INTRODUCTION TO BIOSECURITY

The publication, *Diseases of Poultry*, describes biosecurity as *safety from transmissible infectious diseases, parasites and pests. It embodies all of the measures that can or should be taken to prevent viruses, bacteria, fungi, protozoa, parasites, insects, rodents, and wild birds from endangering the well-being of our flocks.* Biosecurity practices must be designed to eliminate, contain, or reduce the exposure and spread of poultry pathogens through implementation and management of sound best management poultry husbandry practices and policies. A well-designed and managed biosecurity program will not ensure a totally pathogen free environment, but will reduce and make disease challenges more manageable to our poultry flocks. The following document outlines the steps all Tyson Team Members, contract growers, suppliers, visitors, and any other associates must follow.

While biosecurity is always important in controlling disease and protecting our flocks, certain situations may warrant more extensive biosecurity practices. In cases such as Avian Influenza (AI), Infectious Laryngotracheitis (LT), *Mycoplasma gallisepticum* (MG), or Exotic Newcastle Disease (END), normal operating recommendations may not be sufficient. Therefore, different stages of biosecurity have been developed and can be implemented when a serious disease is in our flocks or when the threat is near. All operations are different and a more tailored biosecurity program for each complex may be needed. Work with your Tyson veterinarian to fine-tune your program.

Contingency plans must be in place in the event that a particular farm or area becomes infected with certain poultry diseases. In these circumstances, plans for routine practices need to be flexible to deal with these situations practically. A few examples may include:

- Feed delivery and egg pick up should be scheduled for the last load of the day or week on a "suspect" or "positive" farm.
- A specified area for washing and disinfecting vehicles should be identified.
- An approved method of euthanasia and disposal must be identified.
- Telephone lists of growers, team members, suppliers, etc., should be readily available for rapid dissemination of information.

Rapid response to disease outbreaks will result in less disease spread and a faster return to normal operating procedures.

Team members working within any area of live production must not own any noncommercial avian species.

EXHIBIT
tabbies
3

DEFINITIONS

Biosecurity
Practices used to contain, reduce or eliminate the introduction or spread of disease-causing organisms in poultry operations.

72-Hour Rule
The minimum time required for an individual between the last direct exposure to any noncommercial avian species and contact with Tyson Foods, Inc. live poultry is 72 hours. Additionally, travel into an area with exotic diseases will require following the 72-hour rule. People are one of the primary routes of introduction of a disease into an area. Because of today's rapid transportation methods, exotic or foreign animal diseases can be easily introduced into our country and into our animals. Therefore, it is extremely important to question anyone who enters our facilities about their recent travels. If in doubt, do not let them enter. Also remember, all visitors must abide by the 72-hour rule.

Clean
Removal of all organic material including, but not limited to, feathers, feces and dirt.

Disinfecting
The application of a disinfectant compound to all surfaces to eliminate infectious organisms (use phenolic or glutaraldehyde based products – these compounds are more effective in the presence of organic materials).

Please keep in mind that the efficacy of these disinfectants increases with dose, contact time (exposure), and temperature. If using a dip tank, make certain that the solution is clean. The solution should be changed on a regular basis depending on the accumulation of organic material or other diluting effects (i.e. sunlight, rainwater, etc.). Depending on use, solutions should be changed at least weekly and may need to be changed daily. In the case of electronic or delicate tools, (Weltech scale, computer, cell phone, etc.) a thorough wipe down to remove dust/dirt followed by a light spray or wipe with disinfectant (example: Lysol) may be necessary.

Clean Area
A specific place where cleaned and disinfected items are stored when not in use.
This area is segregated to reduce or eliminate any possible cross-contamination or recontamination. This specific place should be a "low-traffic" area.

Dirty Area
A specific area where potentially contaminated (previously used) items are kept prior to the cleaning and disinfectant process.

Integrated Pest Management Program

A coordinated effort to effectively control various pests using a combination of mechanical, cultural, behavioral, and chemical control means.

1. The incorporation of an effective rodent control program is essential to minimize the transmission of poultry disease causing organisms from one flock to another. This is also an important aspect of a coordinated effort to reduce Salmonella sp. and other foodborne disease organisms.
2. The incorporation of an effective insect control program is important to minimize the transmission of certain disease causing organisms.
3. Wild birds must be removed from and kept out of our poultry facilities. Research has shown that certain wild birds can carry mycoplasma, avian influenza, mites and other poultry disease agents into our domestic flocks.
4. An integrated pest management program (steps 1-3 above) is an effective, economical, and environmentally responsible approach to controlling poultry farm pests. Not only does the effective control of these pests reduce the risk of spreading poultry diseases, it reduces facility damage caused by certain pests (rodents and darkling beetles) and may reduce complaints (flies) from neighbors.

Multi-Age Facilities

- Pullet farm that does not have two periods of 14 days downtime per year.
- Hen farm that does not have one period of 14 days downtime per year.
- Broiler farm that does not have at least 14 days downtime between each flock.

Downtime

The time period when there are no birds present on the farm.

Noncommercial Avian Species

A variety of birds including, but not limited to, backyard chickens, game fowl, parrots, exhibition birds, caged birds, pet birds, waterfowl, and ratites.

BIOSECURITY STAGES

Examples of biosecurity responses (stages) to varying disease situations can be implemented on a farm, zone, area, or complex basis.

STAGE	LOCAL	ADJACENT REGION/STATE
1 GREEN	No serious disease present	No serious disease present
2 YELLOW	Serious disease present in immediate area or zone	Severe disease present in nearby region or state
3 RED	Serious or severe disease present on farm	Severe disease present in immediate area

Serious Disease – Diseases that are highly contagious and cause significant production or performance losses ***or*** may have negative political and trade ramifications. (Example: LT, MG, Pullorum/Typhoid, Coryza, Pneumoviruses)

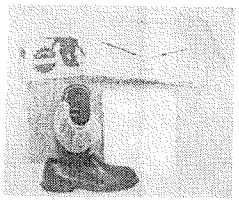
Severe Disease – Diseases that are highly contagious and cause significant production or performance losses and ***do*** have severe negative political and trade ramifications ***or*** are foreign to our country. (Example: AI (all types) and END)

Operating Practices During Stage Green

Attention to biosecurity practices is critical to keeping diseases out of our operations, even when the disease threat appears to be low. In fact, vigilance during these times will lessen the chances of Tyson being involved in the early stages of any disease outbreak.

