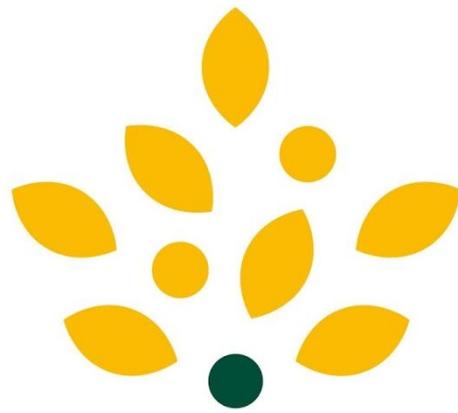


Farm Animal Health and Welfare Report

2019



Morrisons

Since 1899

Introduction

At Morrisons, we have always had a very close relationship with the farmers and suppliers who grow and produce for us. In the livestock supply chain, we are the only UK retailer to have our own buyers sourcing animals directly from over 3,500 British farmers, some of whom have been supplying us for over 30 years. Uniquely, we own our own abattoirs, located in Turriff (Aberdeenshire), Spalding (Lincolnshire) and Colne (Lancashire) and manufacture the majority of our own fresh food in 18 manufacturing sites and 498 stores, including bakery, seafood, meat, fruit & veg, flowers and chilled processed products.

Our Corporate Responsibility report from 2018/19 demonstrates that sourcing well, securing British supply and maintaining high standards of farm animal health and welfare all make good business sense. Animal welfare remains an area of increasing interest for our customers, rising to number four in the top most important issues considered by over 4000 shoppers in our annual corporate responsibility survey. In sourcing such a high percentage of British food - for example all of our fresh meat, milk and eggs are British - we are supporting the high standards of welfare that lie at the heart of British farming. We work closely with our farmers and suppliers across our whole supply chain to raise farm animal health and welfare standards, and satisfy our customers' need for great food at an affordable price.

Listening to our customers

The top issues



(Results taken from our Corporate Responsibility report 2018/19).

Our animal health and welfare policies are at all times based on the 5 Freedoms established by the Farm Animal Welfare Council in 1979. That is freedom from hunger or thirst; freedom from discomfort; freedom from pain, injury or disease; freedom to express normal behaviour and freedom from fear and distress.

Our Approach

As a vertically integrated retailer, buying directly from farms and manufacturing most of the food we sell, animal welfare is a key part of our overall agricultural programme for the business.

We have governance systems and a range of activities to help manage animal health and welfare.

- As part of our Agricultural Plan, our performance against our animal health and welfare plan is reported to our Executive and plc Boards. Our group Corporate Services Director to whom our Agriculture Manager reports, is ultimately responsible for compliance with our animal health and welfare policies.
- We have a dedicated team to monitor, develop and manage farm animal welfare standards including our Agriculture Manager, and farm development, livestock and technical colleagues in our own integrated meat and eggs businesses (Woodheads Brothers and Chippindale Foods).
- We have clear health and welfare targets for each of the sectors we look after, namely; pork, chicken, turkey and duck, beef, lamb, dairy, cheese and eggs. Through working closely in our own supply chain and with our third party suppliers, we measure, monitor and manage these animal welfare measures with any noted deviations from our health and welfare standards being followed up on farm with the relevant livestock colleagues to ensure improvements are made.
- We benchmark and anonymously share standards against national and business targets, and react to any issues that may be flagged as required. Our suppliers and farms provide us with the data for their Key Welfare Indicators on a monthly basis to give us regular and clear visibility of animal welfare.
- We work with vets, nutritionists, colleges, auditors and farmers to consider and develop projects and learning to improve farm animal health and welfare standards. We have farmer and producer groups who meet to compare welfare outcomes and discuss practical and applied research and training programmes for implementation.
- We support and work closely with key industry associations including the NFU, NPA, AHDB, RSPCA Assured, CiWF and Red Tractor to ensure that we are always doing everything we can to improve and maintain welfare standards across our business.

Within this report you will find our key animal welfare policies - both general and species specific - along with results from our monitoring of Key Welfare Indicators (KWIs) for the current year, compared where possible to data from previous years.

We are committed to continually improving the standards and reporting of animal health and welfare in our own supply chain and through our third party suppliers. Our recent improvements have been recognised by our rise to Tier 2 in the Business Benchmark on Farm Animal Welfare (BBFAW) Report for 2018. We were also awarded Retailer of the Year at the Food and Farming Industry Awards 2018, and recognised by Compassion in World Farming through being awarded the Good Egg Award in the same year. In 2019, we have been awarded with Compassion In World Farming's new 'Sustainable Food and Farming Award' for our bee-friendly biodiversity work in eggs.

Key Animal Health and Welfare Policies

Note on policy scope:

Unless otherwise stated, these policies apply to our own label products (fresh, frozen, processed and ingredient). They do not apply to brands owned by third party suppliers and sold into multiple retailers. We do not source or sell own brand rabbit, veal, goose, horse meat, goats, guinea fowl or quail.

Animal Cloning & Genetic Engineering

We do not accept genetically modified material, or milk or meat from cloned animals or their offspring in any of our own brand products. This includes animals derived from semen or embryos of clones. The fact that we deal directly with farmers, and process the majority of our fresh beef, pork and lamb ourselves, gives us close control over the provenance and quality of our meat. We require our suppliers to sign a declaration with each delivery of cattle and lamb that the animals are neither clones nor the progeny of clones.

Animal Testing

We have never conducted or commissioned tests on animals.

All of our own brand personal care and cosmetic products are certified as 'not tested on animals' by the Cruelty Free International Humane Cosmetics Standard, symbolised by the Leaping Bunny logo. This rigorous standard stipulates that no animal testing is conducted or commissioned for cosmetic products or ingredients in any phase of product development by Morrisons or our suppliers after a fixed cut-off date. Additionally, we undergo independent audits to ensure that we remain compliant with the criteria of the Leaping Bunny certification scheme, which we are in the process of adding as a logo to more products to communicate this certification on pack.

Antibiotics

When properly used, antibiotics are essential for treating infection in animals, but excessive and inappropriate use of drugs is a problem due to how it drives increased resistance. This is why we have an active programme to address antibiotic use in farming and at all times promote preventative practice to ensure health conditions are treated proactively, so reducing the need for antibiotics.

“By 2020, our own brand products will not be produced from animals who routinely receive antibiotics when they don't need them”

- No colistin is used in any of our own-brand fresh meat and dairy products.
- No pork in our own-brand fresh supply chain is treated with any antibiotics critically important to human health.

Alongside phasing out the routine use of antibiotics on farms which supply our fresh meat, dairy and eggs, we also require that these farms only use critically important antibiotics (as defined by the European Medicines Alliance) as a last resort, if at all. In addition, all farms supplying Morrisons with fresh meat, dairy and eggs must report their antibiotic use for monitoring.

We work closely with RUMA and are members of the BRC's working group on AMR and the IGD's Strategic Steering Group for Antibiotic Use in the food supply chain, for which we also chair one of the sub-groups.

Assurance / Audits / Compliance

100% of our shell eggs are British and meet the Lion Code standard.

We have internal processes to ensure that products on our shelves labelled as Red Tractor are fully compliant.

We also ensure that any meat coming into our own brand products for retail or manufacture is assured to an independently audited standard through our Farm Animal Assurance standards policy, which covers animals from UK, EU and non-EU countries or origin.

