Animal Health and Welfare Report.

2021/22 Reporting Year

TESCO

Animal Health and Welfare Report 2021/22.

We know customers want great products and expect us to take animal welfare seriously when sourcing these products. We are committed to working responsibly in this area and will continue to make progress by supporting best practice in our supply chains. Our Tesco Welfare Approved (TWA) standards are industry leading and independently audited.

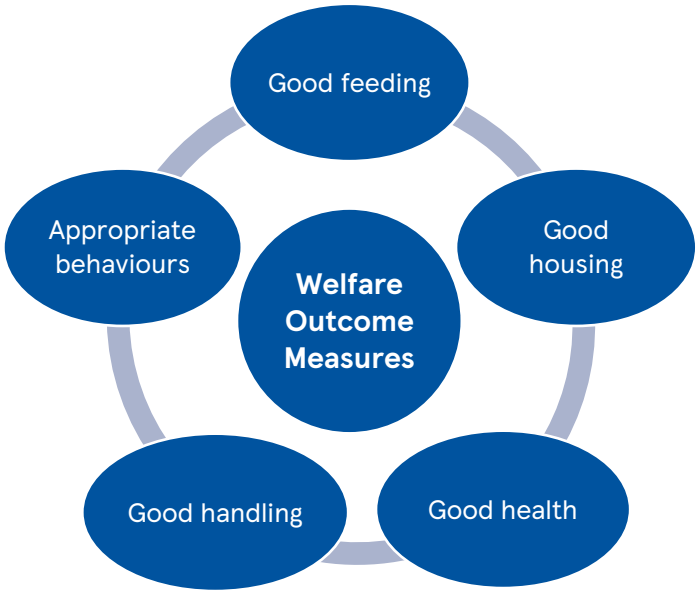
Being transparent about our policies, standards and progress is important.

To help us identify animal welfare issues concerning physical, mental and behavioural wellbeing in our supply chain, we have a system of reporting on animal welfare outcome measures. In 2021/22 we achieved a compliance rate of 96% in terms of complete, on-time submissions.

Welfare outcome measures derived from animal-based indicators are increasingly used by industry to assess welfare impacts. These measures give an indicator of positive and negative welfare approaches on farm, during transport and up to and including the point of slaughter. Reporting data is used to evidence compliance with our overarching animal welfare policy requirements, e.g. close confinement, maximum transport times over land and pre-slaughter stunning, that are applicable to all species. These are then supplemented with a range of species-specific measures.

Animal Welfare Indicators

The indicators (or domains) we use can be applied under a variety of different conditions (farm, transport and slaughter) and address:



These indicators are essentially the criteria which have traditionally underpinned the Five Freedoms, but the domain model recognises the impact on both the physical and mental well-being of animals. Increasingly, we support those management practices that actively promote positive welfare rather than just ensuring an absence of negatives. Good examples of this include the use of Human-Animal Interaction assessments in our pork supply chains.

How do we collect welfare outcome measure data?

Indicator data is typically submitted by suppliers monthly and/or derived as part of our ongoing programme of independent TWA inspections.

The data allows Tesco to track and trend relative performance within any given sector and monitor individual supplier performance over time. This is pivotal to our supplier engagement and enables us to support improvement and good practice.

Key measures and trends are reported below. Unless otherwise specified the data relates to own-label product supplied to Tesco UK. These are sector averages for the reporting period March 2021 – February 2022 (across the whole supplying geography). Previously published comparative data is also illustrated for March 2019 to February 2020 and March 2020 to February 2021. This illustrates our approach to performance monitoring and feedback.

As a consequence of the impact of COVID-19, the previous 2 years, up to March 2022 presented exceptional challenges to the supply base as a whole and disrupted both normal processing schedules and established procedures at farm level. There has been a gradual return to a normalised situation, but the impact of exceptional events still poses challenges when interpreting performance. This is reflected in some of the Outcome Measure trends seen, which have been compounded by sector-specific health challenges such as Avian Influenza (globally) and African Swine Fever (in central Europe).

Farm Assurance

In addition to our Tesco Welfare Approved (TWA) Standards, which applies irrespective of country of origin, as a pre-requisite 100% of farms supplying us must also be certified to an approved independent assurance scheme, which is compliant with ISO 17020 inspection requirements.

All of our British farms are assured by either Red Tractor, Quality Meat Scotland, Farm Assured Welsh Lamb or RSPCA Assured and all imported products are assured to a recognised scheme benchmarked for direct UK equivalence. See below for the Farm Assurance Schemes that Tesco recognise (Table 1).

Table 1: Approved Independent Assurance Schemes Recognised within Tesco Supply Base

Scheme	Sector	Higher Welfare Standard
Aquaculture Stewardship Council	Aquaculture	
BEIC – Lion Code	Laying Hens	
BIM Certified Quality Aquaculture	Aquaculture	
Bord Bia Sustainable Quality Assurance Schemes	Beef & Lamb/Poultry & Eggs (Irish)	
British Quality Trout	Trout	
DB Kontrol	Pigs and Poultry (Danish)	
Debio	Aquaculture (Organic)	X
Englandsgrise	Pigs (Danish)	
FAWL	Farm Assured Welsh Lamb	
GenesisGAP Chicken	Poultry	
GenesisGAP Duck	Poultry	
GenesisGAP Pig Standard	Pig	
GlobalGAP	Aquaculture	
IKB Kip	Chicken	
IKB Nederlands Varkens (+ Welfare Module)	Pigs	
IKB Varkens (+Welfare Module)	Pigs	
Interporc	Pigs	
Lloyds Register Poultry Scheme (Platinum & Gold) Naturland	Poultry Aquaculture	
NIFQAS	Pigs, Poultry, Beef & Lamb	
Organic* EU Regulation (EC) No 834/2007 and 889/2008[1]	Warm water prawns	X
Organic* Farmers & Growers	All	X
Organic* Food Federation	All	X
Organic* Trust	Trout	X
PAI International Pig Standard	Pigs	
QS (+ Welfare Module for Pigs)	All	
Quality Meats Scotland	All	
Red Tractor	All	
Red Tractor – Enhanced Welfare Module	Chicken	X
RSPCA Assured	All	X
SKAL*	All (organic)	X
Soil Association*	All (organic)	X

* Compliant with Regulation (EU) 2018/848 as of January 2021

Close confinement.

The Tesco Animal Welfare Policy states, a commitment to the avoidance of close confinement systems for livestock. Within all our species-specific requirements we specify the maximum livestock allowed in an area to avoid close confinement. We define this by the species and production system, based on welfare monitoring, legislation and evidence-based, best-practice approaches.

Cage free eggs

Our commitment

Tesco have made a commitment to source 100% cage free shell eggs across own brand and branded products for UK, ROI, Booker and CE by 2025. For ingredient egg Tesco has made a commitment to source 100% cage free ingredient egg for UK in all own branded products by 2025.

Within the Tesco UK supply base there has been sustained transition from colony-cage production for shell eggs with 86% of eggs now produced in free-range or barn systems (Figure 1). This is despite significant challenges in overall egg supply exacerbated by the prevalence of Avian Influenza.

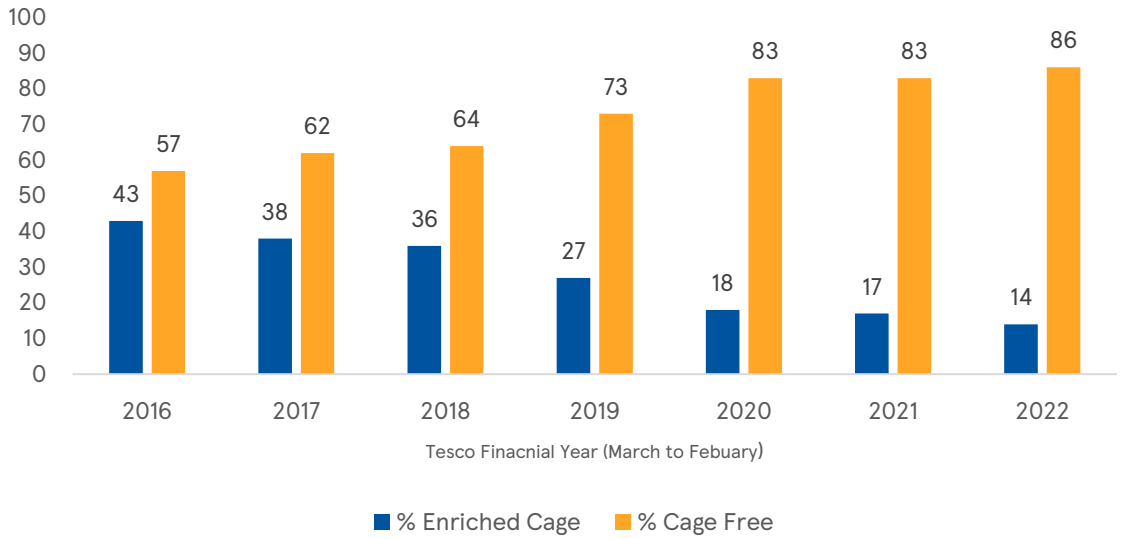


Figure 1: Progress on Cage-Free Shell Egg Commitment (UK)

At group level, with improved visibility of data sets instigated in 2020, the proportion of cage-free shell egg production had been established as 64% and this has now increased to 66%, with individual businesses (Booker and Tesco ROI) on track to be 100% cage free in advance of the 2025 deadline. The comparatively low level of transition in Tesco Central Europe reflects a period of challenge (due to avian influenza) and associated impact on availability. For ingredient egg this figure has shown a marginal increase in cage free supply from 34% to 39%.

The relative proportion of cage-free eggs across Tesco Group is shown in table 2. For 2021/22 these figures are reported for own branded eggs only.

Table 2: Proportion of cage-free eggs across Tesco business units.

Animal Welfare KPI 2021/22	UK	ROI	CE	Booker
% of Cage Free Shell Egg	86%	47%	30%	24%
% of Cage Free Ingredient Egg	37%	23%		

Figure 2 illustrates other key species-specific commitments to include:

- **100%** of own-label finish across the Tesco Group are either wild caught or farmed in open water systems.
- **100%** of own label finished pigs across the Tesco Group are housed in systems which meet or exceed weight specific space requirements and are never restrained or housed individually.
- **100%** of breeding females (dairy cattle, sows and ewes) producing own-label products across the Tesco Group are never tethered during gestation.
- **100%** of cattle in Tesco sustainable Dairy and Cheese groups are never housed in fully slatted systems.
- **100%** of sows producing own-label meat across Tesco UK are not confined in stalls during pregnancy at any point post-service.
- **100%** of sows producing own-label meat across the Tesco Group are not confined in stalls during pregnancy beyond 28 days post-service.
- **100%** of our UK Finest* pork (whether sold as a cut, further processed product or recipe ingredient) is outdoor bred in systems where sows farrow in loose housed (arc) accommodation.
- **100%** of poultry species (Chicken, Turkey, Duck and Goose) for Tesco own-label products across the Tesco Group are never housed in caged systems and meet or exceed the space requirements as defined in EU/UK legislation.
- **100%** of own-label beef across Tesco Group are not finished in feedlot (Concentrated Animal Feeding Operation) systems.
- **100%** of own-label veal is not produced in veal crates.
- Confinement and associated gavage feeding practices are not permitted for own-label poultry products across Tesco Group.