Broilers – Stage Green

Broilers – People



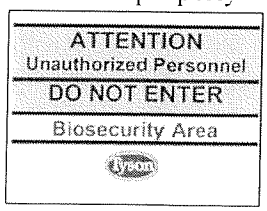
Team members must wear clean clothes and footwear when entering a farm. Special attention should be paid to shoes. Shoes should be covered with washable rubber boots or disposable plastic boots. Disposable boots must be left on the farm in an enclosed container. Washable rubber boots can be used if they are cleaned and sanitized upon departure from the farm.

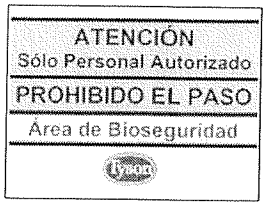
Team members must wash hands before leaving the farm. Waterless gels, disinfecting hand wipes, or soap and water are all acceptable methods. Adequate supplies such as paper towels may be necessary to facilitate proper hand sanitation.

Tyson team members should log each farm visit in chronological order.

Essential Visitors (maintenance, utility, temporary farm helpers)

These people must at least follow the same clothing and footwear procedures as team members. Any equipment should be properly cleaned and disinfected before and after the service visit. Contact with other noncommercial poultry or avian species (backyard chickens, game fowl, parrots, caged birds, waterfowl, etc.) is strictly prohibited for anyone in contact with Tyson Foods, Inc. poultry.





Each complex should maintain a current list of ALL essential visitors. In the event of a change in Biosecurity Status, these people must be informed of precautions needed upon entering/exiting a farm.

Nonessential Visitors (family, friends, other visitors)
These people must not have had previous exposure to any poultry within the last 72 hours and must follow the same biosecurity practices as team members or essential visitors.

Broilers – Equipment

All reusable equipment should be kept thoroughly cleaned and disinfected.

The vaccination vehicle should be treated as equipment. Cleaning the vehicle should be done on a regular basis.

Vaccination equipment - Coolers, SoloVac, water containers, etc. should be made of a nonporous material. All needles should be disposable and disposed of in an approved sharps container or biocontainment box after use. Efforts should be made to minimize the amount of unused water or other supplies that are returned at the end of the day (jugs in cardboard boxes). The clean area/dirty area concept should be applied to the vaccination equipment (see definitions).

- **Necropsy/Fat Collection Equipment** – Knives and/or scissors should be washed after use.
- **Blood Collection** – A sterile needle and/or scalpel blade should be used. Used needles and scalpels should be disposed of in an approved sharps container or biocontainment box. Do not take blood collection vials and/or syringes from inside a house on one farm to inside a house on another farm.
- **Electronic Equipment and Other Reusable Sensitive Items** (cell phones, Ratek, etc.) – Should be kept clean.
- **Catch Pens and Scales** - Should be free of organic material prior to use (feathers, manure, litter, etc.).

Broilers – Vehicles

Service vehicles should be kept clean and orderly. Particular attention should be paid to the interior of the vehicle. The outside of the vehicle should be washed when obviously dirty. Managers should check for cleanliness of vehicles by performing both routine and unannounced inspections.

Broilers – Farms

A minimum of two weeks (14 days) of downtime between flocks should be utilized to reduce disease.

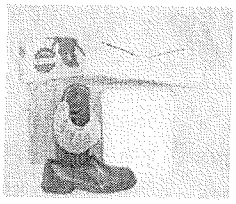
No other poultry shall be kept on the premises. Contact with other avian species on other premises is strictly prohibited. It is recommended that other domesticated species (cattle, pigs, horses, cats, dogs, etc.) be separated from poultry housing. This separation protects the producers, equipment, and facilities, in addition to reducing disease-causing organisms.

See Dead Bird Disposal section for appropriate methods of mortality disposal.

Regular communication should emphasize the importance of biosecurity to protect Tyson and its growers.

Pullets – Stage Green

Pullets – People

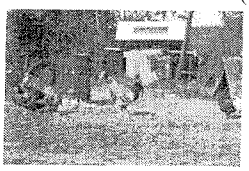


Team members must wear clean coveralls on all pullet farms. Coveralls may be stored and left on the farm. They must be washed between flocks or when obviously dirty. Hands must be washed before leaving the farm. Waterless gels, disinfecting hand wipes, or soap and water are all acceptable methods. Adequate supplies such as paper towels may be necessary to facilitate proper hand sanitation.

Shoes should be covered with washable rubber boots or disposable plastic boots. Disposable boots must be left on the farm in an enclosed container. Washable rubber boots must be cleaned and sanitized upon departure from the farm.

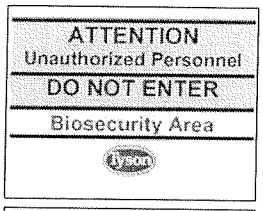
Tyson team members should log each farm visit in chronological order.

Essential Visitors (maintenance, utility, temporary farm helpers)

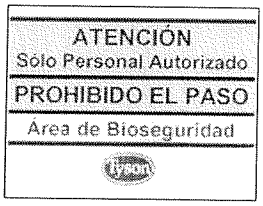


These people must at least follow the same clothing and footwear procedures as team members. Any equipment should be properly cleaned and disinfected before and after service visits. Contact with other noncommercial poultry or avian species (backyard chickens, game fowl, parrots, caged birds and waterfowl, etc.) is strictly prohibited for anyone in contact with Tyson Foods, Inc. poultry.

Each complex should maintain a current list of ALL essential visitors. In the event of a change in Biosecurity Status, these people must be informed of precautions needed upon entering/exiting a farm.