Farm assurance standards in use include:

- Assured Food Standards (Red Tractor) (UK) - (beef, pork, lamb, dairy, chicken, duck)
- QMS - Quality Meat Scotland - (beef, lamb, pork)
- Farm Assured Welsh Lamb
- Bord Bia (Rep of Ireland) - (beef and pork)
- QSG - Quality and Safety Guarantee (pork)
- IKB - Integrated Chain Control, Varkens (pork, chicken)
- QS - Qualitat und Sicherheit - (pork, chicken (Tiers I and II only), duck)
- Codiplan Plus (pork)
- Global GAP (pork, chicken, beef, lamb, turkey)
- Genesis GAP: (chicken, pork, duck)
- Interporc Animal Welfare Spain (Bienestar) (pork)
- New Zealand Farm Assurance Programme (lamb)

100% of our own brand meat products are assured to an approved standard of farm animal welfare. These standards are captured on our product specification system and their compliance assessed by independent auditors at annual supplier visits. Any non-conformances are followed up by our technical team and the supplier in question until a resolution is found. The policy will be extended to include animal welfare standards for milk and eggs in our ingredient, processed and frozen ranges this year.

Close Confinement

We adhere to EU regulations, and more specifically British Red Tractor standards, that have strict controls on animal confinement. Our farm standards policy covers animals from UK, EU and non-EU country of origin. We have strict requirements in avoiding animals produced in systems which use sow stalls, single penning, battery cages, tethering, veal crates and force feeding.

- **Cattle (dairy and beef):** policy prohibits tethering in all aspects of supply chain. We do not source beef or dairy products from the USA, so there is no use of CAFOs in our supply chain.
- **Chicken:** we offer our customers choice with free range and organic which require higher welfare standards, slower growing birds and more space for animals, stocking <math><30\text{kg}/\text{m}^2</math>. Currently around 5% of the volume sold in our fresh chicken range is organic (1%) or free range (4%). The first 20 weeks of the 2019/2020 financial year shows a positive movement in sales of free range and organic chicken, with free ranges sales up 14% year on year, and organic sales up 6%.
- **Ducks:** no close confinement in the supply chain
- **Fish:** In line with our certification requirements for farmed fish salmon will not exceed 25kg/m³ in production and fresh Scottish salmon 15kg/m³. Certification requirements assure regulatory, science based or best practice limits are met for other species.
- **Laying hens:** 100% free from battery cages; moving production to cage-free (see eggs section)
- **Pigs:** all fresh pork free from close confinement including the use of sow stalls; some sow stalls in use for a short time period in continental meats supply. Currently, 5.8% of our supply is Freedom Foods outdoor bred.
- **Sheep / lambs:** no close confinement in the supply chain
- **Turkeys:** no close confinement in the supply chain

Dairy Grazing:

The milk from our 'Milk for Farmers' range is guaranteed to come from cows that have grazed for at least 120 days every year. Depending on the season, the amount of grazing days available for our cows can extend. In 2018 our cows were grazed for an average of 214 days; we update this result on an annual basis and can be seen on our [website](#).

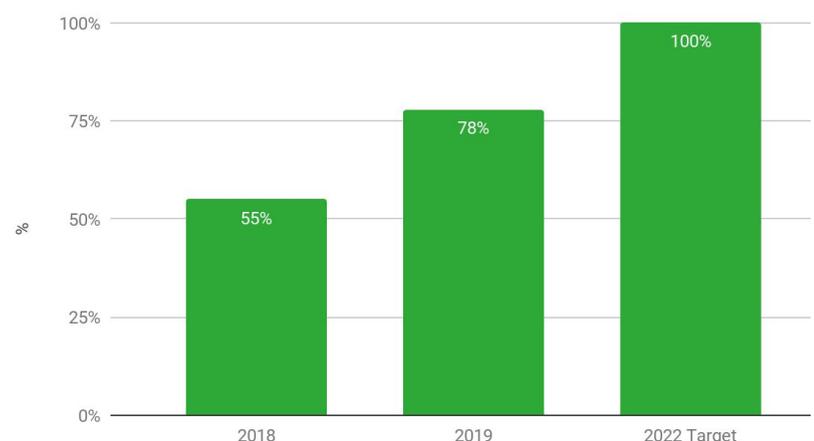
We monitor the health and welfare of all cows in our dairy supply chain, to ensure their health and welfare meets our standards at all times and that regardless of housing systems, welfare is not compromised.

Eggs:

We have been listening hard to our customers about taking eggs from caged hens, and as a result have brought our commitment to go cage-free forward by three years.

We have been working with our suppliers on this for a long time, and since we bought the Chippindale Foods business into our company in early 2018, we have had the opportunity to work even more closely with the farmers who supply us directly. This means that we can work together to make sustainable production changes at farm level.

% of Shell Eggs from Cage Free Systems



All of the shell eggs we sell are British and sourced from farms under the British Lion Quality Code of Practice. This includes minimum standards in areas such as animal welfare, hygiene, the environment and traceability, which exceed those required by law. As well as the shell eggs we sell, all eggs used in our in-store cafes are sourced from free-range production systems.

All of our shell eggs will be from cage-free production systems by 2022. All our ingredient eggs will be from cage-free systems by 2025. We are trialling a number of different options, the results of which are currently very positive and we are looking to improve on our current commitment for ingredient egg. In 2018, the percentage of shell eggs from cage-free was 55%. As of May 2019, this has now risen to 78%, and we are therefore on track to remove caged production systems from our shell egg supply chain by 2022.

Growth Promoters

All growth promotants (hormonal, non-hormonal and antibiotic) are prohibited across all farms supplying meat for Morrisons own products.

Husbandry Practices

Broilers and laying hens:

We monitor beak trimming in our broilers and laying hens. The majority of broilers going into our chicken are not beak trimmed - please see results section of this report. Most laying hens are still beak trimmed and this is always conducted in accordance with industry best practice to ensure minimum impact on the overall beak integrity. Organic foods do not undergo beak trimming, which gives our customers a choice. We support the aim to farm laying hens with their beaks intact through research, training and consultation with our own farmer groups, including projects studying enrichment materials, breed choice and rearing systems. We are also in contact and discussion with members of the Laying Hen Welfare Forum to share learning where possible. More detail on our enrichment study can be found in the appendices of this report.

Routine surgical procedures:

Our Farm Animal Welfare Standards policy does not permit the castration, routine teeth clipping and routine tail docking of pigs, though in line with Red Tractor guidance, this can be conducted under veterinary direction. We now monitor numbers of pigs with fully intact tails and have projects on environmental enrichment underway to try and offer further best practice guidance on one of the many factors affecting tail biting in pigs.

We have a Yearling Beef initiative that promotes the use of bulls in our beef system, providing a practical outlet for farmers that wish to avoid castration. More information on this initiative can be found on our [website](#). Mulesing is prohibited in any lamb products.

Live Import / Export

We do not import any live animals into the UK for processing in our abattoirs.

Our dairy bull calf scheme, established within our farming research programme in 2009, now processes over 30,000 dairy bull calves per year, providing additional income for dairy farmers and reducing the appeal for them to cull or to export live animals from the UK.

Lairage

All livestock handlers and lairage operators in our red meat plants have specific training related to their task and will have a Certificate of Conformance (CoC). This is a legal requirement and certificates are issued by the FSA. They also receive in house welfare training with 12 month refresher training. Managers and Senior Technicians are also sent on the Bristol University animal welfare course (birds) and receive accreditation for the Welfare of Animal at Killing standards (red meat).

Pre-slaughter Stunning

Morrisons policy requires that all meat used in any Morrisons branded product is stunned in a manner that renders the animal insensible to pain prior to slaughter. The number of re-stuns is also recorded, and is shown in the results section of this report under effectiveness of stunning. We also require that all end of lay hens are stunned before slaughter. All pigs within our supply base are gas stunned before slaughter, in line with RSPCA Assured recommendations. In salmon, trout, pangasius, bass and bream we have also adopted stunning into our supply chains.

All 'dead on arrival' numbers are monitored and reported for our own brand fresh products, and are available on request for our own brand ingredient products.