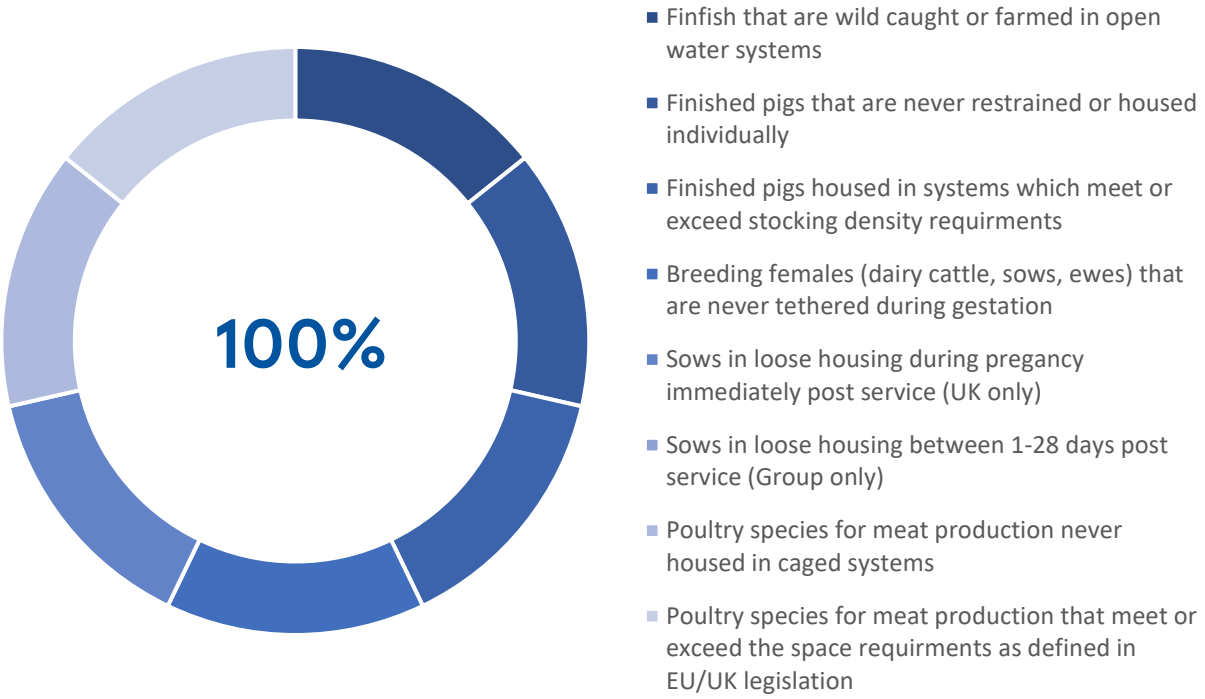


Figure 2: Percentage of animals free from specified confinement conditions in Tesco UK and Group (%)

The 100% compliance to confinement requirements has remained consistent between all reporting between 2019 and 2022 and reflects the absolute nature of these commitments within the Tesco Standards. There are additional areas of focus where Tesco has established reporting systems in 2021/2022 to improve visibility and track compliance in confinement e.g. farrowing systems.

We updated our Outcome Measure reporting for the 2021/22 reporting period to provide greater visibility of both the proportion of units and associated sow numbers adopting conventional farrowing, outdoor farrowing systems and indoor enhanced farrowing systems, where sow and litter are loosed housed within 72 hours of farrowing (Figure 3). 27.08% of sows in the Tesco supply base are housed in either of the enhanced farrowing systems; reflecting the progressive approaches being adopted within our supply chains.

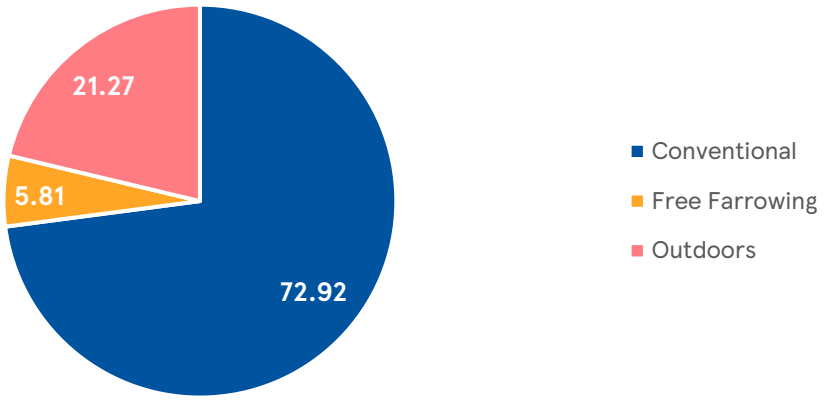


Figure 3. Percentage of Tesco UK pork supply chain associated with specified farrowing systems (%)

Routine physical/surgical interventions.

Tesco encourages farming practices that reduce the need for management mutilations. At present tail docking of dairy cattle, beak trimming in commercial meat chickens, fin clipping of fin fish, dubbing of cockerels and mulesing of lambs is not practiced by any producers across any Tesco businesses and geographies (own label) (Table 2).

Table 2: Summary of surgical interventions excluded from Tesco supply base

Procedure	Species/Sector	Tesco Scope	% Free of Mutilation
Tail docking	Dairy Cattle	Group	100%
Mulesing	Lamb	Group	100%
Beak Trimming	Meat Chickens	Group	100%
Beak Trimming	Organic Layers	Group	100%
Dubbing	Breeder Chickens (Cockerels)	UK	100%
Castration	Finished pigs	UK	100%
Teeth Clipping	Finished Pigs	UK (Italy)	100%
Fin Clipping	Finfish	UK	100%

None of our UK finished pigs are castrated, and our Dutch and Danish Supply chains have committed to increasing the proportion of entire male pigs as part of their overall sustainability strategies. Additionally, Tesco supports the work of the EU Pig Innovation Group; exploring methods of raising entire male pigs within EU pig supply chains as an alternative to surgical castration. 100% of our Italian finished pigs used in a range of our

specialty continental meats for Tesco UK are free from tail docking and tooth clipping. We updated our Outcome Measure reporting for the 2021/22 reporting period to provide greater visibility on the proportion of pigs within our supply chain that are tail docked which showed that just under a quarter (22.7%) of pigs are undocked (Figure 4).

We recognise the complex considerations that underpin the decision to undertake tail docking in pigs i.e. short term discomfort verses the potential for long term issues associated with tail biting. As such we will use this initial data set as a benchmark to track performance improvements in conjunction with greater visibility and evaluation of risk factors.

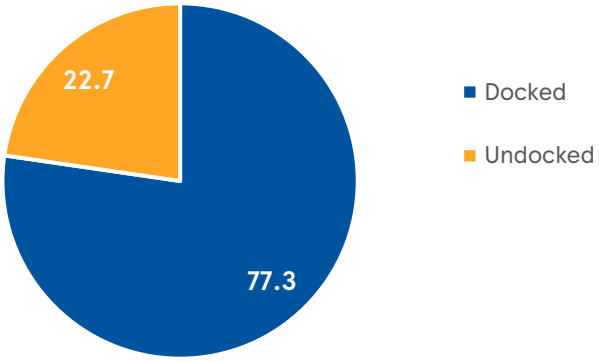


Figure 4: Relative proportion of docked verses non-docked finished pigs within Tesco UK Supply Chain (%)

100% of Tesco Group own label dairy supply chain is free from tail docking.

100% of commercial meat chickens are free from any surgical intervention.

Live plucking for feather and down production is **prohibited** at Tesco Group level.

Transport and fitness to travel.

As part of our TWA standards for all species (excluding aquaculture), we require transport times to be limited to **8 hours or less**. It is recognised however, that occasions arise that are outside processor or haulier control. Over 90% of farm to slaughter transport times for livestock supplied into Tesco UK, ROI and Booker (own label) are 8 hours or less. 100% of our lamb and 99.8% of pork and 99.7% of beef within our Tesco UK supply, typically travel from farm to slaughter within 8 hours (Figure 5).

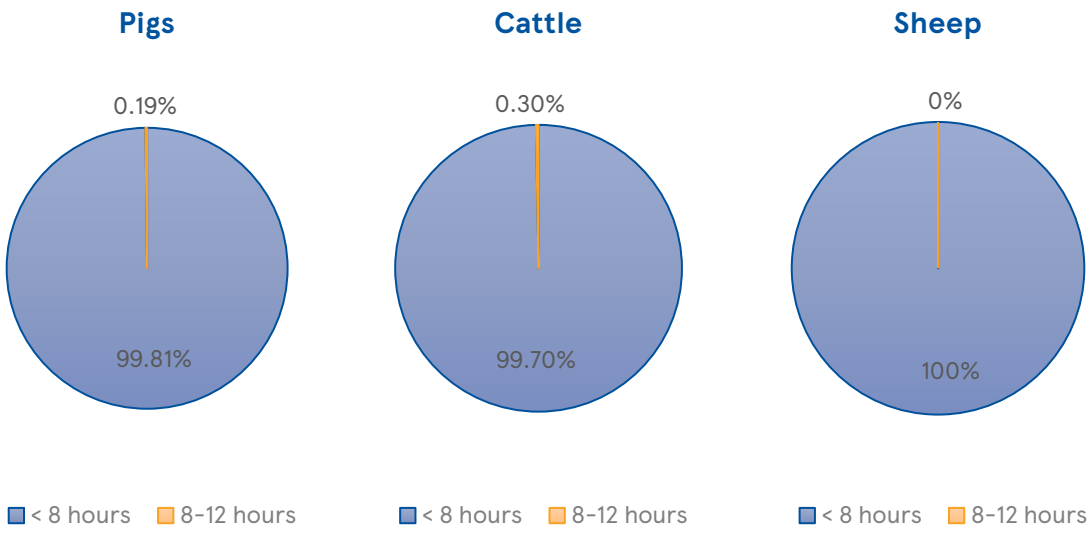


Figure 5. Percentage of deliveries (Pigs, Cattle and Sheep) completed within 8 hours for Tesco UK and ROI (%)

One of the consequences of COVID-19 and African Swine Fever (in central Europe) and Avian Influenza (globally) has been intermittent, short-notice closures of processing facilities and/or requirements to adopt different routes avoiding disease protection zones. This in turn has periodically necessitated transport of animals to sites other than those closest. Those occasions where total transport time has exceeded eight hours are recorded and Tesco have full visibility of occurrence within their supply chain. This equated to 0.73% of all loads occurring over periods of Covid-19 restriction during 2021/2022 (compared to 1.3% over the previous reporting year).

Additional Outcome Measure reporting was introduced across Tesco UK poultry supply chains in 2021/2022. This was in response to industry discussions around the potential value of limiting transport times to less than four hours for chickens, turkey and ducks. Summary data is illustrated in Figure 6 and indicates that across all sectors most transport occasions are completed within four hours.

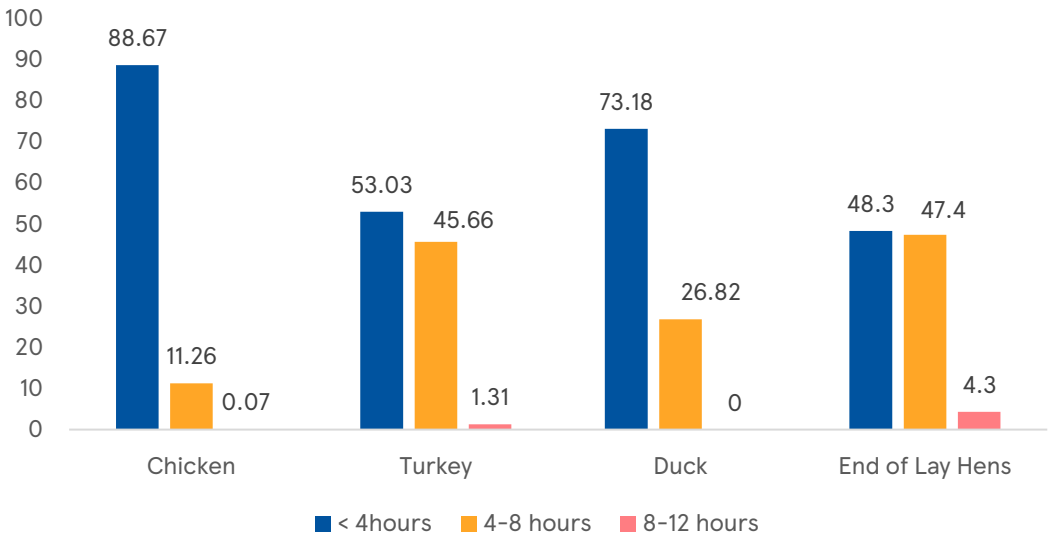


Figure 6. Percentage of poultry deliveries (Chicken, Turkey, Duck and End-of-Lay Hens) completed within specified time frames during reporting period 2021/22 for Tesco UK and ROI (%)

Transportation of aquatic species poses different challenges. For this reason, Tesco actively encourages the humane slaughter of fin fish and crustacea in-situ i.e. at the site of final grow out. Where this is not possible our TWA Standards stipulate strict criteria for water quality parameters e.g. dissolved oxygen and the associated monitoring required and supplementation where required. It is however, recognised that transport is an inherently stressful process, and it is of absolute importance that only those animals considered fit are loaded on farm and that transport practices maintain the welfare of the animal in transit.