Nonessential Visitors (family, friends, other visitors)
These people must not have had previous exposure to any poultry within the last 72 hours and must follow the same biosecurity practices as team members or essential visitors.



Pullets – Equipment

Clean equipment is essential for handling long-lived birds. All equipment should be made of stainless steel and hard plastic (nonporous) without holes or crevices that may allow organic material to accumulate. Benches, tables, wheels, stools, chairs, fans, drop cords, lights, beak trimmers, baskets, and equipment trailers should be easily cleaned and not made of wood. All needles should be disposed into an approved biohazard container. Equipment should be cleaned and sanitized between farms in the following manner:

- If weigh pens are not supplied for each farm, pens should be cleaned and sanitized by removing all organic material and disinfected with an approved disinfectant.

- To properly clean and disinfect nets, high pressure cleaning techniques and manual removal of feathers is necessary. Use approved disinfectants for optimal disinfecting. Allow nets to dry with exposure to full sunlight. Utilize multiple sets of nets for proper cleaning, disinfecting, and drying. If economically feasible, nets may be purchased for each farm and moved with the pullets. Store cleaned and disinfected pens and nets in a clean area. If possible, store nets fully exposed to direct sunlight.
- Cold sterilization with Nolvasan is an acceptable method for sterilization of vaccine guns. Heat sterilization may also be used. **CAUTION:** When heat sterilization is used the O-rings in the vaccinating guns may be damaged, resulting in improper dosing by syringes.
- All other reusable equipment (scales, catch hooks, etc.) should be thoroughly cleaned and disinfected.
- Vaccine wells should be rinsed and dried.
- The clean area/dirty area concept should be applied to the vaccination equipment.
- The trailer, when properly cleaned and disinfected, may be used as the clean room.
- All catching equipment, including cages, trailers, loaders, and equipment trailers should be thoroughly cleaned and disinfected between movements. If pullets are being caught with automatic catching machines, special attention should be made in the cleaning and disinfecting of these machines.

Designated cages for the breeder operation are highly recommended. This would allow for sufficient time for the washing and disinfecting of cages and downtime.

The same biosecurity measures for vaccinating crews applies for pullet moving crews (see above).

Pullets – Vehicles

Service vehicles should be kept clean and orderly. Vehicles should be washed and disinfected weekly (more frequently when obviously dirty). Particular attention should be paid to the interior of the vehicle. Managers should check for cleanliness of vehicles by performing both routine and unannounced inspections.

All service crew vehicles (vaccination, moving, bleeding, etc.) should be kept clean and orderly. These vehicles should be cleaned and disinfected daily.

Pullets – Farms

A minimum of two weeks (14 days) of downtime between flocks should be utilized to reduce disease. On multi-age farms, each age should be treated as a separate farm.

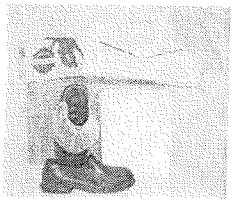
No other poultry shall be kept on the premises. Contact with other avian species on other premises is strictly prohibited. It is recommended that other domesticated species (cattle, pigs, horses, dogs, cats, etc.) be separated from poultry housing. This separation protects the producers, equipment, and facilities, in addition to reducing disease-causing organisms.

See Dead Bird Disposal section for appropriate methods of mortality disposal.

Regular communication should emphasize the importance of biosecurity to protect Tyson and its growers.

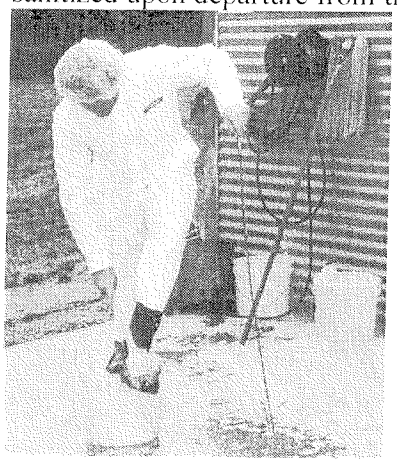
Breeders – Stage Green

Breeders – People



Team members must wear clean coveralls on all breeder farms. Coveralls may be stored and left on the farm and cleaned between flocks. Hands must be washed before leaving the farm. Waterless gels, disinfecting hand wipes, or soap and water are all acceptable methods. Adequate supplies such as paper towels may be necessary to facilitate proper hand sanitation.

Shoes should be covered with washable rubber boots or disposable plastic boots. Disposable boots must be left on the farm in an enclosed container. Washable rubber boots must be cleaned and sanitized upon departure from the farm.



Service crews (spike male catching, bleeding, weighing, nose-boning, etc.) should wear clean clothes and footwear before entering a farm. All footwear must be cleaned and disinfected before entering a breeder house. The use of "street shoes" for service crews should be discouraged. Company supplied uniforms should be utilized. During warm weather, surgical scrubs are a viable alternative while in cold weather coveralls or uniforms should be supplied. Hair nets should be worn on the head or over hats on all farms. Hands must be washed before leaving the farm.

It is recommended that the egg truck driver have footwear dedicated for egg pickup. When not in use, the footwear should be cleaned and stored in a designated location at the hatchery. The egg truck driver must enter only the workroom or egg room.

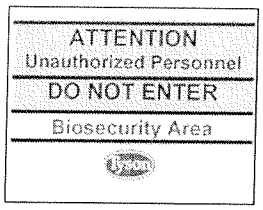
Tyson team members should log each farm visit in chronological order.

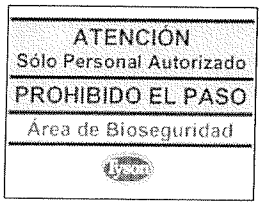
Essential Visitors (maintenance, utility, temporary farm helpers)

These people must follow at least the same clothing and footwear procedures as team members. Any equipment should be properly cleaned and disinfected before and after the service visit. Contact with other noncommercial poultry or avian species (backyard chickens, game fowl, parrots, caged birds and waterfowl, etc.) is strictly prohibited for anyone in contact with Tyson Foods, Inc. poultry.