Humane Slaughter

As well as monitoring and managing the welfare of animals in lairage and the training of staff, we monitor the effectiveness of stunning in our own abattoirs (beef, pork and lamb) to ensure that best practice is adhered to at all times. We have also moved to a new target in our own abattoirs of having no more than 2 in every 25 livestock requiring back-up stunning. All plants monitor the effectiveness of stunning through monitoring, measuring and recording the stunning success rates. In all cases, the trained technician looks for signs of recovery and performs a documented check every 30 minutes. We look for 100% compliance, so on the rare occasion that they may detect signs of recovery, CO2 levels may be adjusted (birds for chicken, pigs for pork), or alternative methods of dispatch are used. This is monitored daily and reported monthly.

CO2 stunning is used for livestock going into pork and chicken audited by the RSPCA Assured Team. We remain open to the outcomes of the DEFRA research into low atmospheric pressure stunning (LAPS); when the research has been concluded, we will be in a position to re-evaluate any stunning methods we use.

CCTV

Our dairy farms supplying us with fresh milk are all required by 01.10.19 to have installed CCTV over key areas in the farm to help provide extra governance and insight into animal welfare, staff welfare and farm safety. Our pig farms supplying us with fresh pork are also required to have considered CCTV by 01.01.20.

CCTV at Slaughter

Morrisons was the first supermarket to have CCTV cameras installed in abattoirs to reassure the public of good welfare practice at slaughter and high standards of food hygiene. The Government has made this a legal requirement which we fully support.

Our customers want to know that animals are treated well throughout the slaughter process. We believe that having CCTV cameras independently reviewed is a clear way to demonstrate that we have the highest possible standards. CCTV is just one tool that we use to protect animal welfare in our abattoirs. In addition to the more than 80 cameras we have running, our abattoirs are the first in England with staff qualified in the Welfare at the Time of Killing (WATOK) standards.

TB Reactors

We do not accept TB reactor cattle into our supply chain.

Training

Training is an important aspect of our agricultural plan to ensure that colleagues on farm, and in our supply chain have the skills and knowledge they need to operate sustainable businesses.

In 2018-19, training has included:

- health and welfare including on-farm antibiotic use and awareness of the impact of key disease issues (beef, pork and lamb)
- effective calf management including use of pain relief and calves in paired housing (dairy)
- litter management for control of welfare related conditions including pododermatitis (broilers)
- keel bone health in laying hen systems (eggs)
- we have also launched a new apprenticeship and mentoring scheme for farmers in 2019.

Labelling

Consumers want to be able to make informed decisions about the food they buy. That's why we provide clear information about where our products are sourced. There are numerous pieces of legislation which apply to the labelling of meat, fish, fresh produce, honey, olive oil and wine. We adhere to all relevant legal requirements on country of origin labelling and in many cases go further, because we know that this information is valued by our customers. For example, we add voluntary country of origin information on products that contain meat, such as ready meals; "produced in the UK from Thai chicken".

We clearly label the country of origin of dairy products like milk, cream, butter, cheese and yogurt. This way, it's easy for customers to be able to identify - and buy - British.

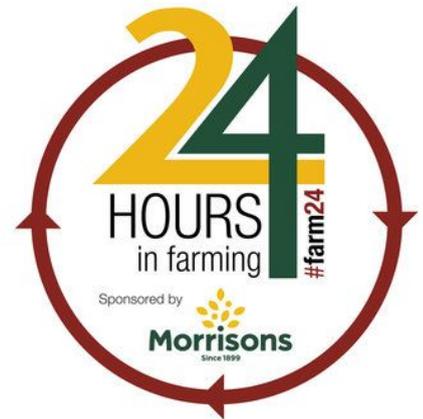
Additionally, our shell eggs state clearly on pack what type of housing system they are raised in. We sell milk within our 'Milk for Farmers' and organic ranges labelled as having the freedom to graze.

We also only ever use farm names on products where we can trace the origin of the product back to the actual farm where it was produced. We do not use any images on own brand products which would imply a housing or production system that has not been used.

Marketing and Communications

We are proud of our British heritage and farming links, and work with the industry to help celebrate best practice and the high standards of animal health and welfare in our supply chain. This includes:

- Sponsoring #Farm24 since 2017
- Sponsoring the British Farming Awards
- Sponsors of the Taste of Excellence Awards for British Dairying
- Supporting the BVD Free initiative and requiring all UK dairy farmers to be part of the National Johne's Management Plan



We also work within our store and online communities to improve customer understanding and awareness of farming and animal health, management and welfare. Initiatives here have included:

- The launch of a new online space for our 'Milk for Farmers' range including details on how farmers care for their livestock;
- Launching a [new website](#) to share videos and case studies of our farmers and their farms
- Case studies on our [community pages](#)
- Running an active schools programme through our store community champions
- Bringing farmers into stores to meet our customers and share their stories

We have also made changes to our online communication so customers have a clear record of our progress in animal health and welfare measures.

Non-Governmental Organisations (NGOs)

We respect and value our relationships with a number of organisations and NGOs to improve the health and welfare of animals in our supply chain. These include:

- Red Tractor
- RSPCA and RSPCA Assured
- Compassion in World Farming
- Responsible Use of Medicines in Agriculture (RUMA)
- The Marine Stewardship Council (MSC)

We also engage with a wide number of stakeholders for a variety of matters relating to livestock and agriculture, including the National Farmers' Union (NFU), the National Pig Association (NPA), the Pig Veterinary Association (PVS), the British Veterinary Poultry Association (BVPA), the British Cattle Veterinary Association (BCVA), the Sheep Veterinary Society (SVS), the Cattle Health and Welfare Group (CHAWG) and

the Agriculture and Horticulture Development Board (AHDB). We are also members of numerous technical committees for the BRC and IGD and work closely with Red Tractor.

Research and Development

Since the launch of our Farming Programme in 2009, we have worked with academic institutions and agricultural colleges, along with sector experts, to deliver practical research and best practice guidance which we have shared with our supplying farmers. This has included:

- Recommendations on environmental enrichment for pigs in indoor housed systems
- Perching and enrichment for broiler hens
- Behaviour and welfare systems for free-range laying hens
- Reviews of free-farrowing systems for pigs
- Housing the dairy cow (with AHDB Dairy)

Ongoing research includes:

- Objective welfare measures for outcomes monitoring - a literature review and pilot study
- Separate environmental enrichment studies (including quantities and benefits) for broilers, laying hens and pigs. Initial observations from the laying hen studies can be found in the appendix.
- Best practice in rear (laying hens) for keel bone health
- Best practice in rear (calves) for improved productivity in the dairy beef sector

100% of our fresh meat and milk is British and independently assured to Red Tractor standards

Red Tractor

100% of the fresh pork, beef, lamb, poultry and milk we sell in our stores is British and certified by Red Tractor, giving customers assurance on food safety, hygiene, animal welfare standards and environmental protection.

In addition to Red Tractor, we also look at other measures to help develop high standards of animal health and

welfare. For example, additional measures are set for all our pork producers to include additional stockmanship, training and management tasks for the health and welfare of their livestock.

Travelling / Transport

Animal welfare is important to our customers and its important to us. As the UK's only retailer to buy directly from farms and process meat through our own abattoirs and manufacturing facilities, looking after the animals whilst they're being transported from farm to processing is as important as any stage in the chain.

For that reason, we have ten 'high welfare' transporters approved, which means they are fitted with drinking systems and insulated roofs to keep the livestock as comfortable as possible on their journeys.

This year we have spent around £400,000 on purchasing new and maintaining our current high welfare trailers to ensure our transport standards are very high at all times.

All our drivers hold a City and Guilds '*Transport of Animals by Road*' long journeys qualification and are required at each stop they make to ensure that all animals they pick up are healthy and fit to travel.