Red Meat

The cumulative proportion of animals considered not fit for transport, dead on arrival or requiring euthanasia is recorded and closely monitored. For example, highlighting seasonal trends and the impact of weather conditions on transport experience (Figure 7). The total values are comparable between species and year-on-year.

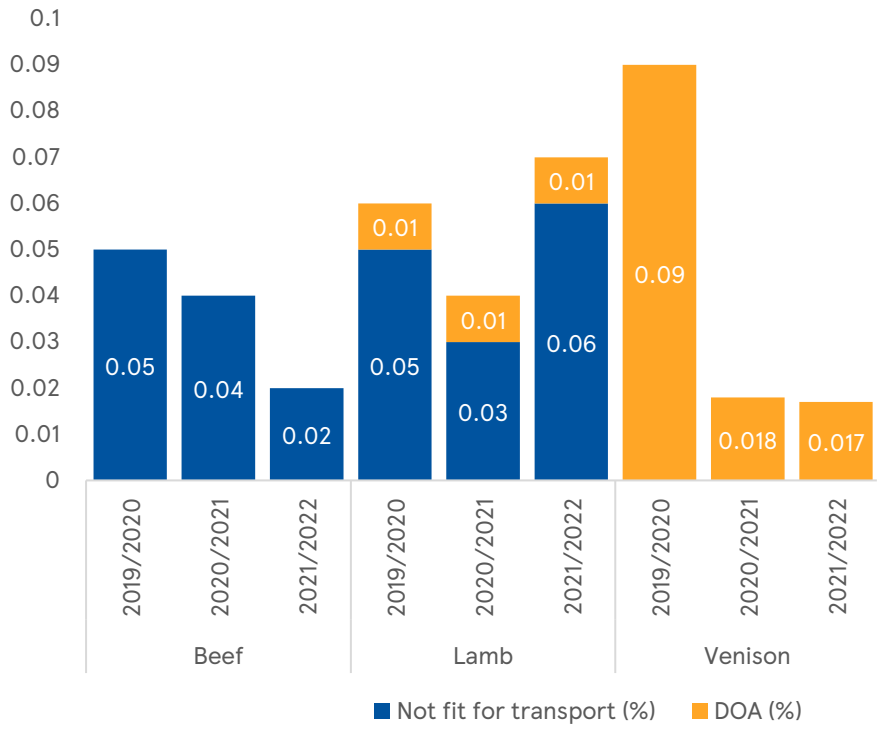


Figure 7. Cumulative percentage of casualty animals (Cattle, Sheep, Venison) (%)

Inter-site variation is a significant aspect which we work with suppliers to understand and address as necessary. The relative proportion of total casualties has declined across the beef and venison supply base, while there has been some non-significant trend increase in total losses in the pork and lamb sectors. However, where there has been an apparent increase in total average in any sector this is evaluated further.

In the case of the relative increases seen across the lamb, venison and pork supply chains the annual increases are attributable to higher number of issues during the first half of the reporting year. There appears to be a seasonal uplift in challenges associated with fitness for transport (assessed at slaughter) associated with warmer weather.

Poultry

Logistically the only measure of transportation fitness to travel that is possible in poultry species is the in-transit mortality or dead-on-arrival figure (Figure 8). There are species specific differences in that values are lower in turkeys and ducks reflecting both the relative robustness of each and that typically farms are in closer proximity to slaughter sites. The apparent increase in ducks that are dead on arrival is not statistically significant.

Overall levels across the broiler (chicken) supply base had remained static between the 2020/2021 and 2021/2022 reporting periods and this is the first year that there has been visibility of in-transit mortality in end-of-lay hens, which will provide a benchmark to assess future performance.

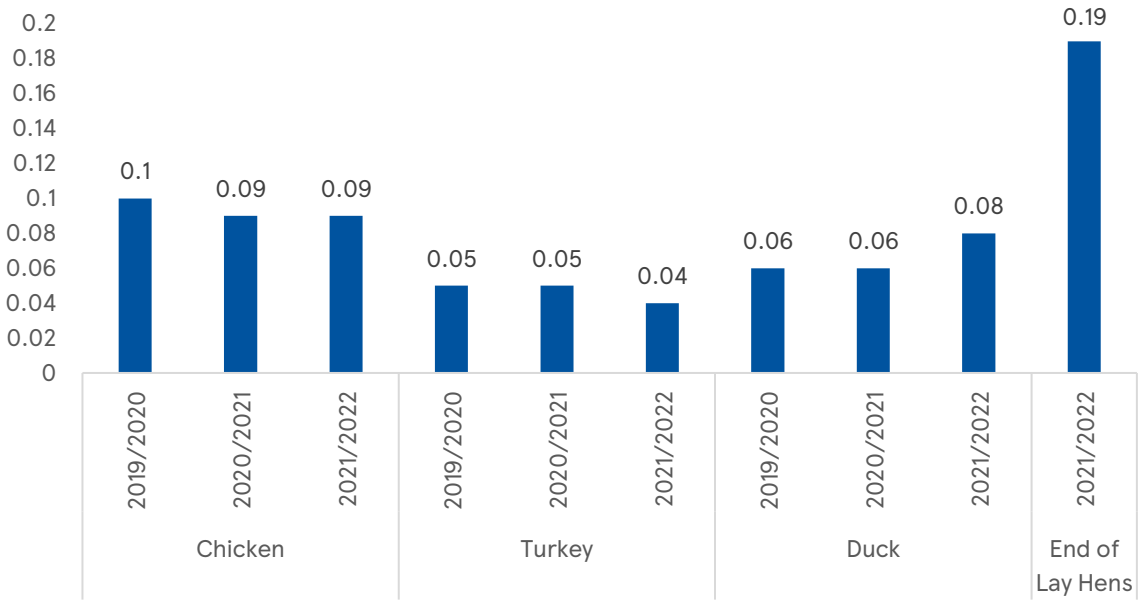


Figure 8. In transit mortality (Poultry) (%)

Animal handling.

Red Meat

It is recognised that loading and unloading animals onto livestock vehicles can be inherently stressful and as such Tesco require that unloading is assessed and subsequently verified as part of the independent third-party inspection process (both from live observation and historic CCTV footage). Slips and falls are monitored for cattle and pigs; the inherent assessment challenges mean that only falls are recorded for lamb and venison.

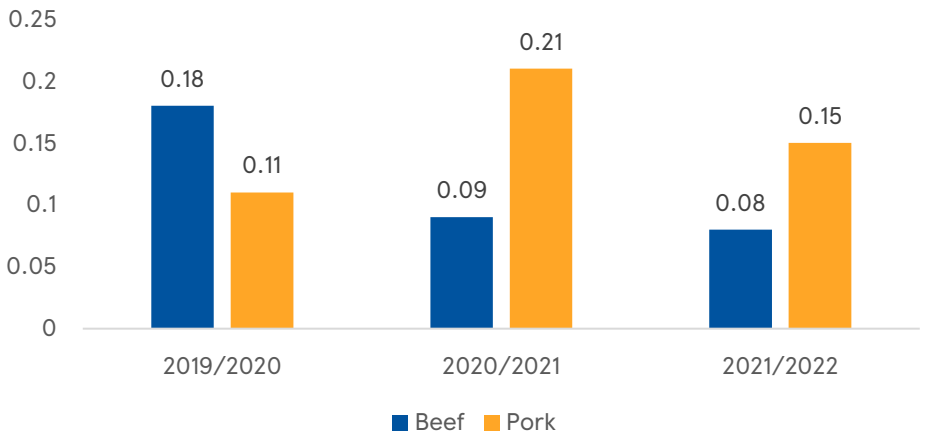


Figure 9. Percentage incidence of slips at unloading (Beef and Pork)for Tesco UK and ROI (%)

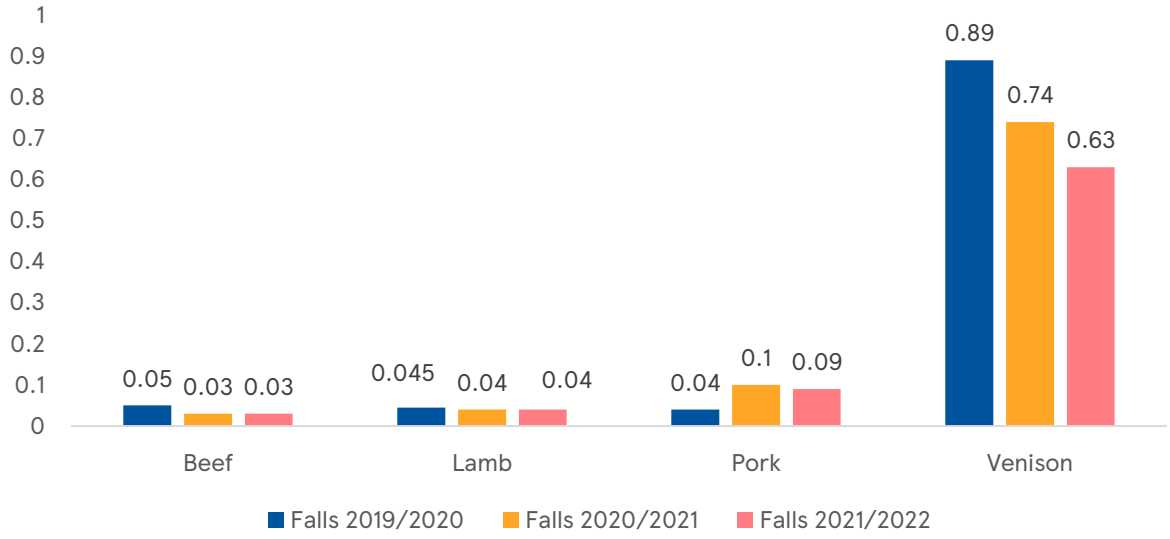


Figure 10. Percentage incidence of falls at unloading (Beef, Lamb, Pork, & Venison) for Tesco UK and ROI (%)

There is a consistency of outcome across beef, lamb and pork sectors. The higher percentage seen in venison reflects both the smaller total numbers processed (and so any individual instance has a proportionately greater result) but also the nature of deer as a species.

Beef, lamb and venison have all shown marginal trend decreases in the incidence of falls across the illustrated reporting periods (Figure 10). The increase that has been reported across the pig supply base is of potential concern but mainly reflect the difficulties of consistency of assessment during the unloading process. In response to feedback from suppliers in relation to this issue Tesco are continuing to explore AI options to automate the process for greater accuracy.

Goad use

Goad use is prohibited across the Tesco Supply Chains for veal, lamb and pigs. It is permitted (subject to strict conditions of use) for beef and venison, where the size of the animal and the safety of personnel must be considered when trying to ensure animals are moved with least overall intervention and net welfare impact. Where goad use is high and/or accompanied by other welfare indicators such as vocalisation, Tesco would require review of handling facilities and practices to resolve any issues.

Comparative data sets indicate a (non-significant) trend increase in goad use in cattle but a reduction in use across the venison supply chain. The increase seen in the beef supply chain has not resulted in an increase in associated behavioural indices (such as vocalisation) and may be a consequence of a variety of variables, not least cattle age.

Conversely, the reduction in use across the venison supply chain may equally be reflective of animal type e.g. previous handling experience and change in usage level is therefore not necessarily indicative of procedural changes at processor level.

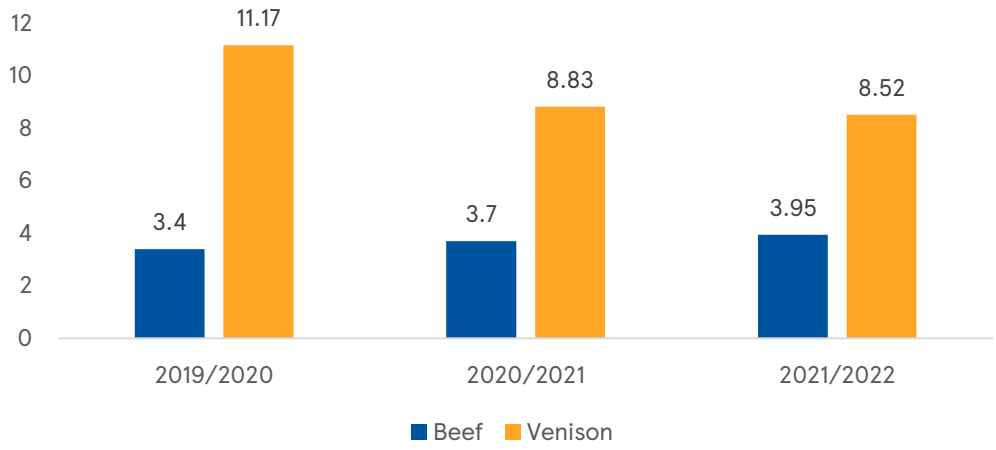


Figure 11. Percentage use of handling aids (proportion of beef and venison requiring goad use) for Tesco UK and ROI (%)

Live Clipping.