Each complex should maintain a current list of ALL essential visitors. In the event of a change in Biosecurity Status, these people must be informed of precautions needed upon entering/exiting a farm.

Nonessential Visitors (family, friends, other visitors)
These people must not have had previous exposure to any poultry within the last 72 hours and must follow the same biosecurity practices as team members or essential visitors.





Breeders – Equipment

All equipment used in the breeder house should be easily cleaned and disinfected. If weigh pens are not supplied for each farm, pens should be cleaned and sanitized by removing all organic material and disinfected with an approved disinfectant. Pens should be free from visible organic material (dirt, feces, and feathers) before being disinfected. Once visibly clean, the pens should be hosed down with water then sprayed with disinfectant solution or scrubbed and cleaned with a brush that has been dipped in a disinfectant solution. The disinfectant solution should be fresh and not grossly contaminated with dirt or feces. If nets are used, refer to the net cleaning and disinfectant paragraph in the Pullet Equipment section.

All other equipment taken into the breeder house (catch hooks, tools, bleeding equipment, etc.) should be cleaned and disinfected in the same manner as catch pens. In the case of electronic or delicate tools, (Weltech scale, computer, cell phone, etc.) a thorough wipe-down followed by a light spray or wipe with disinfectant (example: Lysol) is necessary. Because paper and notebooks are very difficult to clean and disinfect, only the necessary documents or forms should enter the breeder house (do not take an entire notebook or clipboard into the house if it is not needed).

Inventory (egg boxes, egg flats, etc.) should be managed to avoid the necessity of transfer of materials from farm to farm. This practice helps prevent the spread of poultry diseases and greatly reduces the spread of chicken mites.

Breeders – Vehicles

Service vehicles should be kept clean and orderly. Vehicles should be washed and disinfected weekly (more frequently when obviously dirty). Particular attention should be paid to the interior of the vehicle. Managers should check for cleanliness of vehicles by performing both routine and unannounced inspections.
All crew vehicles (vaccination, moving, bleeding, etc.) should be kept clean and orderly. These vehicles should be cleaned and disinfected between farms.
The cab of the egg truck must be cleaned and disinfected daily and the entire truck washed and disinfected as needed, at least weekly.

Breeders – Farms

A minimum of two weeks (14 days) of downtime between flocks should be utilized to reduce disease. On multi-age farms, each age should be treated as a separate farm.

No other poultry shall be kept on the premises. Contact with other avian species on other premises is strictly prohibited. It is recommended that other domesticated species (cattle, pigs, horses, cats, dogs, etc.) be separated from poultry housing. This separation protects the producers, equipment, and facilities, in addition to reducing disease-causing organisms.

The use of cats for rodent control is discouraged. If used, cats must only be used for one flock.

See Dead Bird Disposal section for appropriate methods of mortality disposal.

Regular communication should emphasize the importance of biosecurity to protect Tyson and its growers.

Breeder – Catching

All catching equipment, including cages, trailers, loaders, and equipment trailers should be thoroughly cleaned and disinfected between movements. Contract breeder catchers should be made aware of our biosecurity programs and must adhere to our guidelines. Catchers should have clean clothing and footwear before entering a poultry house. Contractors' equipment should be evaluated for cleanliness at the time of load-out. An off-site area for cleaning and disinfecting contractors' equipment may be needed. The cleanliness of contractors' equipment is of paramount importance on multi-age breeder facilities. Contract catchers should be aware that there might be other at-risk poultry on the farm. Therefore, contract catchers should enter only the houses in which they are catching.

Designated catching nets for multi-age breeder operations are highly recommended.

Spike Male – Stage Green

Before moving any spike male, be sure to have **NEGATIVE** serology for MS, MG and AI - **NO EXCEPTIONS**. Ample time (minimum of one week) must be allowed for blood work to be received and processed by the lab. **Should MS or MG be confirmed, these males must not be used to spike in negative hen flocks.** Birds must also be physically examined to ensure that the birds do not have mites. **No birds with mites may be moved until the mites have been effectively treated.**

Male movements should be planned to minimize the number of deliveries to reduce exposure. Male moving equipment should be cleaned and disinfected prior to the movement of the males.

Biosecurity in the male spike house should mirror the protocol outlined for pullets. Because males may be distributed to many houses, extra precautions are necessary,

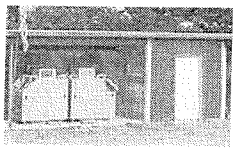
including extra blood work (Mycoplasma sp.) and physical examination for mites. Anytime birds are added or moved, blood work is necessary (see above).

All birds that are put in a spike house must have received identical vaccinations (i.e. never mix birds that are vaccinated for ILT with birds that are not vaccinated for ILT).

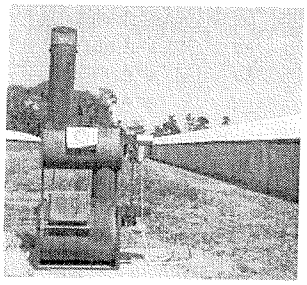
A minimum of 14 consecutive days of downtime twice yearly is necessary to prevent the spread of disease. Spike males are the primary means of disseminating certain diseases (MG, MS).

Other Operating Areas – Stage Green

Dead Bird Disposal – Stage Green



Dead birds should be disposed of on the farm. Composting, incineration, or freezing are the Tyson approved methods of dead bird disposal. Disposal of birds in pits is no longer a Tyson approved method, regardless of local ordinances that may permit it.



In most cases, growers should not be allowed to take their normal mortality to rendering plants or livestock landfills as this practice has proven to start and perpetuate many disease outbreaks. If growers are allowed to utilize livestock landfills or rendering plants, this practice must cease immediately once a severe or serious disease is identified in the area. The complex must have a written protocol that effectively and expeditiously (within 24 hours) communicates this change to all growers when an outbreak occurs. The compliance with this change should also be verified.

In complexes with freezers, the local management must be familiar with the routine activities of the mortality removal vehicle. This understanding will facilitate rapid response in the event of a disease threat. Mortality removal vehicles must have the capabilities to be tarped. The truck and trailer should be clean at the start of each day.