Depending on the season and time of year, we transport up to 75% of lambs on our own transport, 10-15% of pigs and an average of 30% of the cattle. If farmers choose to have a contractor transport their animals instead, we have rigorous checks to ensure that animal welfare is at the heart of their working practice. All hauliers and drivers entering our sites are subject to checks by our lairage staff. They check the haulier is assured, check the condition of the vehicle and check the driver has the relevant qualifications. Every animal leaving the vehicle is also checked by the on-site vet to ensure that they have travelled safely and without discomfort.

When the animals get to us, we have comfortable and well maintained lairage facilities with feed and water available for animals to use as required. We monitor and report travel times for all the animals coming into our fresh food supply including ph level measuring for stress impact as well as observed welfare and stress behaviours.

Species Specific Policies

Beef

100% of our fresh beef is British and produced to Red Tractor standards. Our buyers source cattle directly from breeder / finisher farmers located across the UK. We have known many of the 1,700 farmers we buy from directly for many years, and share details with them on their carcass grading and other key indicators, including cleanliness and health. A good quality, healthy animal demonstrates high commitment to welfare as well.

To further help animal health management, we are members of the UK BVD Free initiative and encourage all beef producers to be part of an active BVD eradication scheme. We are also carrying out research and practical training into the factors on farm which affect eating quality of the meat we buy. 2019-20 welfare ambitions include the management of respiratory disease on beef farms, as well as further work into the monitoring and reductions of antibiotic use.

We also monitor beef going into our ingredient and processed products. We have strict requirements avoiding meat from tethered animals. We do not have any product which has been farmed in veal crates.

Chicken

All Morrisons-label Fresh Chicken is 100% British. We work through a small number of UK processors to deliver fresh chicken and our poultry farmers are some of the most efficient, sustainable and welfare conscious in any sector. Each processor works with a number of local farmers in their particular region of the UK, typically 30 to 40 specialist poultry rearing farms. We work closely with these farmers through our Producer Groups.

In 2011 we were the first major supermarket to introduce natural lighting into all our chick units following research into chicken behaviour with the University of Bristol. Many farms have installed biomass heating systems to turn chicken manure into heat, while all actively monitor a number of key welfare indicators.

As well as Red Tractor, we have introduced additional measures for the full range of poultry coming into our fresh chicken, turkey and duck supply including increased health and welfare monitoring, checking of stock and training of staff. Working closely with our suppliers, we monitor and manage key inputs such as stocking densities and key welfare indicators including pododermatitis, hock marks, leg culls and mortality rates. We benchmark and anonymously share all results among all our suppliers, working together to consider innovations, research and information needed to support and improve best practice.

We monitor antibiotic use of our chicken supply every month, ensuring that we achieve our Morrisons' targets, which thanks to the hard work of our farmers and suppliers, are now set as more challenging than the RUMA industry targets for the sector.

In 2018:

- 100% of male chicks were used from hatch;
- 100% of catching teams have been trained on animal welfare;
- 100% of feed supplied to flocks was milled in the UK, with the majority of suppliers milling their own feed.
- 100% of birds had access to at least two forms of environmental enrichment, namely sawdust bales. Other additional enrichment objects being used include perches (available to 76%), platforms (available to 12%) and a variety of pecking objects (available to 88%), these included cables ties, bottle tops, chains and knotted string.

Dairy

“100% of our dairy farmers are signed up to the Arla UK 360 standards. This means no calf is fed antibiotic waste milk, along with other improved welfare standards”

100% of our fresh milk is British and supplied by a group of aligned Morrisons farmers from the Arla farmer co-operative. In March 2019, we became the first retailer to commit to the Arla UK 360 farming standards across our entire Arla milk supply, meaning that by 30th September 2019 approximately 200 Arla farmer owners will be directly supported by Morrisons across five key business areas including animal health and welfare, community engagement, environmental management and business resilience.

In addition to Red Tractor standards, we ask all farmers supplying milk to us to monitor and report measures including lameness assessments, mastitis, body condition scoring, cow comfort, cleanliness, culling (including involuntary culling), hair loss and lesion scoring, health recordings, infectious disease occurrence, longevity and antibiotic use. All herds need to be supported by an active veterinary herd health plan which sets targets and action plans for improvements. Additionally, pain relief must be used when carrying out any stockman's tasks such as disbudding, dehorning and castration. Information is also shared to encourage the selection of polled breeds. All Morrisons farms have an active National Johne's Management Plan in place and also have active plans in place to manage BVD, Leptospirosis and Neospora as applicable.

All information is anonymously benchmarked and shared for improvements within the group. Farmers meet twice a year for practical workshops to help share information on key topics, focus on specific welfare topics such as lameness or mastitis and what they can implement on farm to manage these issues, as well as having access to newsletters and a dedicated farmer portal for further knowledge exchange.

We also have very clear guidelines for all our Morrisons' dairy farmers, which states that no healthy calves are to be shot, slaughtered or exported. All calves must be raised as pairs or a larger group from a few days old which is ahead of the 8 weeks of age legal requirement. We work closely with Buitelaar and Woodheads to ensure our dairy farmers have a market for their dairy bulls, and in 2018 processed over 30,000 dairy bulls through Woodheads.

We have strict requirements in avoiding any animals which have been tethered or tail docked in our own brand fresh, ingredient and processed products.

Dairy Beef

Beef from the dairy herd provides us with lean meat; it's also a much more sustainable way for those dairy herds not using sexed semen to find a market for their dairy bulls and can provide a valuable business opening for new entrants in the beef sector.

We pioneered our dairy bull calf scheme, established within our farming research programme in 2009, which now processes over 30,000 dairy bull calves per year. This provides additional income for dairy farmers and reduced the need for them to cull or to export live animals from the UK. We work closely within this supply chain, and are developing a learning programme with them to support contracted farms in key health and welfare measures to improve the quality of life and product of the calves they care for. We are also part of a steering group with the Royal Agriculture University looking at reducing the use of antibiotics in this production system.

Our partnership with Buitelaar recently has seen them awarded with the Good Calf Award in 2019 through Compassion in World Farming and the award for Supply Chain Initiative of the Year (The Grocer, 2018).

Our dairy beef initiative has given us the chance to work with Young Farmers groups and local markets to help new entrants. They have been able to establish a business through our youngstock scheme, as we buy the young beef stock for rearing on farm, deducting the initial price they were bought for from their final price at abattoir.

Ducks

All ducks in our own brand fresh supply are raised to Red Tractor standards or better. Key welfare indicators are used to monitor duck welfare, which include mortality rates, presence of pododermatitis, cleanliness scoring, antibiotic usage and stocking densities.

Eggs

We care about the eggs we sell, the farms they came from and how the hens that lay them are looked after. That's why 100% of our eggs are produced on British farms certified to British Lion Quality Standards laid down by the Egg Industry Council and all our free-range eggs are RSPCA Assured.

By 2022 100% of our shell eggs going into stores will be from hens who do not live in cages, and by 2025, 100% of the egg used in our ingredients and processing will also be from hens who do not live in cages.

“All our shell eggs will be from cage-free production systems by 2022. All our ingredient eggs will be from cage-free systems by 2025”

Since February 2018, we have owned our own egg packing facility (Chippindales) and buy the majority of our shell eggs directly from farmers, along with two other family owned businesses, all of whom work closely with groups of local farmers in their local area.

We monitor key welfare measures for the hens who supply the eggs we all enjoy. These measures include feather scores, keel bone assessment, mortality and health, housing type, litter management, enrichment provided (indoor) and ranging (outdoor). We also require that all end of lay hens are stunned before slaughter.

In 2018, 100% of laying hens had access to at least one form of environmental enrichment, namely perches. Examples of extra enrichment materials provided include haynets (available to 35%), pecking blocks (available to 43%) and a variety of other pecking objects (available to 88%) including chains, cable ties, bottle tops, oyster shell and string. 100% of free range hens had access to either woodland, trees or bushes, with over 55% of producers also introducing trailers or wooden shelters to the external ranging area.