There is an expectation that animals are presented to processing plants at point of unloading in a clean and healthy condition. This is both a measure of animal welfare and a food safety requirement. There are occasions however, where the fleece or hide of an animal is heavily soiled on arrival and some degree of clipping is required. Live clipping is discouraged as it is another handling procedure requiring animal restraint and as such the incidence must be reported. Figures for beef are higher than for lamb but the relative incidence of each is now broadly consistent year-on-year (Figure 12).

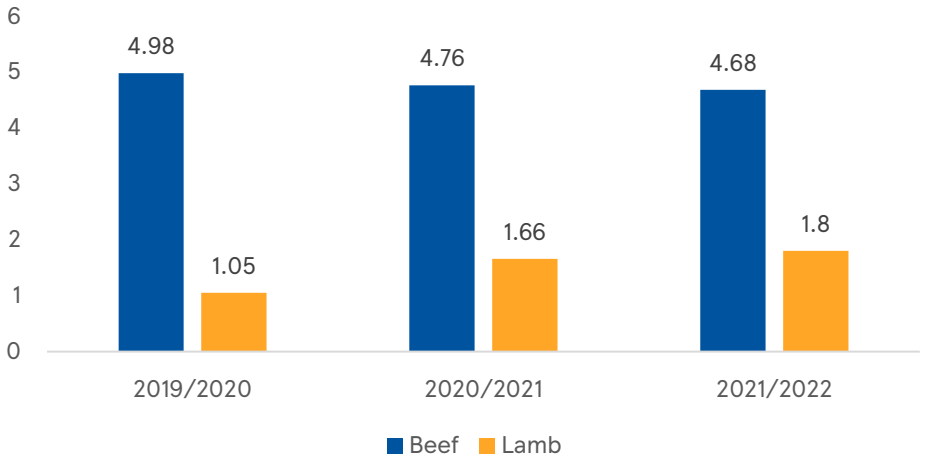


Figure 12. Percentage of animals live clipped at slaughter intake (beef & lamb) for Tesco UK and ROI (%)

Variation tends to be a function of environment (location, housing type and seasonality) geography (high rainfall) and season (autumn/winter) generating periods where live clipping is far more likely compared to the rest of the production year, as illustrated by trend graph (Figure 13).

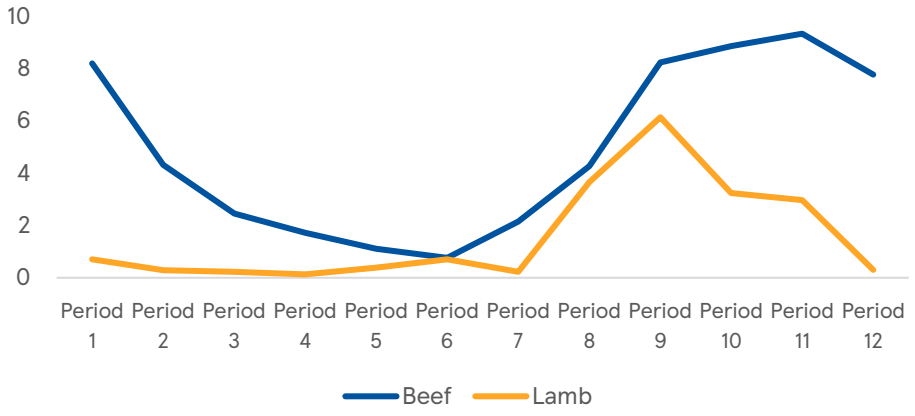


Figure 13: Seasonal variation in percentage incidence of live clipping (beef & lamb) for Tesco UK and ROI (%)

Slaughter.

The Tesco Group Animal Welfare Policy requires that all livestock species are pre-stunned in accordance with European regulatory requirements (Regulation 1099/2009 EC).
This is irrespective of geography or species and includes branded products, except for a small number of designated and clearly labelled branded concessions subject to religious slaughter policies. For Halal approved sites this is strictly limited to those that accept electrical stunning. This stunning practise and procedure is verified during independent audit, and the effectiveness of stun and slaughter are verified through outcome measures. While there is currently no statutory requirement for fish to adhere to prescribed methods of stun and slaughter, Tesco suppliers of salmon, trout, sea bass, sea bream and pangasius have adopted industry best practice i.e. electrical stunning prior to slaughter.

There is 100% pre-slaughter stunning of all terrestrial and finfish species supplying all own label products for Tesco Group.
Where here methods have been limited e.g. chill-kill of shrimp, the 2021/2022 reporting period saw the commercial adoption of a novel system of instantaneous electrical stunning for shrimp, after a successful pilot period in 2021. While the pilot outcomes are reviewed and commercial adoption is refined, warm water shrimp suppliers continue to use a standardised best practice rapid chill-kill method. Tesco support academic and industry advances in this area and will encourage uptake when a proven humane method is available.

We do however, in a small number of stores, sell branded meat or host concessions that sell un-stunned halal and kosher meat. This is to serve customers who specifically wish to purchase un-stunned meat. This meat is clearly labelled Halal or Kosher, so that our customers are able to make informed choices. At least 99% of animals destined for Tesco Group (own-label and branded) are stunned before slaughter and this position remains consistent across reporting periods (Figure 14).

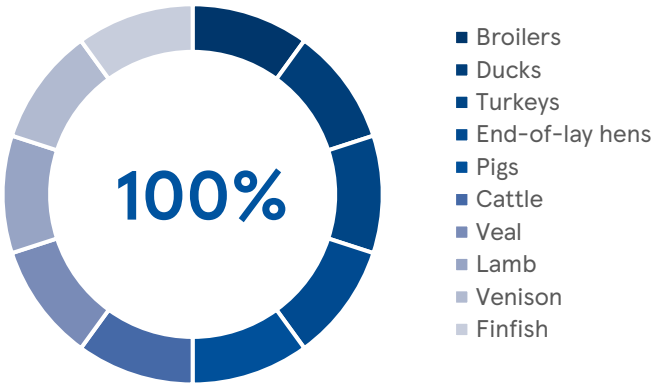


Figure 14. The percentage of animals pre-slaughter stunned across Tesco Group (own-label) (%)

Secondary stunning

In addition to requiring that all species are pre-slaughter stunned we recognise that the effectiveness and consistency of stunning is crucial to animal welfare during the slaughter process. Where possible, we favour the use of methods that result in an irrecoverable stun (stun-kill) such as Controlled Atmosphere Stunning (CAS) systems used in most of our pig and poultry supply chains. We recognise the debate in relation to the use of Carbon Dioxide in CAS systems for pigs but in the absence of commercially viable, scientifically validated alternatives, Outcome Measure data continues to illustrate the net benefits of the system (relative to electrical stunning) in terms of effectiveness of primary stun.

Where electrical or percussive systems are used then our suppliers report on the percentage of animals that require a secondary or 'back-up' stun.

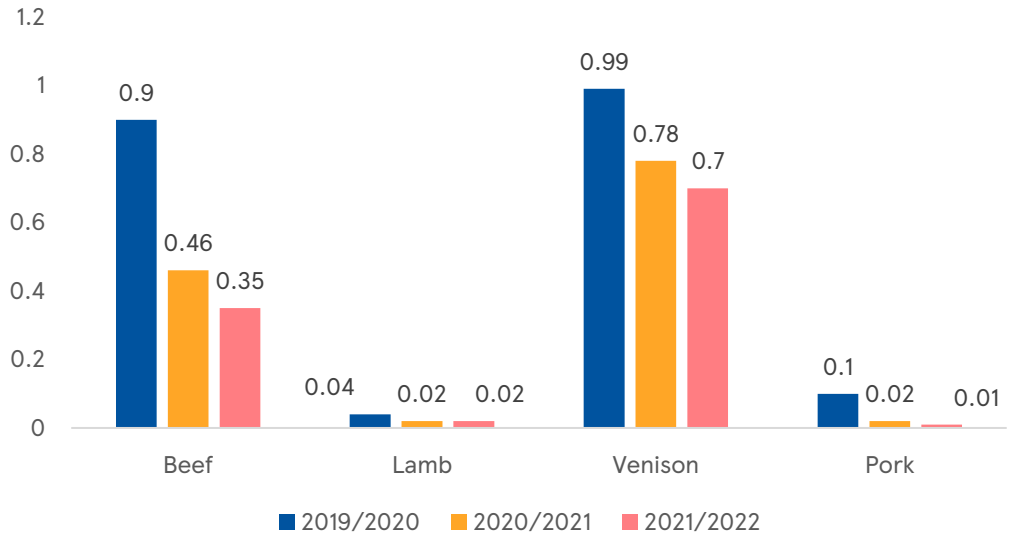


Figure 15: Percentage incidence of animals requiring secondary stunning for Tesco UK and ROI (%)

The higher figures seen in our beef and venison supply chains reflect a proportion of 'health and safety' stuns to minimise spontaneous post-stun movement. In 2022, differentiation of secondary stuns in terms of 'health and safety' as opposed to 'stun failure' has been included in reporting requirements to provide absolute visibility and better cross-species comparative data. Importantly, however there has been a continued reduction in the incidence of secondary stunning in the 2021/2022 reporting year reported across every one of the red meat and pork species sectors ranging from 25-50% reduction in what were already low figures (Figure 15).

Electrically stunned poultry may show some post stun responsiveness in a minority of cases. Similarly, where a bird misses the automated neck cut, a manual back up will used

to ensure that 100% of birds are effectively stunned and slaughtered. Both these parameters are carefully monitored to ensure animals are insensible throughout (Figure 16).

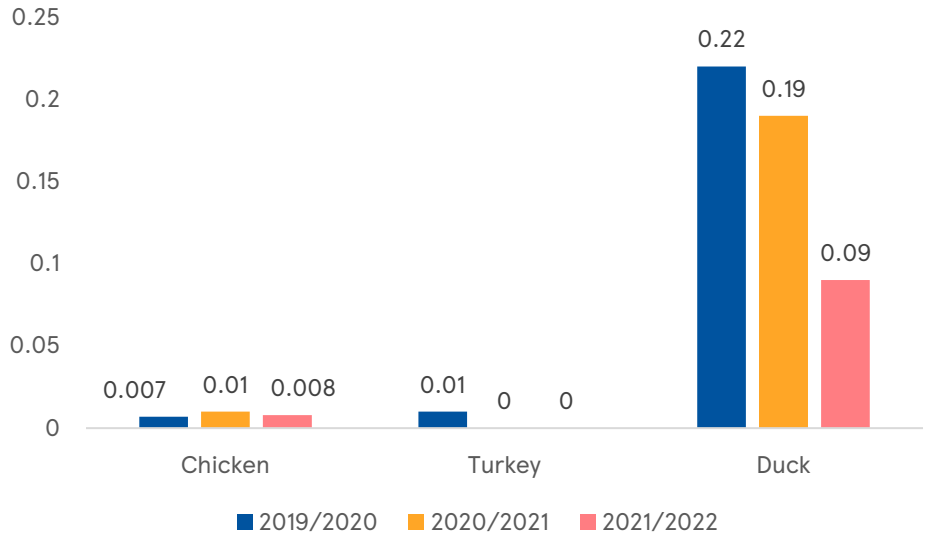


Figure 16. Percentage of birds requiring secondary stunning in poultry (chicken, turkey & duck) in Tesco UK and ROI (%)

Tesco promotes the use of CAS systems that induce an irrecoverable stun-kill. These systems are widely used in broiler and turkey supply chains (hence the lower values for responsiveness post stun). However, duck physiology makes the application of CAS systems more difficult, and the higher responsiveness figure is associated with the necessary use of electrical stunning systems but there has nevertheless been a significant reduction in post-stun responsiveness within the duck supply chain.