Complexes utilizing incinerators or composting must protect carcasses from domestic or wild animals. Carcasses being held for incineration must be covered.

Litter Removal – Stage Green

Follow best management practices during the removal and spreading of litter.

Live Haul – Stage Green

Growers are often concerned about the live haul truck bringing disease causing organisms onto their farm. Although this seems like a legitimate threat, it is rarely a problem. Most poultry diseases require an active host to allow an organism to live and multiply. In live haul, this is not a problem because all of the "hosts" are caught and taken to the plant. **All live birds may serve as hosts for poultry disease agents from one flock to the next.** It is for this reason that all birds should be culled and disposed of properly after each flock.

Hatchery – Stage Green

Hatchery – People

Team members must wear clean clothes and footwear when entering the hatchery. Team members should also wash their hands upon entry. Waterless gels, disinfecting hand wipes, or soap and water are all acceptable methods.

It is recommended that the egg truck driver, chick bus driver and any helpers have footwear dedicated for egg pickup and chick delivery. When not in use, the footwear should be cleaned and stored in a designated location at the hatchery. The egg truck driver must enter only the workroom or egg room.

Tyson team members should log each farm visit in chronological order.

Contact with other noncommercial poultry or avian species (backyard chickens, game fowl, parrots, caged birds, waterfowl, etc.) is strictly prohibited for anyone in contact with Tyson Foods, Inc. poultry.

Essential Visitors (maintenance, utility, deliveries)
Any equipment should be properly cleaned and disinfected before and after service visits.

These people should not have had contact with other noncommercial poultry or avian species (backyard chickens, game fowl, parrots, caged birds, waterfowl, etc.) within the last 72 hours and must follow the same biosecurity practices as team members.

Each complex should maintain a current list of ALL essential visitors. In the event of a change in Biosecurity Status, these people must be informed of precautions needed upon entering/exiting a farm.

Nonessential Visitors (tours or other visitors)
These people must not have had contact with other noncommercial poultry or avian species (backyard chickens, game fowl, parrots, caged birds, waterfowl, etc.) within the last 72 hours and must follow the same biosecurity practices as team members or essential visitors.

Hatchery Equipment

Egg Transport - Farm racks, egg flats, paper commercial egg supplies, and other associated articles used in the delivery or shipping of eggs from the breeder farm should be properly cleaned before delivery to the farm.

Chick Delivery - Moffitt loaders, pallets, hand trucks, dollies and other equipment associated with the delivery of the processed chicks to the broiler farms should be cleaned daily.

Paperless chick boxes should be cleaned and disinfected twice a week (for example, Wednesday and Saturday). In papered boxes, the paper should be changed at a minimum of twice a week and the boxes washed at least once a week.

Hatchery Vehicles

The cab of the egg transport and chick delivery vehicles must be cleaned and disinfected daily and the entire truck washed and disinfected as needed, at least weekly. Managers should check for cleanliness of vehicles on both routine and unannounced inspections.

Feed Mill – Stage Green

Feed truck driver must have footwear dedicated for feed delivery. When not in use, the footwear should be cleaned and stored in a designated location at the feed mill. Feed truck drivers should never enter the poultry house. Feed tickets should be left in a designated location outside of the poultry house.

Feed mill employees should not own or be associated with any other noncommercial poultry or avian species.

Feed trucks should be washed weekly. The cab of the truck must be cleaned and disinfected daily.

Offices- Stage Green (Growout, Plant, Feed Mill, Truck Shop/Service center)

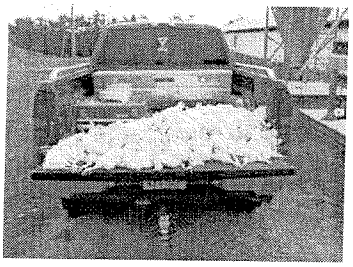
Each complex should maintain a current list of ALL essential visitors. In the event of a change in biosecurity status, these people must be informed of precautions needed upon entering/exiting a farm.

A clean footbath will prevent the introduction of poultry disease-causing organisms into the office area. No office personnel are allowed to have backyard poultry or any noncommercial avian species (ducks, guinea foul, turkeys, parrots, etc.).

Team members who are also Tyson contract growers must change into clean clothes and shoes before entering a Tyson facility and before returning to their poultry farm. Team members who are non-Tyson contract growers must shower and change into clean clothes and shoes before entering a Tyson facility and before returning to their poultry farm.

Because equipment and team members from the shop and service center may potentially have direct contact with live poultry on the farms, it is crucial to keep the shop manager informed with the current Biosecurity Status in the complex. Specific questions regarding Biosecurity may be directed to the Tyson veterinarian. When visiting a farm, shop/service center team members should follow the same Biosecurity measures outlined in each section of thus manual.

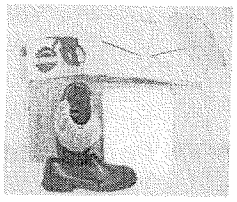
Operating Practices during Stage Yellow



Serious or severe disease outbreaks require special precautions. This level of biosecurity will require a heightened awareness and implementation of practices that will minimize the spread of contagious disease. Extra cost and effort will be required to prevent the spread of disease while continuing to operate our business. Verification of biosecurity practices is essential to success.

Broilers – Stage Yellow

Broilers – People



Team members must wear clean clothes or coveralls, hair nets, and footwear when entering a farm. Special attention should be paid to shoes. Shoes must be covered with washable rubber boots or disposable plastic boots. Additional protective measures may be required when collecting fat or blood. These include the use of gloves and the wearing of a protective covering (apron, coveralls).

Crews going from farm to farm for the purpose of collecting blood or fat or weighing birds should change coveralls between each farm.

All disposable clothing must be removed outside of the building and left on the farm in an enclosed container. Reusable rubber boots must be cleaned and sanitized before entry and upon departure from the farm.

Arrangements with the grower should be made so that disposable attire (coveralls, boots, and hair nets) may be left on the farm in an enclosed container on the outside of the house.