A review of our enrichment project for laying hens is included in the appendix.

Fish

Whether caught in the wild or farmed we carefully review the sources of all fish and seafood used in our products, making sure they meet important criteria before entering our products. This process looks at stock levels, fisheries management practices, location of catch, gear types and production systems among many other metrics. Scientific advice, certification against credible third party standards and engagement with NGOs plays an invaluable role in helping shape our approach and helps us identify supply chains operating to industry best practice.

Assuring high operational standards aboard vessels is challenging in part because they spend so much time out at sea. We have long engaged with the fishing sector to help understand their unique circumstances and supported the development of a system for recognition of the high standards that lie at the heart of British industry. Support for the Responsible Fishing Scheme standard throughout our supply chains, helping vessels demonstrate best practice in 5 core areas, has played a fundamental part of our commitment:

- Safety, health and welfare
- Training and professional development
- The vessel and its mission
- Care of the catch
- Care for the environment

We are now feeding into the development of a standard revision which is taking place as the scheme has been taken onboard by Global Seafood Assurances and will continue to promote its uptake and use.

We source more than 10 different farmed species for use in our products, including:

- Atlantic salmon
- Rainbow trout
- Oysters
- Mussels
- Scallops
- Pangasius
- Sea bass
- Sea bream
- Whiteleg shrimp
- Giant tiger prawns
- Halibut

Third party certification against standards including Aquaculture Stewardship Council, Global Aquaculture Alliance, Best Aquaculture Practices or Global G.A.P. plays a fundamental role in our approach and is required at farm, hatchery, feedmill and processing site. Amongst wider environmental, safety, management and social considerations these standards largely regulate the health and welfare provisions for fish and seafood farmed in our supply chains. These standards include the requirement for clearly defined animal health management plans developed in accordance with expert veterinary / professional guidance and outline the approaches taken to disease control, stress mitigation, water quality management and routine health testing.

While many farms in our supply chains abstain from using antibiotics during production cycles their use is not prohibited under these standards. Under strict veterinary guidance they remain a necessary tool for treating some diseases. However, we are committed to further action on Critically Important Antimicrobials for human health to help eliminate their use.

We are committed to working with specialists, NGOs and our suppliers to help understand and support the adoption of best practice in pre-slaughter handling and stunning. Many of our suppliers have already led in this area through the adoption of electro and percussive stunning with species such as bass, bream, basa and salmon but understanding in this area continues to evolve and benefit from investment.

As well as farms and hatcheries being certified we also aim to have all of the marine ingredient processing plants certified to the International Fishmeal & Fish Oil Organisation (IFFO) standard. This will help us better identify the fisheries their source material is coming from and ensure the feed used in our aquaculture supply chains meets the same high standards of our wild capture policy.

Lamb

100% of our fresh lamb is British and produced to Red Tractor standards. Our buyers sourcing sheep have known many of the 1,100 farmers we buy from directly for many years, and feed back details on their carcass grading and other key indicators, including cleanliness and health. A good quality, healthy animal demonstrates high commitment to welfare as well.

We source nearly three quarters of a million lambs from UK farmers each year. Our early season spring lamb usually begins in mid May, with the earliest spring lamb coming mainly from North Wales, where the milder climate allows for early lambing. Our sourcing moves North, and into Scotland as the season progresses.

Developments to the lamb programme for 2018-19 have included monitoring antibiotic use, including the removal of routine use, training and information for SCOPS and worm egg counting and a developing programme to body condition score ewes.

Pork

100% of our fresh pork is sourced from 140 UK pig farms, which have some of the highest standards in Europe and the world. Through Woodheads, we work directly with farmers and producer groups, buying pork to sell in our retail and manufacturing businesses. Many of the farmers we work with have supplied us for generations. We are one of the biggest processors of British pork, with the recent expansion of our Colne site enabling us to process more UK pigs than ever before.

As well as Red Tractor, we have introduced additional measures for the full range of pigs coming into our fresh pork supply including increased monitoring and checking of stock, training of staff and regular body condition scoring of the pigs at key times of life, in the form of a Bolt On Audit. A behaviour management plan is required to help manage and prevent incidences of tail, ear and flank biting and lameness, as is a more thorough application of environmental enrichment materials regardless of housing system, all of which will go towards an intention to stop the need to tail dock pigs. This includes the assessment of enrichment materials for optimal, suboptimal or marginal benefit, ensuring that pigs have constant access to at least one optimal material at all times to satisfy rooting behaviours.

The provision of environmental enrichment can also be part of a multi-factorial approach to mitigating the risks of tail biting and the need to therefore tail dock, as well as providing for the pigs' need to forage as a behaviour. We published our own guide for farmers on Environmental Enrichment in 2017. We are currently working on an environmental enrichment study with the University of Leeds to quantify how much and what type of enrichment is required as a compulsory requirement for pigs in our supply chain. This will be published in Winter 2019.

Additionally, we have an established network of vets, farmers, academics, and our processing and retail colleagues to work collaboratively on projects.

Turkey

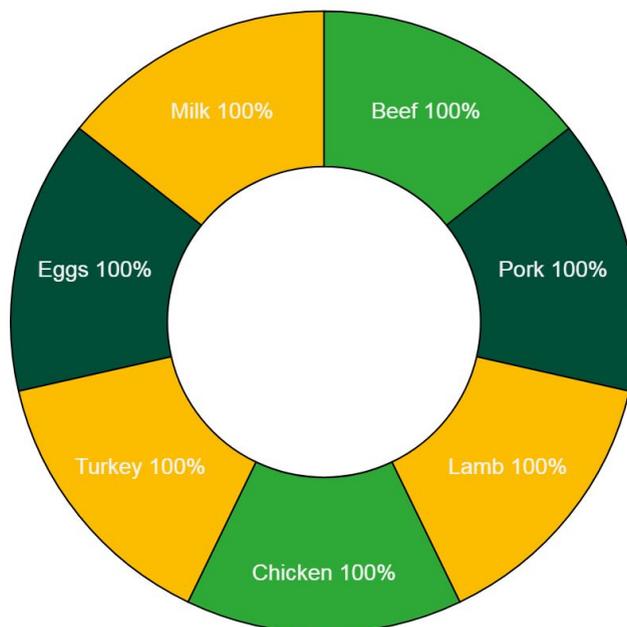
All our fresh turkey is sourced to Red Tractor standards. No desnooding takes place in this chain. The key welfare indicators that are monitored against both industry standards and internal target figures in our turkey production include mortality rates, leg culls, presence of pododermatitis, antibiotic usage, stocking densities and rejects. Our standards also include reward based environmental enrichment, specifically the birds should be provided with sawdust bales and pecking objects.

Welfare Outcomes and Key Performance Indicators 2018/19

In conjunction with our suppliers we monitor a wide range of key welfare indicators, which are reported to our agriculture team on a monthly basis along with commentary and an action plan around any anomalous figures. This allows us to have clear visibility of the welfare of animals in our own brand supply chain, and means we can react quickly to any concerns regarding those figures. We are striving for continuous improvement in our animal welfare standards, and reporting of these figures is an important part of that process. In addition to the reporting of key welfare indicators, we are working with academic institutions and agricultural colleges, along with sector experts, to deliver practical research and best practice guidance to improve animal welfare standards, which we share with our supplying farmers. Several of our suppliers are also involved in research projects as trial sites for environmental enrichment trials. Initial observations from one of these projects can be found in the appendix.

Livestock Origin and Red Tractor Standards

100% of our beef, pork, lamb, chicken, turkey, eggs and milk in Morrisons own-brand ranges are of British origin, and 100% are therefore reared to at least Red Tractor standards. In the case of pork, we also have an additional bolt-on for higher standards that is assessed at the same time as the Red Tractor audit.