The figure reported for 2020/21 in the turkey supply base (0%) and the associated reduction relative to the 2019/20 figure is indicative that all suppliers now use CAS (stun-kill) systems.

Cross-species enrichment.

The provision of an environment that supports the display of a range of natural behaviours is crucial to the mental and physical well-being of animals and can be important even in more extensive production systems e.g. dairy. The table below (Figure 17) gives an overview of some of the enrichment types used across our supply chain.

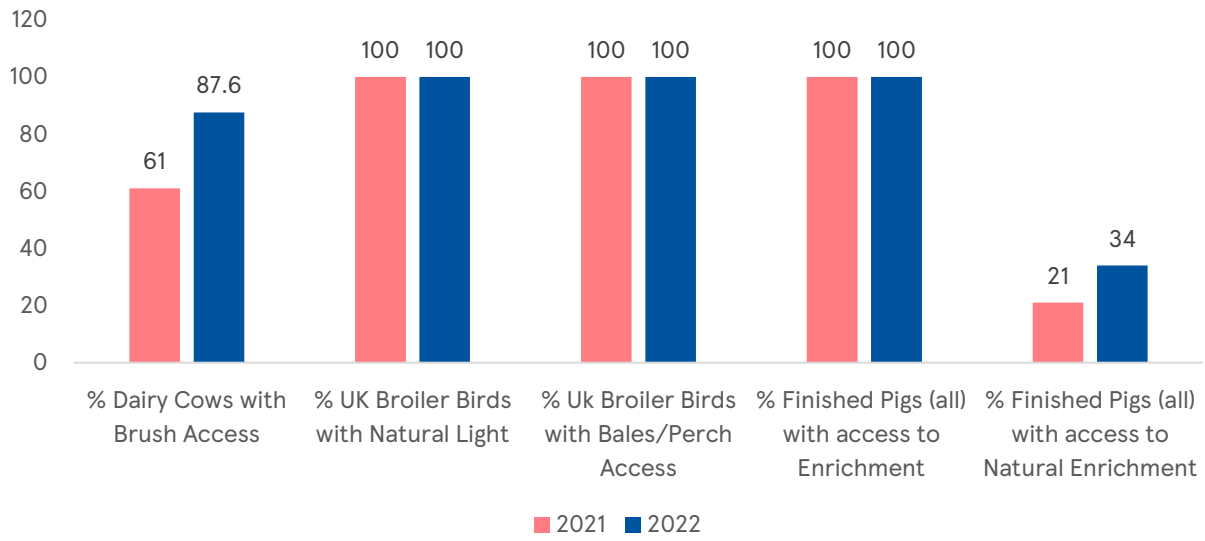


Figure 17. Percentage provision of environmental enrichment in Tesco UK

Pig enrichment must satisfy key characteristics to be considered optimal (farm level guidance is that enrichment is compliant with COMMISSION RECOMMENDATION (EU) 2016/336 of 8 March 2016 on the application of Council Directive 2008/120/EC laying down minimum standards for the protection of pigs as regards measures to reduce the need for tail-docking). Where this cannot be achieved through the provision of a single substrate, such as straw, then a variety of different enrichment types must be provided which collectively meet behavioural needs.

100% of all pig supplied into Tesco Group own label are provided with enrichment and all of our Finest* pork is finished in straw-based systems satisfying the criteria for optimal enrichment at each life stage. Additionally, all of our pork sourced from Germany for Tesco UK is provided with natural enrichment sources e.g. straw, hay, shavings, wood, reflecting in-country legislative requirements. Enrichment is key to pig production across all Tesco geographies. It applies to all product ranges including our continental Meats.

Enhanced Welfare Systems

Tesco have introduced a 'Room to Roam' range, in addition to the existing higher welfare offerings of Finest Free Range and Organic. 'Room to Roam' systems use a slower growing bird, which have a maximum stocking density of 30kg/ m^2 or below. Within the Tesco UK global supply base, 15% of broiler chicken comes from birds raised at or below (Figure 18), and 5% from slower-growing breeds (Figure 19).

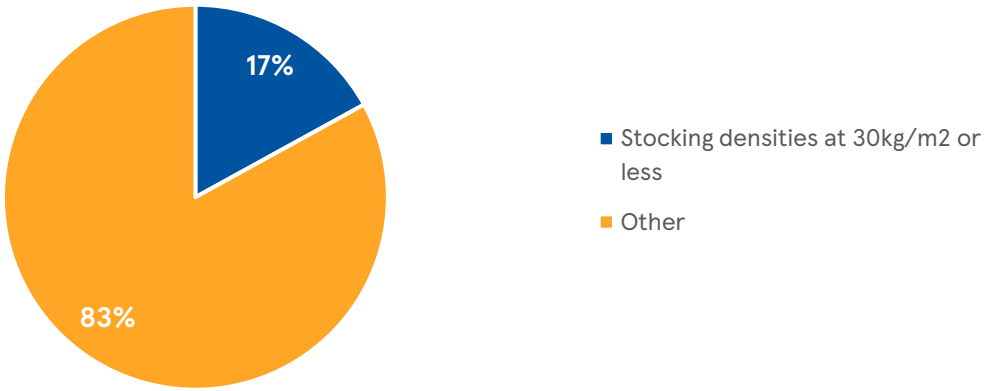


Figure 18. Percentage of broiler birds stocked at 30kg/m2 or below for Tesco UK (%)

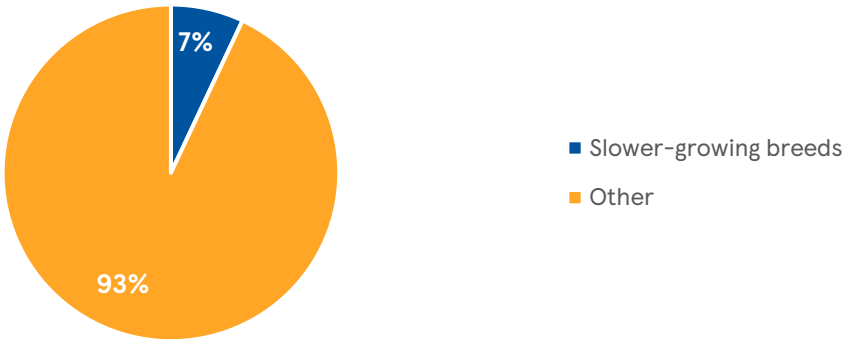


Figure 19. Percentage of Tesco UK broiler chicken sourced from slower-growing breeds (%)

Species-specific.

Dairy Cattle

Members of the Tesco Sustainable Dairy Group (TSDG) and Sustainable Cheese Group (TCG) are independently assessed at farm level to track and trend performance against key welfare outcome measures.

Table 3: TSDG Welfare Outcome Measures

Assessment Variable	Target
Mobility (lameness)	Herd average <20%
Johnes Disease	100% of farms with Johnes disease not present in 98% of herd
Calving	< 5% cows require assistance at calving
Skin (Hock) Lesions	< 5% cows demonstrate any form of hock lesion
Body Condition Score	95% of cows to achieve a body condition score of 2 or above.

There is a high proportion of farms meeting compliance targets, indicating that key management considerations such as nutrition, housing and health care are consistently being met. It is encouraging that despite targets being increased year on year, the proportion of TSDG producers meeting those targets has remained statistically unchanged (Figure 20) indicating relative improvement. In addition to this we can verify that 0% of TSDG and TCG animals are housed in fully slatted systems.

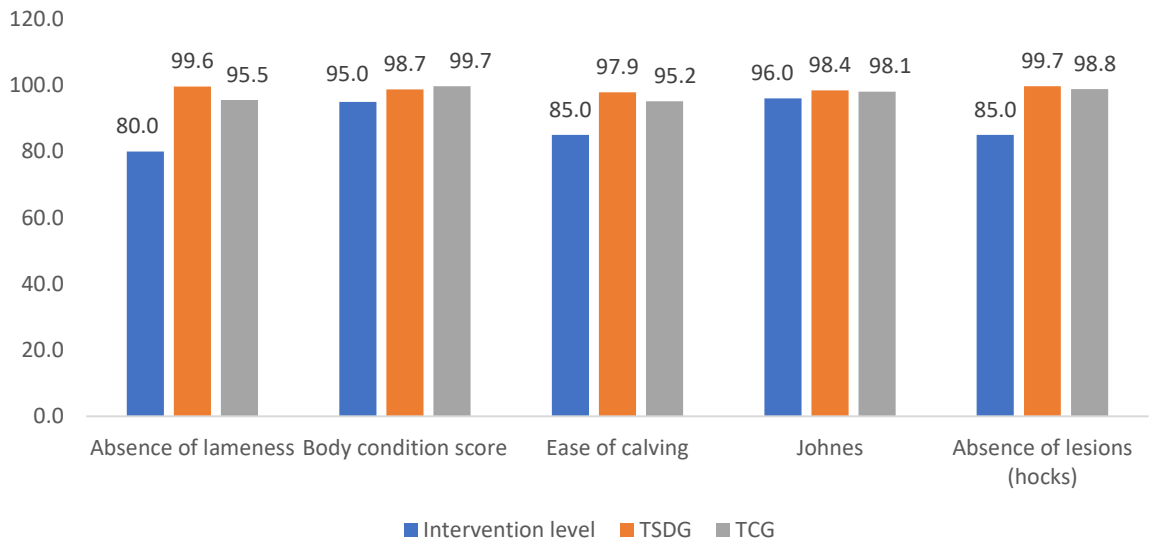


Figure 20: Proportion of TSDG and TSG dairy farms meeting compliance targets 2021/22 (%)

Poultry

Mortality

Mortality is the measure of those animals that die or are euthanased on farm as a consequence of disease or injury. It is a metric that is of value both in terms of considering animal health and welfare but additionally in terms of the net sustainability of a production system. Mortality levels vary with species and external factors such as seasonal fluctuation, health challenges and a range of environmental conditions, which in turn can be a consequence of geography. Understandably, it is a key measure of on-farm welfare across our global poultry supply base and one which is closely monitored. In this way, best practice which minimises on-farm mortality can be identified and supported across the supply base through the application of targeted health plans. Mortality data is also reviewed within the context of antibiotic trends. The Tesco Antibiotic Commitments emphasise responsible use, but this must not be at the expense of bird welfare. By tracking, trending and correlating mortality and antibiotic data we can ensure there isn't a restriction in use of antibiotics at the expense of bird health.

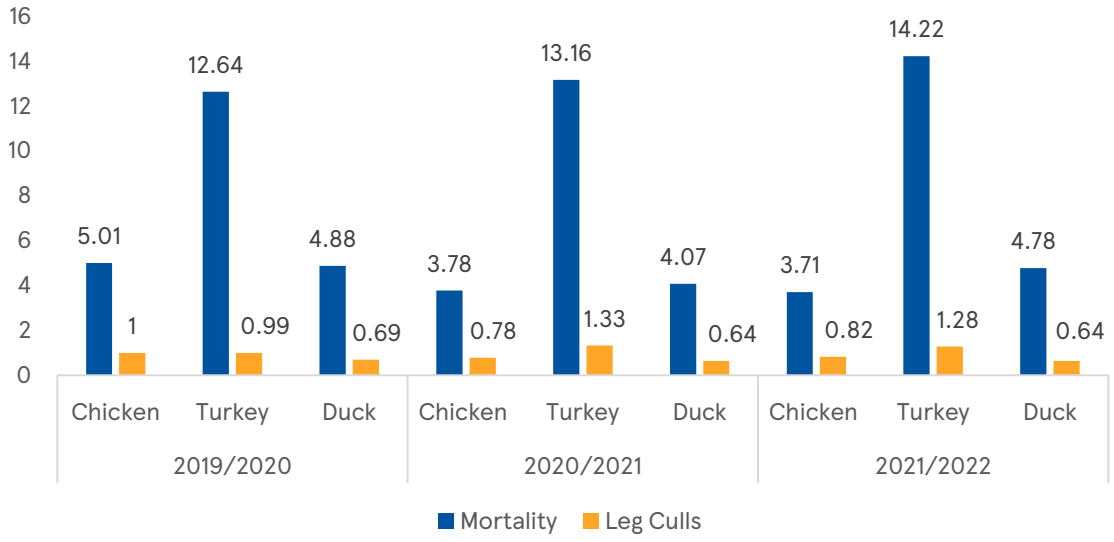


Figure 21. Percentage mortality and incidence of leg culls within poultry supply chains (chicken, turkey & duck) in Tesco UK and ROI (%)

Leg culls associated with leg weakness

A specific data sub-set within mortality figures relates to the proportion of birds requiring culling for reasons associated with leg weakness. Mobility in poultry species is an area of focus hence leg health is key irrespective of breed. The percentage of birds culled for leg

issues is consistent across species and is fairly static and remains proportional with any changes in absolute mortality levels. It also indicates that sites take a proactive approach to managing bird mobility.