Team members must wash hands upon entry and before leaving the farm. Waterless gels, disinfecting hand wipes, or soap and water are all acceptable methods. Adequate supplies such as paper towels may be necessary to facilitate proper hand sanitation.

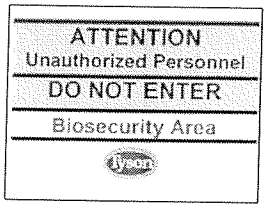
Tyson team members must log each farm visit in chronological order.

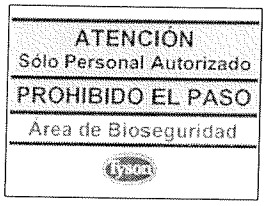
Essential Visitors (maintenance, utility, temporary farm helpers)

These people must at least follow the same clothing and footwear procedures as team members. Any equipment should be properly cleaned and disinfected before and after the service visit. Contact with other noncommercial poultry or avian species (backyard chickens, game fowl, parrots, caged birds, waterfowl, etc.) is strictly prohibited for anyone in contact with Tyson Foods, Inc. poultry.

Growers assisting other Tyson growers with chick placement must have clean, sanitized foot wear when entering the farm. Should growers need to share equipment, effective cleaning and disinfection must take place between farms.

Each complex should maintain a current list of ALL essential visitors. In the event of a change in biosecurity status, these people must be informed of precautions needed upon entering/exiting a farm.





Nonessential Visitors (family, friends, other visitors)
These visitors must be kept to a minimum, not have had previous exposure to any poultry within the last 72 hours, and must follow the same biosecurity practices as team members or essential visitors.

Broilers – Equipment

All reusable equipment should be kept thoroughly cleaned and disinfected.

The vaccination vehicle should be treated as equipment. Cleaning the vehicle should be done on a regular basis.

- Vaccination equipment - Coolers, SoloVac, water containers, etc. should be made of a nonporous material. All needles should be disposable. Efforts should be made to minimize the amount of unused water or other supplies that are returned at the end of the day (jugs in cardboard boxes). The clean area/dirty area concept should be applied to the vaccination equipment (see definitions).
- **Necropsy/Fat Collection Equipment** – Knives and/or scissors should be washed and sanitized after use.
- **Blood Collection** – A sterile needle and/or scalpel blade should be used. Do not take blood collection vials and/or syringes from inside a house on one farm to inside a house on another farm. Used needles and scalpels should be disposed of in an approved sharps container or biocontainment box after.
- **Electronic Equipment and Other Reusable Sensitive Items** (cell phones, Ratek, etc.) – Any equipment that is taken inside the house should be sanitized using disposable wipes upon leaving the farm.
- **Catch Pens and Scales** – Should be free of organic material (feathers, manure, litter, etc.) prior to use. Upon leaving the farm, it should be cleaned and disinfected with an approved product.

Broilers – Vehicles

Service, vaccination, and weighing crew vehicles must be kept clean and orderly. Particular attention should be paid to the interior of the vehicle. Floor mats and tires should be disinfected upon leaving the farm. The outside of the vehicle should be washed daily and when obviously dirty or when going from a "Yellow Zone" to a "Green Zone". Managers

should check for cleanliness of vehicles by performing both routine and unannounced inspections.

Vehicles should not be parked near the poultry house. If possible, park at the gate or at least 100 feet from the house.

Broilers – Farms

A minimum of two weeks (14 days) of downtime between flocks should be utilized to reduce disease.

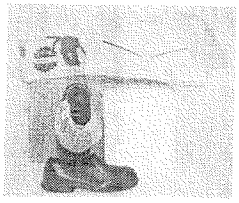
No other poultry shall be kept on the premises. Contact with other avian species on other premises is strictly prohibited. It is recommended that other domesticated species (cattle, pigs, horses, cats, dogs etc.) be separated from poultry housing. This separation protects the producers, equipment, and facilities, in addition to reducing disease-causing organisms.

See Dead Bird Disposal section for appropriate methods of mortality disposal.

Communications pertaining to the situation should be disseminated to the growers, potential visitors, and pertinent Team Members in a timely manner.

Pullets- Stage Yellow

Pullets – People



Team members must wear clean coveralls and hairnets on all pullet farms. Coveralls may be stored and left on the farm. They must be washed between flocks or when obviously dirty. Hands must be washed before leaving the farm. Waterless gels, disinfecting hand wipes, or soap and water are all acceptable methods. Adequate supplies such as paper towels may be necessary to facilitate proper hand sanitation.

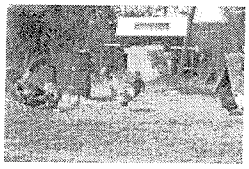
Shoes should be covered with washable rubber boots or disposable plastic boots. All disposable clothing must be removed outside of the building and left on the farm in an enclosed container. Reusable rubber boots must be cleaned (to remove ALL organic matter) and sanitized upon departure from the farm.
Service staff should schedule visits from youngest to oldest birds. Known positives or suspect flocks must be visited only when necessary and at the end of the day. Communication by telephone may be necessary to avoid contact with positive or suspect farms.

Service crews (vaccination, bleeding, weighing, etc.) should only service one farm per day. If several farms are visited, clean coveralls, hairnets and footwear must be provided for each farm.

Arrangements with the grower should be made so that disposable attire (coveralls, boots, and hair nets) may be left on the farm in an enclosed container on the outside of the house.

Tyson team members must log each farm visit in chronological order.

Essential Visitors (maintenance, utility and temporary farm helpers)

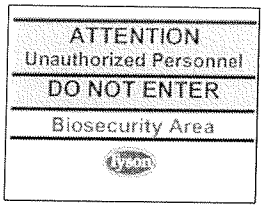


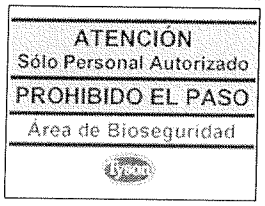
The necessity of all visits should be questioned. Visitors from high-risk areas "Stage Red" will be prohibited until they have fulfilled the requirements of the 72-hour rule or by direct permission from the live production manager.