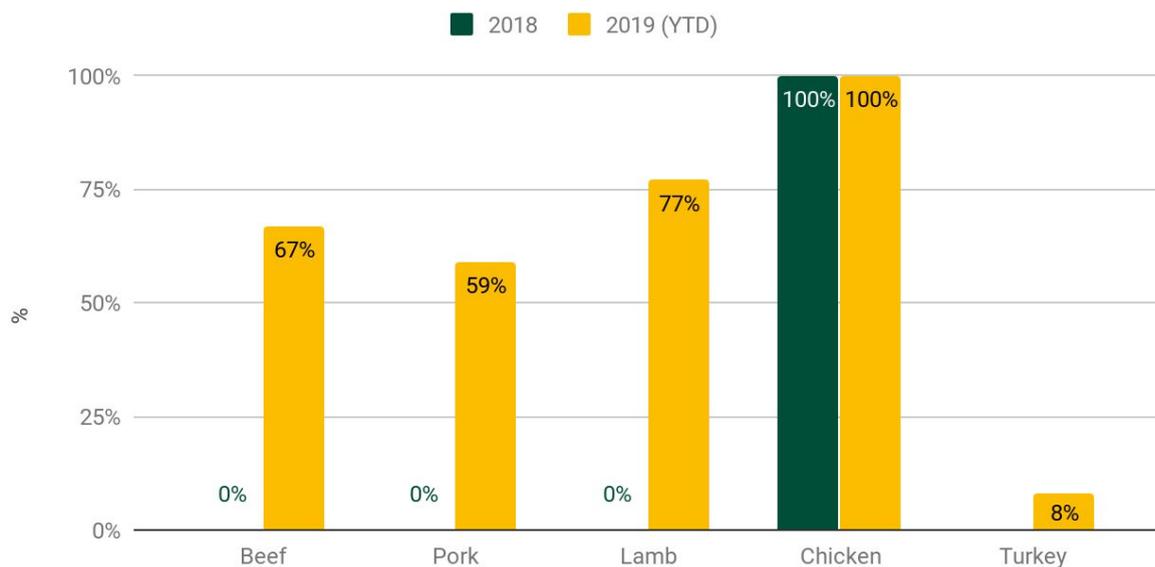


Travel times

Having our own abattoirs, we also look after a lot of the transport to our plants too and have ten ‘high welfare’ transporters fitted with drinking systems and insulated roofs to keep the livestock as comfortable as possible on their journeys.

The majority of live animal transport in our supply chain from farm to abattoir arrive in under four hours. We also monitor injuries, road traffic incidents, noticeable fatigue and any stock dead on arrival, the data for which is illustrated below.

Comparison of 0-4 hours travel time from 2018 to 2019 (YTD)



Transportation Incidences

Figures below represent 2018 RTAs and resulting fatalities for our own transport vehicles, while DOAs represent the total figure, including from contractor vehicles. Due to all transportation of poultry taking place outside our own transport vehicles, we do not currently have available data on RTAs:

Species	Road Traffic Accidents	Resulting Fatalities	DOAs
Beef	0	0	0.001%
Pork	0	0	0.013%
Lamb	0	0	0.004%
Broiler	NA	NA	0.073%
Turkey	NA	NA	0.056%

Pre-slaughter Stunning

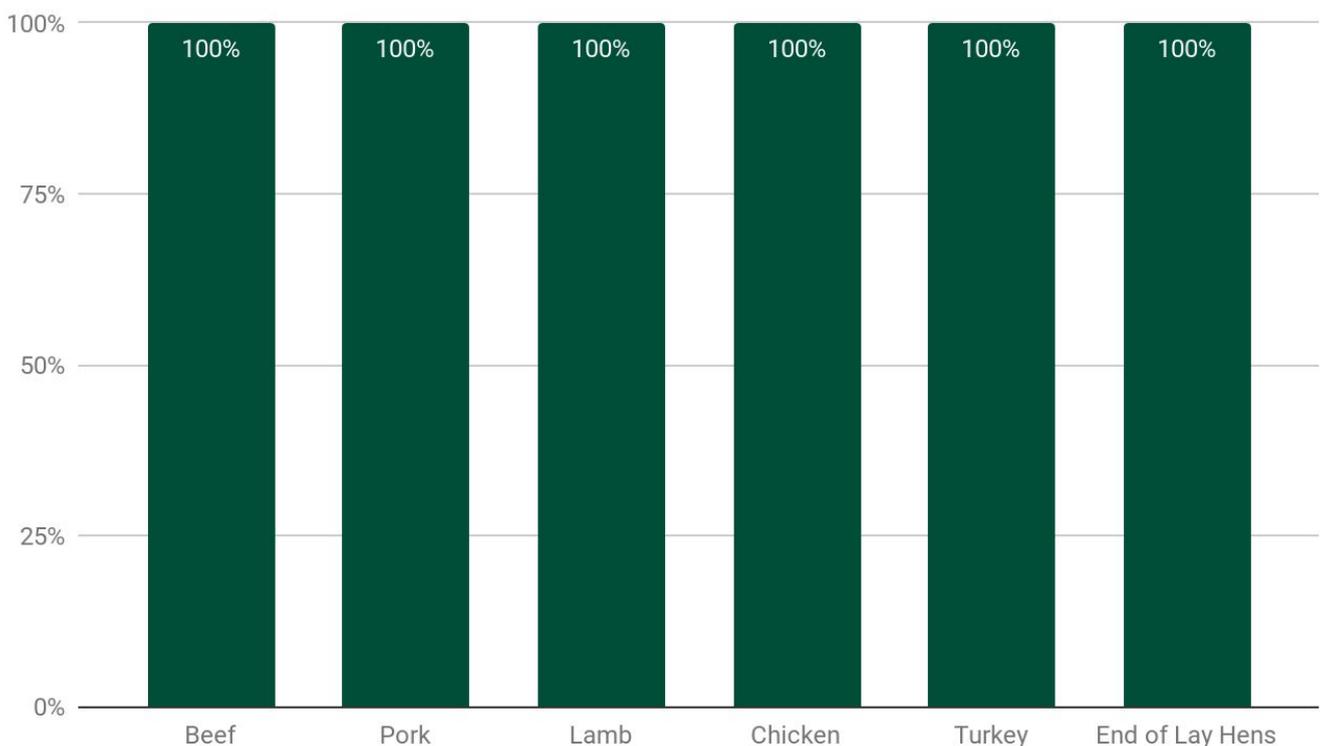
All meat used in any Morrisons branded product is stunned in a manner that renders the animal insensible to pain prior to slaughter. We also require that all end of lay hens are stunned before slaughter.

100% of birds in our chicken supply were stunned pre-slaughter: currently 88% through CO₂ multi-phase, and 22% through electric live inversion stunning. This is due to become 100% through CO₂ multi-phase by November 2019.

100% of pigs within our supply base are gas stunned before slaughter, in line with RSPCA Assured recommendations.

No necessary re-stuns were recorded in our pig or sheep processing, meaning a 100% effectiveness of the stunning process. Within the processing of cattle, 2018 saw a 99.79% effectiveness of stunning, with 0.21% of cows requiring re-stunning (414 animals out of 200,000 cattle slaughtered). Our abattoirs were the first in England to have staff qualified in the Welfare at the Time of Killing (WATOK) standards.