Overall, there have been reductions in mortality and rate of leg culls in both chicken and duck supply chains. There has been an increase in both metrics within the turkey supply chain, but this is consistent with reported challenges identified within the antibiotic data sets, specifically industry-wide issues with enteric disease.

Lesions

Tesco is committed to housing systems and environmental management that ensure the occurrence of foot pad lesions (pododermatitis) in chickens, ducks and turkeys, leg lesions (hock burn) in chickens and breast blisters in turkeys are minimised. Tesco liaise with individual suppliers and communicate evidence of good practice and associated on farm management where individual suppliers are achieving significantly lower figures than the average but equally endeavour to recognise and understand those factors including seasonality and environmental challenges which have a significant impact on recorded levels.

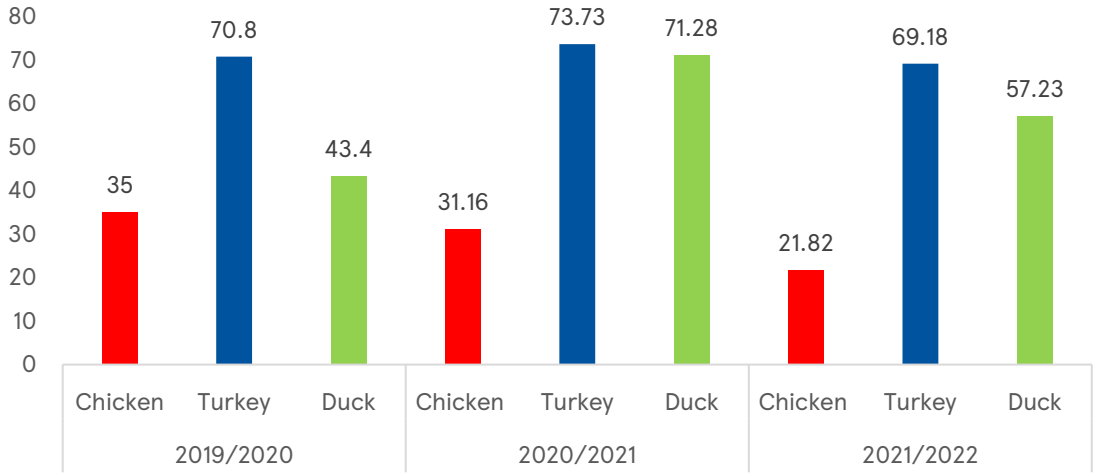


Figure 22: Percentage incidence of pododermatitis within poultry supply chains (chicken, turkey & duck) in Tesco UK and ROI (%)

It is important to note that Tesco do not recognise the incidence of an acceptable level of pododermatitis or hock burn and unlike many scoring systems which only report on the presence of more severe lesions the Tesco figures represent absolute values i.e. where there is any indication of contact redness or abrasion, however minimal.

There has been a relative reduction in pododermatitis in broiler chickens but this average includes considerable geographic variation. It has long been known that the levels of

pododermatitis are higher in the UK and Northern Europe compared to Thailand. A similar variation has driven the apparent increase in levels in ducks in the 2020/21 reporting period, as historically the only 52-week supplier was located in Thailand with the fresh seasonal supply base coming from the UK. There is now UK production received on a 52 week basis.

There has been a marginal trend increase in incidence in the turkey supply base (and an associated increase in levels of breast blister in the 2020/21 reporting period) but again this is believed to be attributable to underlying enteric health challenges experienced by some suppliers and the associated difficulties in maintaining optimal litter quality. In contrast to the reported increase in pododermatitis, levels of hock burn have decreased in broiler birds. Pododermatitis is associated with foot pad/litter contact (indicating birds are upright) whereas hock burn tends to be associated with more inactive birds experiencing greater periods of recumbent posture and hence leg contact with litter surface. It would therefore be unusual for both metrics to show an increase. While any contact lesions must be minimised, the change in relative proportions does indicate that patterns of bird motility have changed i.e. fewer individuals demonstrating periods of prolonged inactivity.

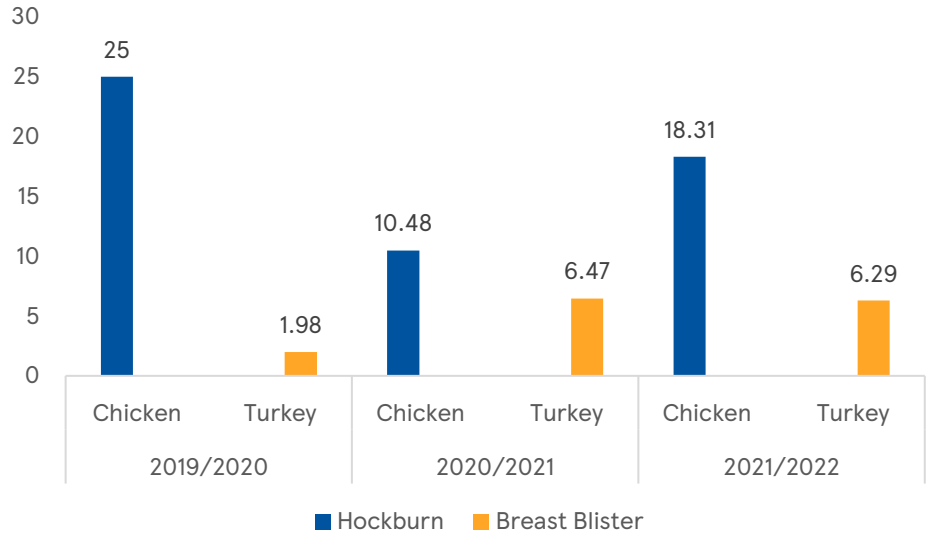


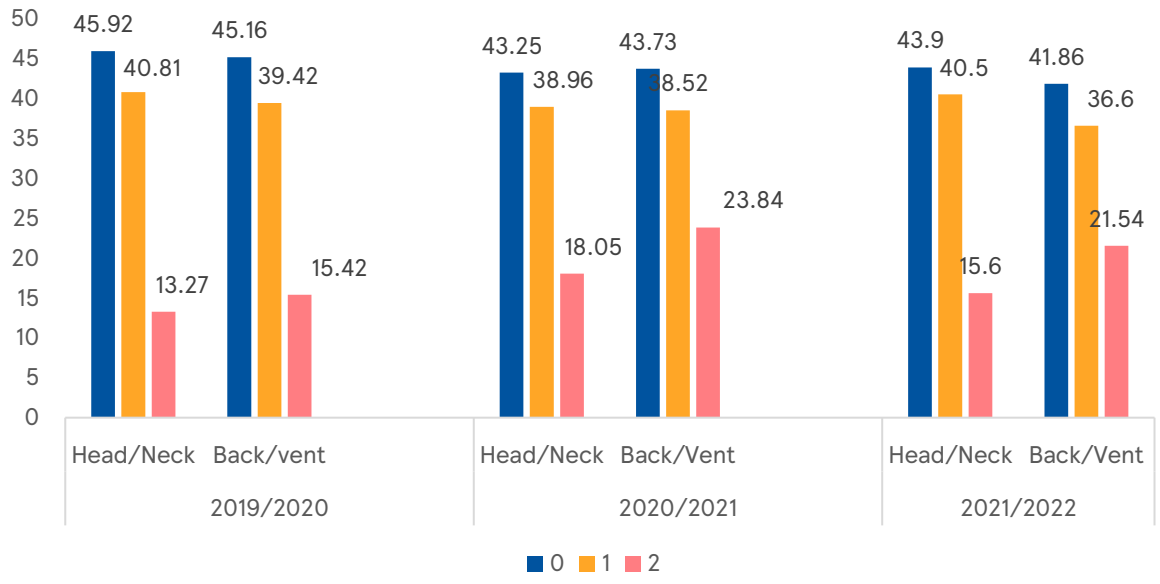
Figure 23: Percentage incidence of hock burn (chickens) and breast blister (turkey)in Tesco UK and ROI (%)

All the figures for mortality, leg culls and lesions are evaluated in the context of trend usage of antibiotics, as it is recognised that responsible use and reduction strategies can pose additional management challenges, and this cannot be at the expense of animal welfare.

Laying Hens.

Feather Coverage

Tesco recognises the impact that injurious pecking behaviours have in laying hen flocks and encourages the implementation of strategies as outlined by the Bristol University FeatherWel initiative to minimise occurrence. Tesco require that feather coverage is assessed and scored in all commercial egg laying flocks from 40 weeks of age. This enables producers to monitor conditions or behaviours that may result in feather loss and respond accordingly. A score of 0 indicates complete feather coverage, while a score of 2 indicates a degree of feather loss. These scores are independently verified during assessments. Most birds retain all or most of their feather coverage whilst in lay and only a minority of flocks have evidence of agonistic behaviours. Given the significance of these metrics to the overall assessment of laying hen welfare, video training had been developed and delivered in the 2020/21 reporting cycle to ensure absolute consistency of approach by suppliers and 3rd party assessors. This has continued to prove invaluable to ensuring supplier consistency of approach given ongoing limitations in conducting in situ 3rd party farm assessments as a result of Avian Influenza restrictions.



Score 0: complete feather coverage
Score 1: loss of indiviual feathers
Score 2: significant feather loss exceeding >5cm diameter

Figure 24: Feather coverage in Laying Hens in Tesco UK and ROI(%)

Following improvements between 2018 and the 2019/20 reporting cycles, where there had been an improvement in feather coverage and associated scores with a reduction of approximately 6% in the total number of birds assessed as scoring 2 for either head/neck

or back/vent coverage, there has been a reduction in birds showing complete feather coverage in the 2020/2021 data set and this pattern has been maintained in the 2021/2022 data set (Figure 24). This is potentially because of a number of variables, including known health challenges but principally due to free-range flocks being housed for extended periods due to Avian Influenza housing orders.

Beak treatment

As part of the Tesco commitment towards the avoidance of routine physical interventions, we collect detailed information on both the instances and method of beak treatment (Figure 25). Beak treatment should be avoided or only use methods which least effect bird discomfort and result in minimal damage. All birds either receive no beak treatment (score 1) or are treated at day old in the hatchery (score 2). No birds are beak treated on farm (score 3) or because of emergency intervention (score 4).

In Tesco UK and ROI progress is being made in relation to beak treatment with 16.48% of birds now untreated (this is principally associated with organic flocks). However, non-treated birds are at increased risk of demonstrating injurious behaviours. This has been cited as a reason for taking birds out of lay earlier than intended and is reflected in the reduction in average flock age in free-range systems.

Across the Tesco Group, less than 5% of laying hens would be free from beak treatment.

