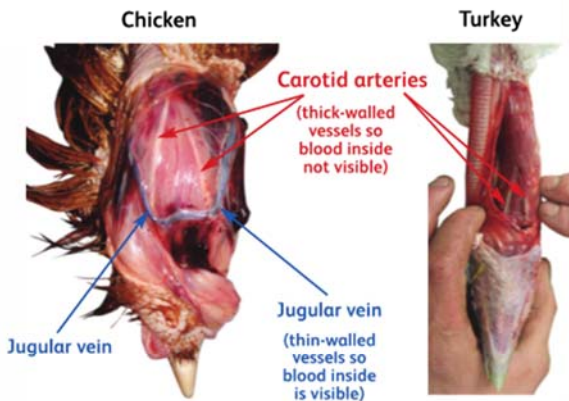
Small-scale and seasonal slaughter is subject to regulations additional to those relating to animal welfare at slaughter. These include registration with the environmental health department of the relevant local authority, to ensure compliance with animal health, animal by-product licensing, and collection and disposal requirements.

²Simple stunning in Annex I of Regulation 1099/2009 includes head-only electrical stunning and head-to-body electrical stunning.

EFFECTIVE NECK-CUTTING OF POULTRY



Identification of blood vessels



These birds have not received neck cuts but have been dissected to show the intact blood vessels

Jugular veins are easily identified because they lie just beneath the skin.

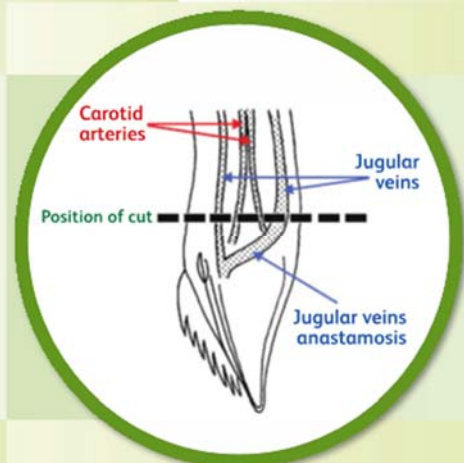
Carotid arteries lie within the neck muscle and are the **most important** blood vessels to sever because they carry oxygenated blood to the brain.

In chickens, geese and guinea fowl, the carotid arteries are typically visible on the surface of the neck muscle, near the head.

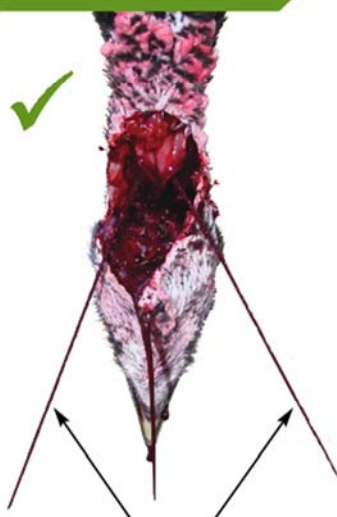
In turkeys and ducks, the arteries are hidden underneath the surface of the muscle so it is necessary to dissect the muscle to expose them.

Application

A deep horizontal cut into the neck muscle, across the front and both sides of the throat, just below the jaw bone, is called a ventral neck cut (VNC) and is a reliable method of severing **both common carotid arteries** and **both external jugular veins**, in all species. A VNC bleeds birds **rapidly**, thereby benefiting bird welfare and meat quality.



Assessment



✓ Signs of an effective cut

Immediately after cutting, for approximately 5 – 10 seconds, **two narrow 'jets' of blood** should spray under high-pressure in an upside-down V-shape; this indicates **both common carotid arteries** are severed.

- ▶ Allow the bird to bleed for at least 2.25 – 3 minutes.
- ▶ Regularly check the bird remains unconscious.
- ▶ Confirm death (sustained absence of corneal reflex and rhythmic breathing) before beginning further processing.

✗ Signs of an ineffective cut

Slow-flowing or dripping blood immediately after cutting, even in small species (e.g. quail), may indicate the veins are cut but the arteries may remain intact. Immediately cut the neck again until sufficient blood flows, or decapitate the bird.

Note: some conditions may reduce a bird's blood pressure (e.g. slow heart rate; cardiac arrest; neck dislocation; captive-bolt stunning may cause blood vessel damage within the head) so no 'jets' of blood may be seen even though both arteries might be cut.