% of Animals Receiving Pre-Slaughter Stunning



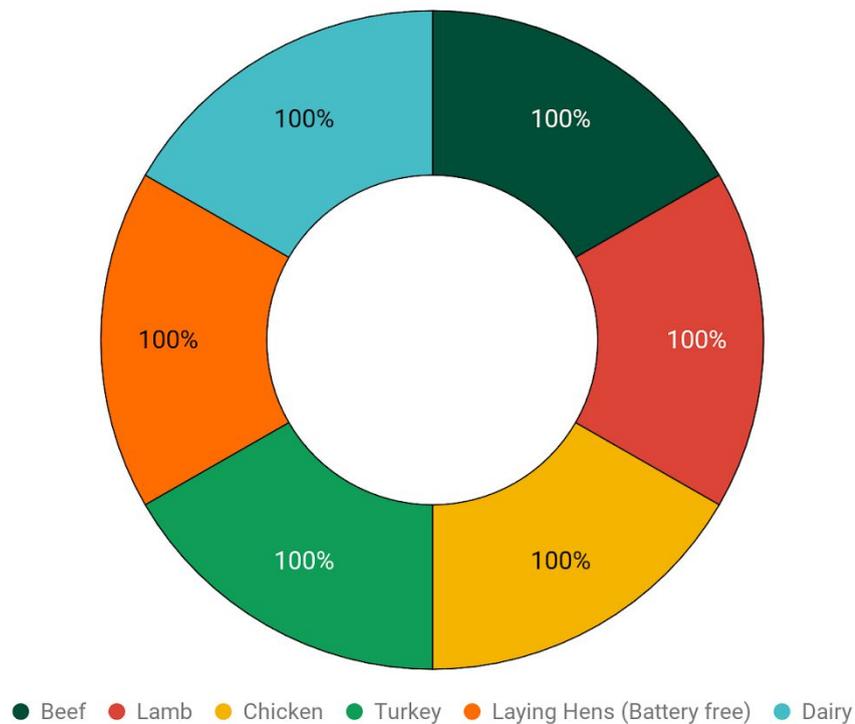
Close Confinement

We adhere to EU regulations, and more specifically British Red Tractor standards, that have strict controls on animal confinement. Our farm standards policy covers animals from UK, EU and non-EU country of origin. We have strict requirements in avoiding animals produced in systems which use sow stalls, single penning, battery cages, tethering, veal crates and force feeding.

All our fresh British pork is free from close confinement including the use of sow stalls; currently 5.8% of our fresh pork supply is Freedom Foods outdoor bred (approximately 1740 pigs processed per week through Woodheads).

Some sow stalls are still in use for a short time period in continental meats supply; this period of confinement has been greatly reduced in recent years. We are in discussion with our main suppliers to understand how this can be reduced further to zero in due course.

Animals free from close confinement

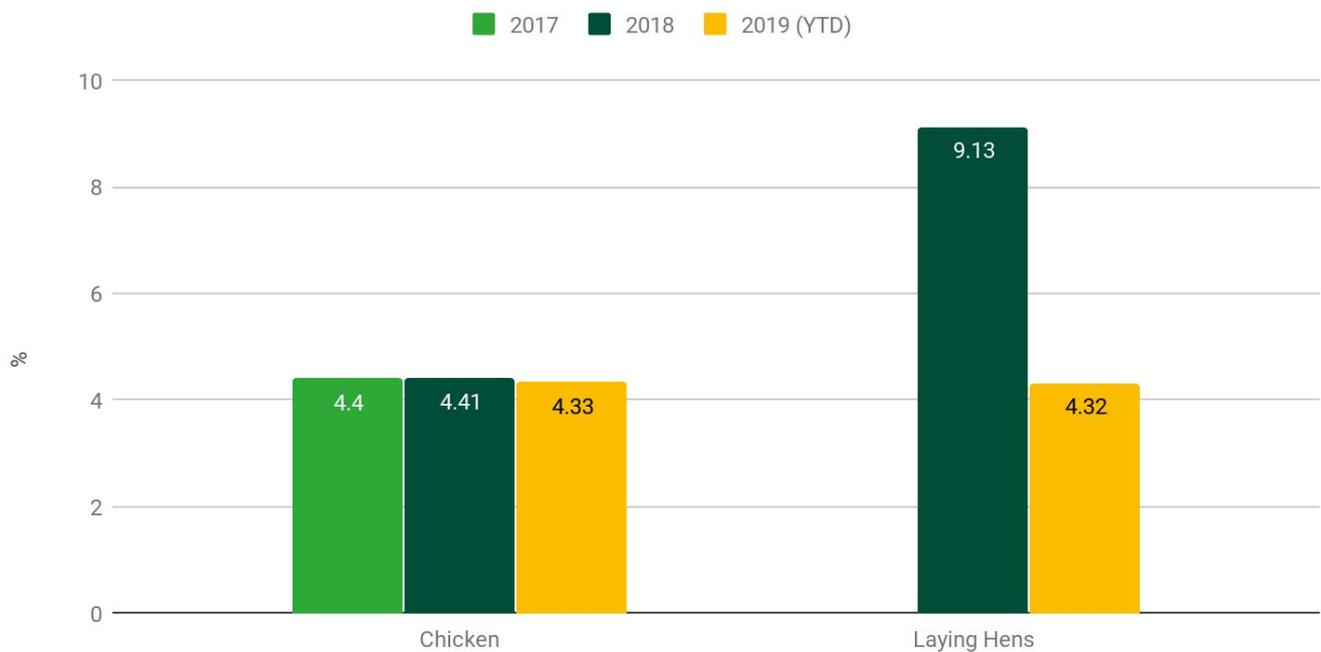


Mortality Rates

The graph shown here is an example of our monitoring of mortality rates taken from on-farm data in the poultry section of our own brand supply chain. We were not collecting specific data on this from turkey in 2017 or 2018, but are now able to show an accurate figure for 2019 so far. Both chicken and laying hen sectors show an improvement from 2018 to 2019.

We realise that setting mortality rate targets could affect welfare ambitions if animals are kept alive in order to meet a target. For this reason, we monitor a number of welfare figures such as hock marks, presence of pododermatitis and leg cull figures as well as medicine usage to make sure animal welfare always comes first.