Essential visitors must follow at least the same biosecurity procedures as team members. Any equipment should be properly cleaned and disinfected before and after the service visit. Contact with other noncommercial poultry or avian species (backyard chickens, game fowl, parrots, caged birds and waterfowl, etc.) is strictly prohibited for anyone in contact with Tyson Foods, Inc. poultry.

Should growers need to share equipment, effective cleaning and disinfection must take place between farms.

Each complex should maintain a current list of ALL essential visitors. In the event of a change in biosecurity status, these people must be informed of precautions needed upon entering/exiting a farm.



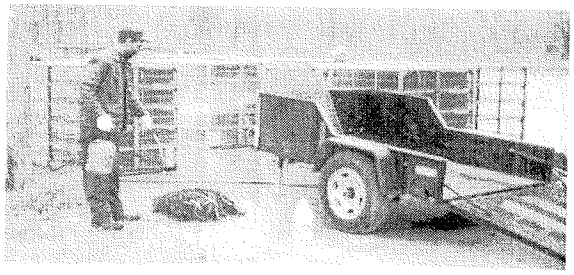


Nonessential Visitors (family, friends, other visitors)
Nonessential visitors will not be allowed.

Pullets – Equipment

Clean equipment is essential for handling long-lived birds. All equipment should be made of stainless steel and hard plastic (nonporous) without holes or crevices that may allow organic material to accumulate. Benches, tables, wheels, stools, chairs, fans, drop cords, lights, beak trimmers, baskets, and equipment trailers should be easily cleaned and not made of wood. All needles should be disposed into an approved biohazard container. Equipment should be cleaned and sanitized between farms in the following manner:

- Weighing pens should be provided for each farm. If weigh pens are not supplied for each farm, pens should be cleaned and sanitized by removing all organic material and disinfected with an approved disinfectant.
- To properly clean and disinfect nets, high pressure cleaning techniques and manual removal of feathers is necessary. Use approved disinfectants for optimal disinfecting. Allow nets to dry with exposure to full sunlight. Utilize multiple sets of nets for proper cleaning, disinfecting, and drying. If economically feasible, nets may be purchased for each farm and moved with the pullets. Store cleaned and disinfected pens and nets in a clean area. If possible, store nets fully exposed to direct sunlight.
- Cold sterilization with Nolvasan is an acceptable method for sterilization of vaccine guns. Heat sterilization may also be used. **CAUTION:** When heat sterilization is used the O-rings in the vaccinating guns may be damaged, resulting in improper dosing of vaccine.



- All other reusable equipment (scales, catch hooks, etc.) should be thoroughly cleaned and disinfected.
- Vaccine wells should be rinsed and dried.
- The clean area/dirty area concept should be applied to the vaccination equipment.
- The trailer, when properly cleaned and disinfected, may be used as the clean room.
- All catching equipment, including cages, trailers, loaders, and equipment trailers should be thoroughly cleaned and disinfected between movements. If pullets are being caught with automatic catching machines, special attention should be made in the cleaning and disinfecting of these machines.

Designated cages for the breeder/pullet operation are required. This would allow for sufficient time for the washing and disinfecting of cages and downtime.

The same biosecurity measures for vaccinating crews apply for pullet moving crews (see above).

Pullets – Vehicles

Service and crew vehicles should be kept clean and orderly. The outside of the vehicle should be washed daily and when obviously dirty or when going from a "Yellow Zone" to a "Green Zone". Particular attention should be paid to cleaning the interior of the vehicle. Truck cabs and tires should be sprayed with disinfectant after each farm visit. Managers should check for cleanliness of vehicles by performing both routine and unannounced inspections.

All service crew vehicles (vaccination, moving, bleeding, etc.) should be kept clean and orderly. These vehicles must be cleaned and disinfected when moving to a different farm.

Vehicles should not be parked near the poultry house. If possible, park at the gate or at least 100 feet from the house.

Pullets – Farms

A minimum of two weeks (14 days) of downtime between flocks should be utilized to reduce disease. On multi-age farms, each age should be treated as a separate farm.

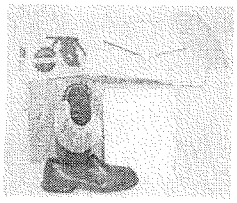
No other poultry shall be kept on the premises. Contact with other avian species on other premises is strictly prohibited. It is recommended that other domesticated species (cattle, pigs, horses, cats, dogs etc.) be separated from poultry housing. This separation protects the producers, equipment, and facilities, in addition to reducing disease-causing organisms.

See Dead Bird Disposal section for appropriate methods of mortality disposal.

Communications pertaining to the situation should be disseminated to the growers, potential visitors, and pertinent Team Members in a timely manner.

Breeders – Stage Yellow

Breeders – People



Team members must wear clean coveralls and hairnets on all breeder farms. Coveralls may be stored and left on the farm. They must be washed between flocks or when obviously dirty. Hands must be washed before leaving the farm. Waterless gels, disinfecting hand wipes, or soap and water are all acceptable methods. Adequate supplies such as paper towels may be necessary to facilitate proper hand sanitation.

Shoes should be covered with washable rubber boots or disposable plastic boots. All disposable clothing must be removed outside of the building and left on the farm in an enclosed container. Reusable rubber boots must be cleaned (to remove ALL organic matter) and sanitized upon departure from the farm.
Service staff should schedule visits from youngest to oldest birds. Known positives or suspect flocks should be visited only when necessary and at the end of the day. Communication by telephone may be necessary to avoid contact with positive or suspect farms.

Service crews (vaccination, bleeding, nose boning, weighing, etc.) must only service one farm per day. If several farms are visited, clean coveralls, hair nets and footwear must be provided for each farm.

The egg truck driver must have footwear dedicated for egg pickup. The footwear must be cleaned (to remove ALL organic matter) and sanitized after each farm. When not in use, the footwear should be cleaned and stored in a designated location at the hatchery. Immediately upon arrival to the farm, the egg truck driver must put on disposable coveralls. The egg truck driver must enter only the workroom or egg room. Egg truck drivers must not own or be associated with any other non-commercial poultry or avian species.