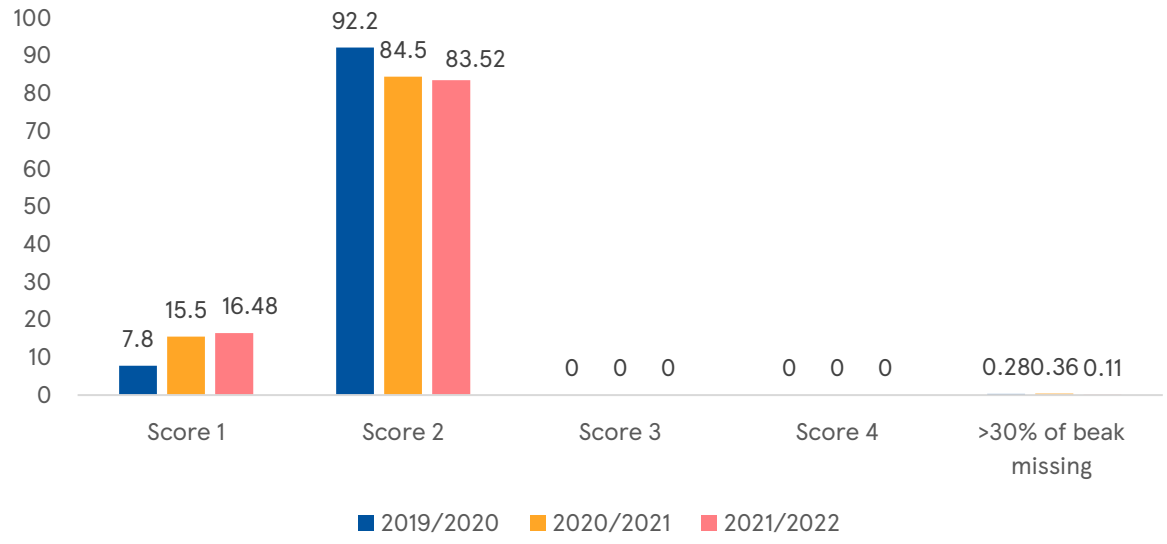


Figure 25: Method of beak treatment and associated outcomes

Mortality – laying hens

As with other poultry (meat) species Tesco collates mortality information in relation to commercial laying flocks. This is to understand seasonal trends and those factors which may result in bird losses, specifically disease challenge. However, there are several ongoing changes within the egg supply base which have impacted on reporting metrics. As the proportion of colony cage production decreases and the proportion of barn production increases (consistent with progress on cage-free commitment) we have asked suppliers to report each method of production separately. Additionally, as average flock age increases and health challenges increasing the variability seen across flock ages, we have standardised mortality data at 70 weeks of age and then at final depopulation, with a requirement to declare flock age.

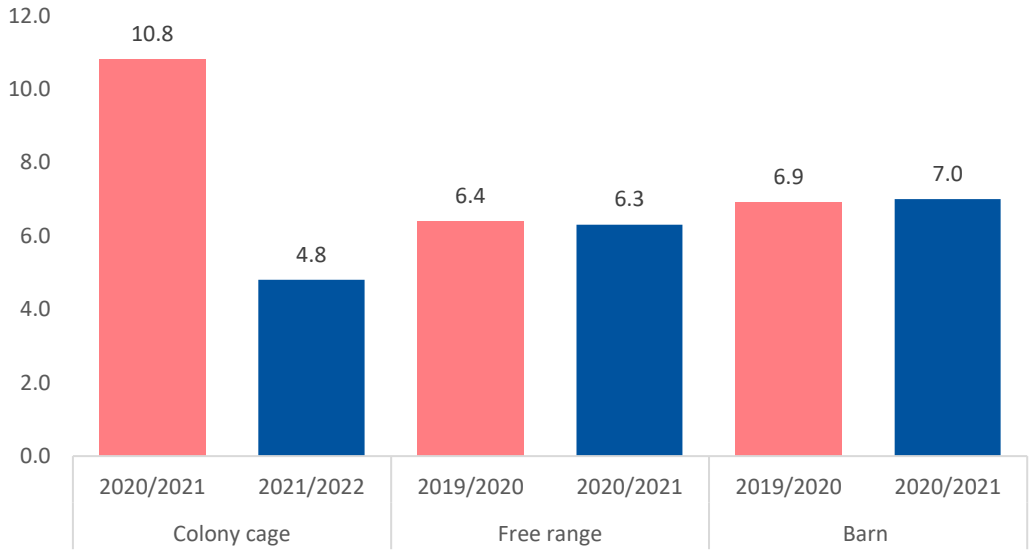


Figure 26: Flock Mortality at 70-weeks for Tesco UK and ROI (%)

.

There is consistency in the mortality data sets reported for barn and free-range production at both 70-weeks and end of lay. Additionally, average flock age at depopulation is similar for both. The mortality figures and average flock age for colony cage production are very different in comparison. There are several reasons for this; average flock age data indicates that a number have been taken out of production early due to health challenges (and hence higher mortality) but also as part of the commercial transition to cage free production. Mortality figures for colony cage production must be interpreted cautiously due to the relative decrease in sample size i.e. increased mortality in a limited number of flocks has a disproportionate impact on sector average as a whole.

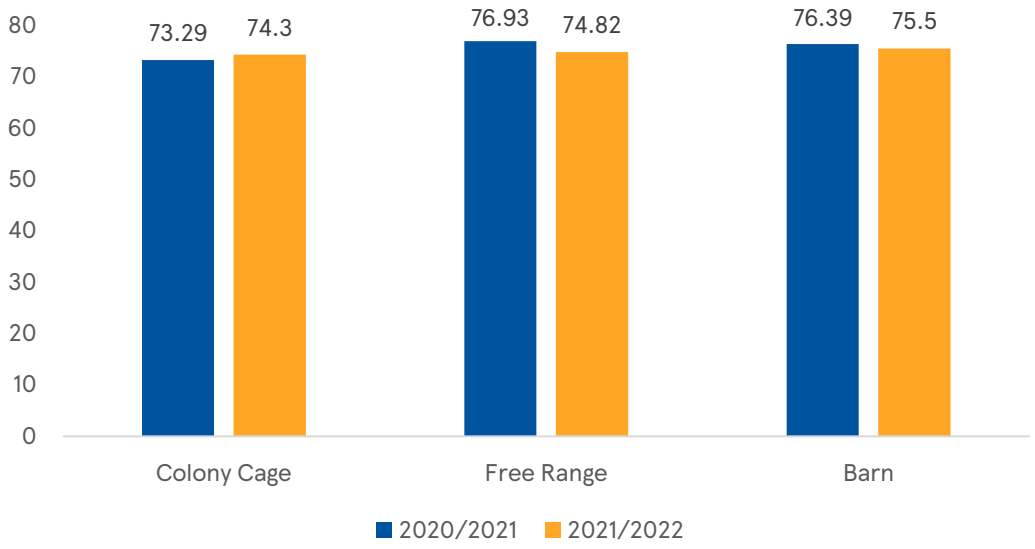


Figure 27: Average age of flock at depletion for Tesco UK and ROI (%)

Pigs.

Lameness is recognised as a key welfare indicator in pigs and reflects historic housing and handling conditions. Skin lesions or 'fight damage' can arise due to mixing unfamiliar groups of pigs or held in unfamiliar surroundings. We require that pigs are kept in farm groups during transport and lairage and that the time which pigs are held in the lairage is minimised. All processing sites now consistently ensure that minimum numbers are held overnight and don't exceed 25% on any individual occasion. Pig welfare post-transit is further monitored by assessment of lameness and skin damage; the levels of which are consistently low across our supply base (Figure 28) indicating housing and transit handling are to a good standard.

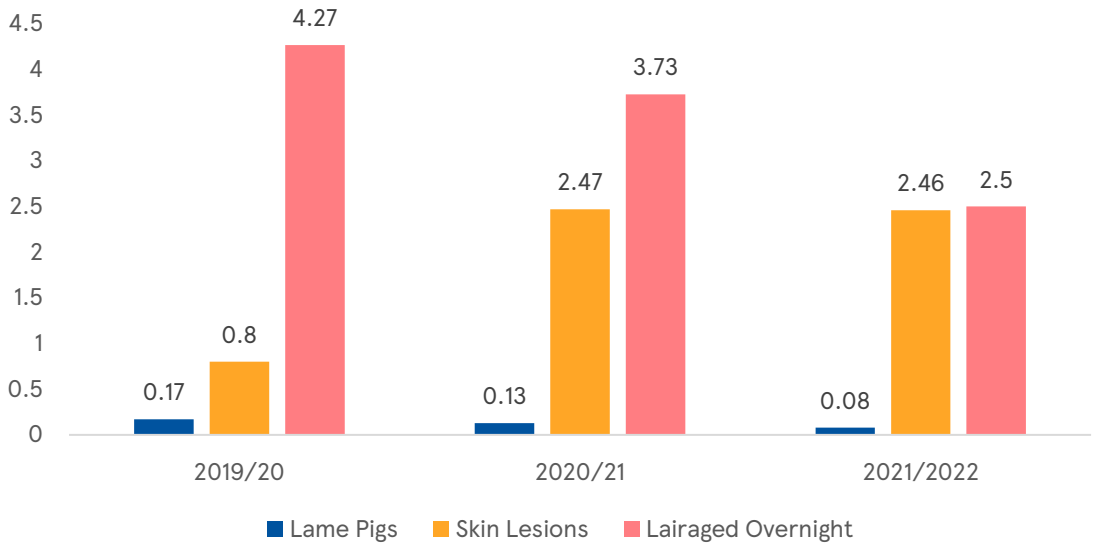


Figure 28: Pork Outcome Measures for Tesco UK and ROI (%)

There has been a year-on-year reduction in both the incidence of lame pigs and the proportion of pigs lairaged overnight. It was unclear why the proportion of skin lesions had increased in 2020/2021 and has been maintained at a similar level in 2021/2022. It is suggested that continued disruption to processing may have resulted in increased lairage times, even where the proportion held overnight has not been impacted.

Beef Cattle.

Vocalisation in the lairage area, specifically during handling, is recorded to provide a measure of the likely stresses and associated welfare status of the animals. Low reported levels have been validated by independent third-party assessment. There has been a net reduction in total average incidence in successive reporting years. However, it is recognised that vocalisation values do vary year-on-year but again, more markedly between sites and it is this that is reviewed on an ongoing basis. Vocalisation can be associated with animal type (cows and young bulls vocalise more) rather than necessarily reflecting handling as a single factor.

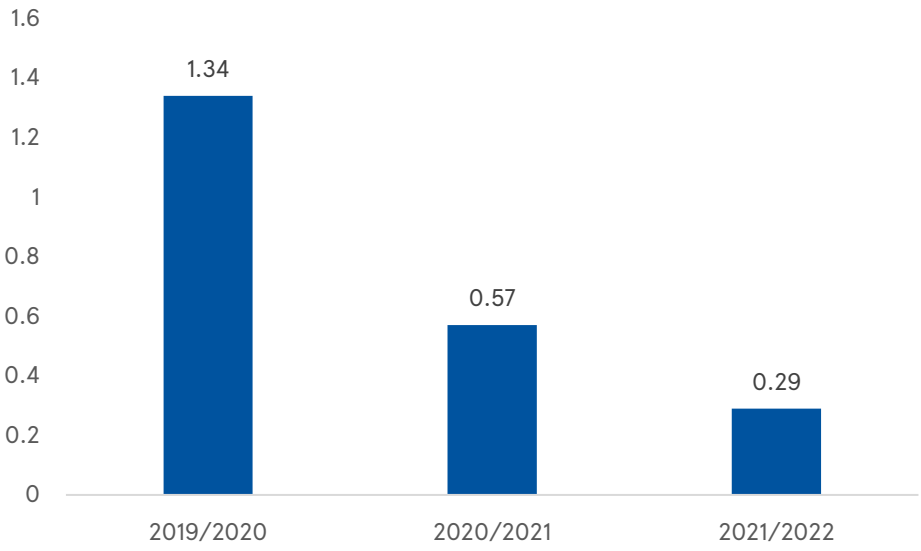


Figure 29: Cattle behavioural indicators – vocalisation in Tesco UK and ROI (%)

Lamb.

Wherever possible we support a move away from processes such as tail docking and castration. However, this must be balanced against the potential welfare impact of associated welfare challenges in a pasture-based system, such as 'fly strike'. Given the relationship between tail length and discomfort associated with the docking process (the longer the tail the less the impact) we actively monitor tail length and prohibit short docking (score 2) and require the maximum possible length to remain (score 0) while still retaining the long-term management benefits of docking where strictly necessary.