Comparison of Mortality Rates per Species from 2017 to 2019

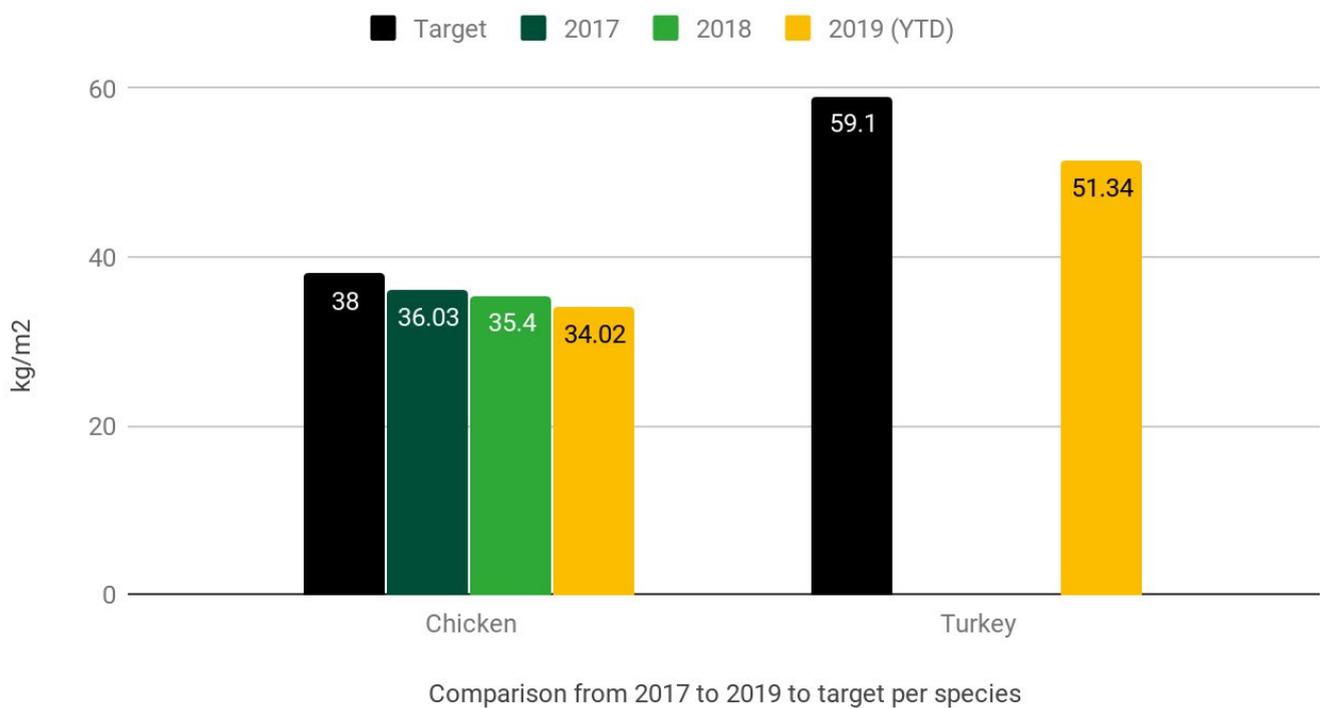


Comparison from 2017 to 2019 per Species

Stocking Densities

As with mortality rates, the graph shown here is an example of our monitoring of stocking densities taken from on-farm data in the poultry section of our own brand supply chain. As with mortality rates, we have not been able to record accurate data for turkeys before 2019. Chicken (broilers) shows a steady reduction in stocking densities, and this is improving on our target figure year on year.

Stocking Density Comparison from 2017 to 2019 Against Targets



Welfare Policy Compliance - Reporting

Policy measure	Compliance rate
No animal cloning	100% of our own-brand products comply
No animal testing	100% of our own-brand products comply
Antibiotic use	Chicken: supply base exceeds RUMA target Eggs: supply base meets RUMA target Pork: supply base working to meet RUMA targets; 100% of fresh pork has not received any CIAs since 01.01.2019. Beef: supply base working to meet RUMA targets Lamb: supply base working to meet RUMA targets Milk: supply base on track to meet RUMA targets
Red tractor assurance	100% of our fresh meat and dairy is Red Tractor Assured
Other assurance standards	100% of our own brand products for meat are audited to a Morrisons approved farm animal welfare standard
Beak trimming	Fresh chicken 2018: 98% fully beaked (i.e. not beak trimmed) Fresh chicken 2019: 100% fully beaked Shell eggs 2018: 6% fully beaked
Cage free eggs	Shell egg 2018: 55% cage free Shell egg 2019: 78% cage free Shell egg 2022 target: 100% cage free Ingredient egg 2018: 55% cage free Ingredient egg 2025 target: 100% cage free
Castration	100% of pigs in our own brand fresh pork are not castrated
CCTV at slaughter	100% of our abattoirs have CCTV installed
Close confinement	100% of fresh pork free from sow stalls 100% of shell and ingredient egg free from battery cage production 100% of cattle (dairy and beef) free from tethering 100% of veal production free from crates 100% of animals free from force feeding.
Dairy bull calves	100% of healthy dairy bull calves in our fresh milk are not shot on farm.
Environmental Enrichment	Animals that have access to environmental enrichment materials if housed indoors: 100% - pigs for own brand pork 100% - broilers for own brand chicken 100% - laying hens for shell eggs

	100% - cows for dairy if all year round housed																		
Genetic engineering	100% of our products are free from genetic engineering.																		
Grazing	2019: This will be reported as an actual figure in December. 2018: Dairy cows grazed for an average of 214 days (approx 30 weeks).																		
Growth promoters	100% of our meat is free from all growth promoters.																		
Key welfare indicators	All species going into fresh own-brand product have key welfare indicators defined, monitored and measured (see above)																		
Live imports	No live imports within our chain																		
Livestock origin	100% of fresh meat, dairy and shell eggs is British																		
Pre-slaughter stunning	100% of our own-brand products are stunned before slaughter. Effectiveness of stunning (100% indicates no re-stunning required): 2018: Pork: 100% Lamb: 100% Beef: 99.79%																		
Tail docking	We are now monitoring the % of our fresh pork that is sourced from pigs who have not had their tails docked. 2018: 20.8% of our fresh pork was from pigs who did not have tails docked. 5.8% of these were from Freedom Foods farms. 100% of our dairy cows are free from tail docking.																		
Tethering	100% of our dairy cows are not tethered																		
Transport journey times to abattoir	Own-brand fresh meat supply: <table border="1"> <thead> <tr> <th></th> <th>0-4 hours</th> <th>5-8 hours</th> </tr> </thead> <tbody> <tr> <td>Chicken</td> <td>100%</td> <td>n/a</td> </tr> <tr> <td>Pork</td> <td>59%</td> <td>36%</td> </tr> <tr> <td>Beef</td> <td>67%</td> <td>32%</td> </tr> <tr> <td>Lamb</td> <td>77%</td> <td>23%</td> </tr> <tr> <td>Turkey</td> <td>8%</td> <td>81%</td> </tr> </tbody> </table>		0-4 hours	5-8 hours	Chicken	100%	n/a	Pork	59%	36%	Beef	67%	32%	Lamb	77%	23%	Turkey	8%	81%
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Appendices

Laying Hen Environmental Enrichment Trials



Even though our laying hens are mainly from free-range systems, when hens are not out on the range (time of day, inclement weather etc), we wanted to be able to understand what enrichment products would be needed inside the shed to help them express their natural behaviours. It was also aimed to understand what best practice advice we could establish with our farms to help on the journey to keep beaks intact.

The trial has meant the introduction of a wide range of enrichment materials, such as rope, pecking blocks, lucerne bales, chains, plastic toys, cardboard egg boxes and even traffic cones. Initial observations from the trial showed some significant differences between the levels of interaction with certain materials. For example, it appears that little interest was shown in chains, while lucerne bales and traffic cones are of great interest to the birds.

One key point of this trial is to try to find an enrichment material that adds real value to the flock, but does not burden the farm with unsustainable costs. Some great innovation has been shown by our farmers to prolong the life of materials such as lucerne, by storing them in hay nets at one site (pictured right), while another site placed the lucerne bale inside an empty water butt, drilling holes in the sides to allow the birds access to the material inside.



Sites involved in the trial attend meetings with the Morrisons Agriculture team and the University of Bristol to discuss and compare their observations, and look at next steps. The trial is ongoing, with full data analysis and presentation of results yet to be completed.

Bumble Bee Project



In order to better support our natural world, our Chippindale Eggs business have created Bumble Bee friendly farms throughout their free range laying hen farms. 33 farmers are involved in the project, resulting in a total of 57 acres of bee friendly planting and enhanced ranging for the hens.

The launch of the 'Farmers Favourites' brand by Chippindales has helped to ensure that eggs from our bee friendly farms are distinctive and have a real point of difference on the shelf.



"Bumblebees are amongst the most loved and familiar of insects, but sadly these charismatic creatures are struggling to survive. The loss of habitat has been the primary reason for their decline. Chippindale foods recognised early on the importance of these creatures, the vital role they play in pollinating many of the crops that provide us with food to eat and the diversity of wild flowers and animals which depend on them. Their work in making their farms 'bee friendly' engaging and encouraging their staff to learn about them and their needs, ensuring that land is set aside for habitat for them and providing bumblebee identification courses has been an amazing success, for both the company and for the bumblebees themselves. A brilliant initiative which the Trust applauds."

Gill Perkins CEO Bumblebee Conservation Trust

*"We drilled our first bee friendly mix over 5 years ago and have not regretted the decision since. The mix was easy to drill and established exceptionally well giving a diverse range of species and when flowered, a vibrant array of colours and all within the first year. Almost immediately we witnessed an increase in insect and bee activity and during the monthly bee walks we were able to identify 12 different species. Yesterday they saw a queen *B lapidarius* - a large mainly black bee with a red tail which was in very good condition."*

Charles Rook, R&J Farms Ltd.