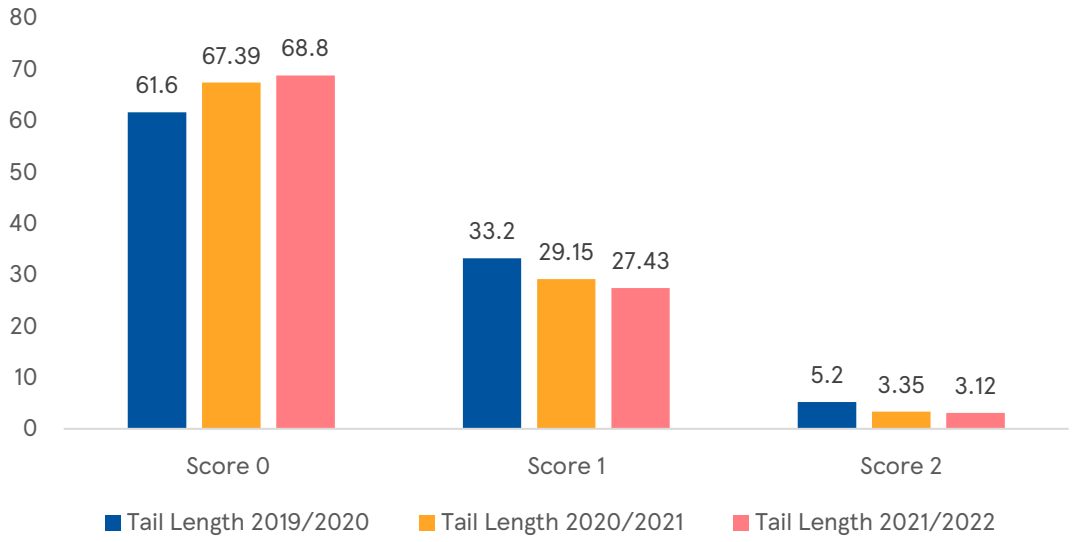


Figure 30: Relative percentage of tail length scores in lambs in Tesco UK and ROI (%)

Across the supply base, there has been a proportional year-on-year increase in the number of animals with tail score 0 (long dock or no dock) and a concomitant reduction in those which score 2 (Figure 30). Score 2 is exclusively associated with the New Zealand supply base and reflects the challenges in highly extensive systems where mulesing is absolutely prohibited. There has been a significant year-on-year improvement in that incidence of short-docked tails has declined from over 10% in 2015 to 3.12% in the last annual reporting period.

Additionally, within the Tesco Sustainable Lamb Group there is a proportion of producers that do not tail dock or castrate (Figure 31). Visibility of this data was collated for the first time in the 2020/21 reporting period and monitoring data from 2021/2022 illustrates there has been a significant increase in both the proportion of lambs that are not docked and those not castrated. We will review this further to understand any management considerations required to support this approach on the wider farm base.

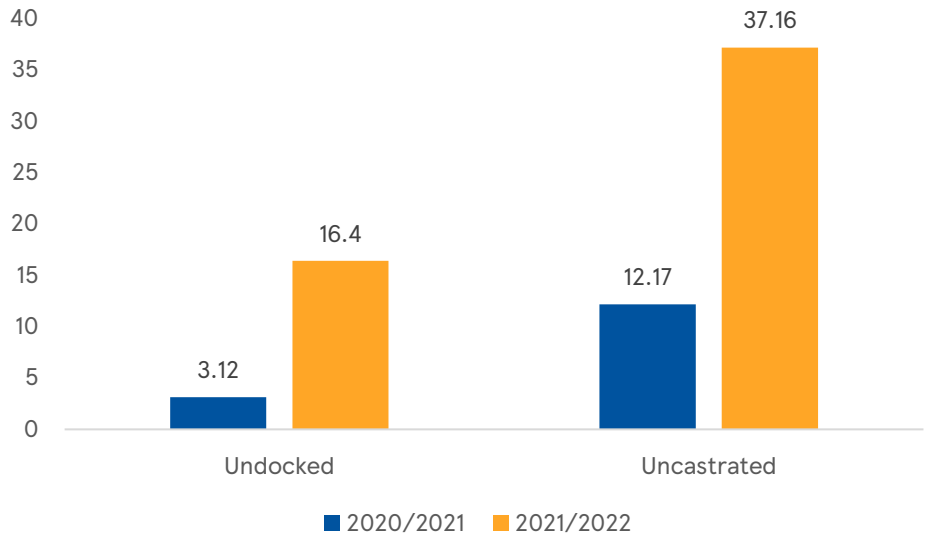


Figure 31: Physical interventions in Tesco Sustainable Lamb Group (TSLG) (%)

Aquaculture.

Shrimp

There is increasing focus on the welfare of aquaculture species including invertebrate crustacea such as shrimp. Tesco are moving towards non-ablated production from non-wild caught brood stock and have made significant improvements in this respect from an initial starting point of 100% ablation in 2016 to a reduction in incidence of over 80%. The wild caught broodstock is a minimal percentage of total and is associated with Panneus Monodon (Giant Tiger Shrimp) production in extensive systems. There is no ablation of wild caught broodstock.

% of Wild Caught Shrimp Broodstock
2021/22 - 0.009%
2020/21 – 0.013%
2019/20 – 0.011%

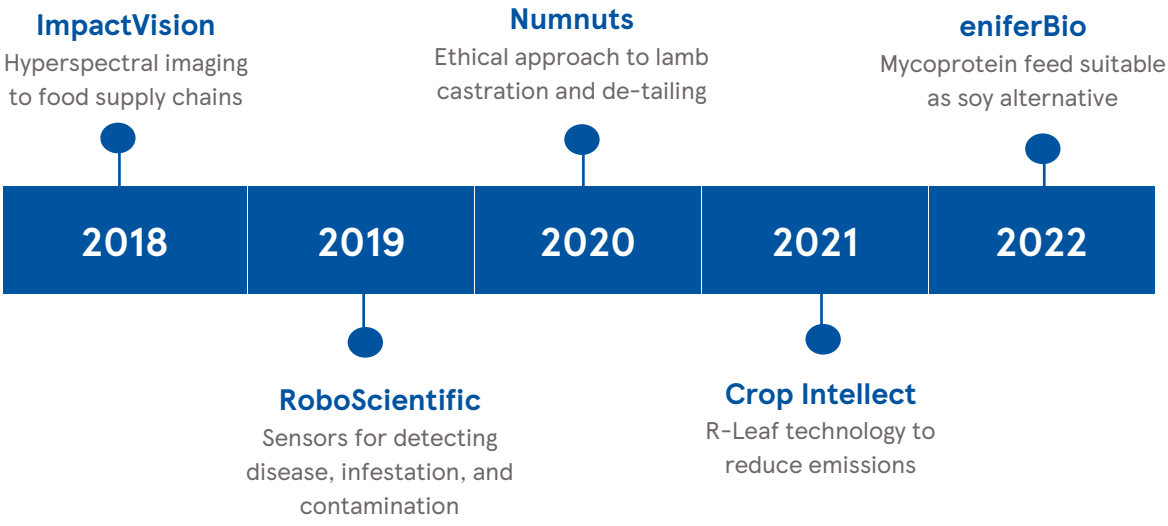
% of Eye Ablation in Shrimp Broodstock
2021/22 – 1.14%
2020/21 – 12.79%
2019/20 – 64.40%

Innovation.

We believe innovation, research and development are an integral part of ensuring that our supply chains are efficient, safe, responsible, and sustainable. The key focus of Tesco supported research and development in agriculture is to ensure there is direct positive impact at a farm level including improvements in animal health and welfare. Our approach to enable innovation sits across a number of key workstreams including our Tesco Sustainable Farming Groups, supporting Government Innovation Centres, information sharing on the Tesco Supplier Network, working closely with our innovative suppliers through the Tesco R&D Committee, and our flagship event – the Agri T-Jam. Recent outputs include advisory infographics aimed at optimising farm level litter management for chickens, the evaluation and adoption of a novel system of electric stunning in our shrimp supply chain and trialling and automated means of lameness detection in dairy cows.

Agri T-Jam

We held our first Agri T-Jam in 2018. It has the ambition of helping to make a positive difference within our supply chains on the key challenges facing the agricultural sector. Exciting agri-tech companies with solutions to some of our current and future challenges and opportunities get the chance to pitch their technologies to us, our supply chain partners, and investors. Novel approaches to addressing health and welfare issues are one of the priority criteria. Past T-Jam winners, as well as several finalists, have gone on to set up trials in our supply base.



Government Innovation Centres

We are active supporters of UK Government initiatives to bring together the food industry and academic researchers to transform the productivity of the UK livestock industry. We were the first retail member of the Centre of Innovation Excellence in Livestock (CIEL), a £70 million research hub opened in 2016, and we are actively working to develop CIEL through our participation on the Interim Management Board. Livestock health and welfare continues to be a priority area of focus. We are a partner of Crop Health and Protection (CHAP) and member of the Scottish Aquaculture Innovation Centre (SAIC). We also have representation on the BBSRC Animal Welfare Research Network.

Tesco Supplier Network

Keeping close channels of communication with our many suppliers and producers around the world is an essential part of how we trade responsibly. In part this is made possible by our online supplier community, The Tesco Supplier Network, which give members a direct line to Tesco colleagues, industry experts and other suppliers around the world. The Tesco Supplier Network was launched in January 2015 and builds on the success of our previous online communities - the Tesco Knowledge Hub and Producer Network.

This new community gives us the opportunity to improve communication with our suppliers, to share ideas and address common challenges, and to drive sustainability and innovation, both throughout our supply chain and ultimately in the products that our customers enjoy.
Our aims:

1. Share knowledge, best practice, and expertise
2. Build a more collaborative supply chain
3. Create and develop innovative solutions together

Not only can Tesco Supplier Network members learn more about our strategy, they are also able to connect directly with Tesco teams and seek advice from peers facing similar challenges. This is key for our Tesco Sustainable Farming Groups, where farmers and the Tesco team have access to dedicated channels for discussion and knowledge sharing around topics such as animal health and welfare and environmental sustainability.

Research Activity and Support

We are pleased to be able to engage with academics and provide an industry perspective on key animal welfare issues, while sharing and showcasing positive advances within our supply chains through attendance at conferences and in publication of conference proceedings.

Example publications

HSA International Conference: Livestock Welfare during Transport, Marketing & Slaughter 2022
The Assessment Of Dry Electric Stunning As A Commercial Method For The Humane Dispatch Of Farmed White Leg Shrimp (Litopenaeus Vannaemi) (2022)
https://www.hsa.org.uk/downloads/hsa-conference-programme-book-fv.pdf

AWRN 2023: Animal Welfare Science and Society
Exploring The Motivation Of A UK Retail Beef Sustainable Farming Group To Implement Preventative Health And Welfare Strategies

AWSELVA Conference 2023: The Economics of Animal Welfare in Financially Challenging Times
Reframing Welfare metrics as Farm Gate Losses

Hutchings C, B Green, J Kirkpatrick and FG Roberts (2020) Ventilation attributes: Impact on litter quality and associated bird welfare outcome measures P23 Recent Advances in Animal Welfare Science VII

Celebrating success in our supply chain.

In 2022, we received recognition from Compassion in World Farming (CIWF) for leading the way in crustacean welfare. Specifically for the introduction of a humane slaughter system for Whiteleg Shrimp (pennaus Vannamei) into commercial practice. https://www.compassioninfoodbusiness.com/resources/case-studies/technical-case-studies/tesco-hilton-seafood-improving-the-welfare-of-whiteleg-shrimp-pennaus-vannamei-at-harvest/

We are proud to be a principal sponsor of Open Farm Sunday and want to help our customers understand how their food is produced, from the experts who produce it. Every year, we support suppliers and farmers who welcome the public to their farms – both virtually and in person – to educate them on food production standards, particularly animal health and welfare.

The Fair For Farmers Guarantee is another way that we communicate the great work of our producers, tell the story of our food and show customers how our farmers meet our welfare standards and care for their cows. This is communicated on every single bottle of fresh milk.

Additionally, we showcase the commitment and best practice of our suppliers and the care shown to animals through our Tesco blog (https://www.tescoplc.com/updates/2019/it-s-a-family-affair-life-on-a-modern-dairy-farm/) and our Tesco Magazine. For example, the work undertaken to progress our 2030 commitment to responsible sourcing and certification of seafood. (https://issuu.com/tesco_magazine/docs/tesco_magazine_july_aug_2022).

2030 By this year, all Tesco seafood will be sustainably sourced.
Tesco was also named the Marine Stewardship Council's UK Supermarket of the Year in 2021.

In 2021, we worked closely with the RSCPA on TV and social media adverts educating customers about our new Room to Roam chicken range and the high welfare standards to which the chickens are raised.

Additionally, our customers are now able to check which Tesco stores stock their favourite RSPCA products (https://www.rspcaassured.org.uk/where-to-buy-rspca-assured/buy-at-tesco/). Our Room to Roam chicken is now available to more customers. The front-of-pack label provides an insight into the higher welfare standards to which the birds are raised and clearly showcases the RSPCA Assured mark.