Tyson team members must log each farm visit in chronological order.

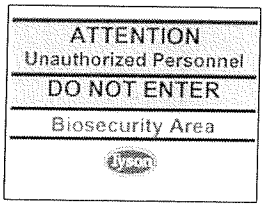
Arrangements with the grower should be made so that disposable attire (coveralls, boots, and hair nets) may be left on the farm in an enclosed container on the outside of the house.

Essential Visitors (maintenance, utility, temporary farm helpers)

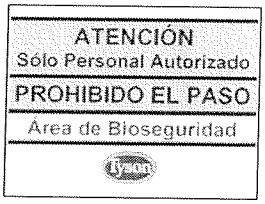
The necessity of all visits should be questioned. Visitors from high-risk areas "Stage Red" will be prohibited until they have fulfilled the requirements of the 72-hour rule or by direct permission from the live production manager. Essential visitors must at least follow the same biosecurity procedures as team members. Any equipment should be properly cleaned and disinfected before and after the

service visit. Contact with other noncommercial poultry or avian species (backyard chickens, game fowl, parrots, caged birds and waterfowl, etc.) is strictly prohibited for anyone in contact with Tyson Foods, Inc. poultry.

Should growers need to share equipment, effective cleaning and disinfection must take place between farms.



Each complex should maintain a current list of ALL essential visitors. In the event of a change in biosecurity status, these people must be informed of precautions needed upon entering/exiting a farm.



Nonessential Visitors (family, friends, other visitors)
Nonessential visitors will not be allowed.

Breeders – Equipment

Clean equipment is essential for handling long-lived birds. All equipment should be made of stainless steel and hard plastic (nonporous) without holes or crevices that will allow organic material to accumulate. Benches, tables, wheels, stools, chairs, fans, drop cords, lights, debeakers, baskets, and equipment trailers should be easily cleaned and not made of wood. All needles and blood collection equipment should be disposed into an approved biohazard container. Equipment should be cleaned and sanitized between farms in the following manner:

- Weighing pens should be provided for each farm. If weigh pens are not supplied for each farm, pens should be cleaned and sanitized by removing all organic material and disinfected with an approved disinfectant.
- To properly clean and disinfect nets, high pressure cleaning techniques and manual removal of feathers is necessary. Use approved disinfectants for optimal disinfecting. Allow nets to dry with exposure to full sunlight. Utilize multiple sets of nets for proper cleaning, disinfecting and drying. If economically feasible, nets may be purchased for each farm and moved with the pullets. Store cleaned and disinfected pens and nets in a clean area. If possible, store nets fully exposed to direct sunlight.
- All other reusable equipment (scales, catch hooks, etc.) should be thoroughly cleaned and disinfected before leaving the farm.
- The clean area/dirty area concept must be applied all equipment used in the breeder house.

The same biosecurity measures for pullet crews apply for crews working in breeder facilities.

Breeders – Vehicles

Service and egg pickup vehicles should be kept clean and orderly. Vehicles must be washed and disinfected daily and upon leaving a "Yellow Zone" before traveling into a

"Green Zone". Particular attention should be paid to cleaning the interior of the vehicle. Truck cabs and tires should be sprayed with disinfectant after each visit. Managers should check for cleanliness of vehicles by performing both routine and unannounced inspections.

All service crew vehicles (vaccination, moving, bleeding, etc.) should be kept clean and orderly. These vehicles must be cleaned and disinfected when moving to a different farm.

Vehicles should not be parked near the poultry house. If possible, park at the gate or at least 100 feet from the house.

Breeders – Farms

A minimum of two weeks (14 days) of downtime between flocks should be utilized to reduce disease. On multi-age farms, each age house should be treated as a separate farm.

No other poultry shall be kept on the premises. Contact with other avian species on other premises is strictly prohibited. It is recommended that other domesticated species (cattle, pigs, horses, cats, dogs etc.) be separated from poultry housing. This separation protects the producers, equipment, and facilities, in addition to reducing disease-causing organisms.

The use of cats for rodent control is discouraged. If used, cats must only be used for one flock.

See Dead Bird Disposal section for appropriate methods of mortality disposal.

Communications pertaining to the situation at hand should be disseminated to the growers, potential visitors, and pertinent Team Members in a timely manner.

Breeder – Catching

All catching equipment, including cages, trailers, loaders, and equipment trailers should be thoroughly cleaned and disinfected between movements. Contract breeder catchers should be made aware of our biosecurity programs and must adhere to our guidelines. Contractors' equipment should be evaluated for cleanliness at the time of load-out. An off-site area for cleaning and disinfecting contractors' equipment may be needed. The cleanliness of contractors' equipment is of paramount importance on multi-age breeder facilities. Contract catchers should be aware that there might be other at-risk poultry on the farm. Therefore, contract catchers should enter only the houses in which they are catching.

Designated catching nets for multi-age breeder operations are required and the use of the contract catching crew's nets is prohibited. Catching crews must observe the same biosecurity procedures as team members when entering a breeder facility.

Spike Male – Stage Yellow

Before moving any spike male, be sure to have **NEGATIVE** serology for MS, MG and AI—**NO EXCEPTIONS**. Ample time (minimum of one week) must be allowed for blood work to be received and processed by the lab. **Should MS, MG, or AI be confirmed, these males must not be used to spike in negative hen flocks.** Birds must also be physically examined to ensure that the birds do not have mites. **No birds with mites may be moved until the mites have been effectively treated.**

In planning male movements, minimize the number of deliveries to minimize exposure. Male moving equipment must be cleaned and disinfected prior to the movement of the males.

Biosecurity in the male spike house should mirror the protocol outlined for pullets. In that males may be distributed to many houses, extra precautions are necessary, including extra blood work (Mycoplasma sp.) and physical examination for mites. Anytime birds are added or moved, blood work is necessary (see above).

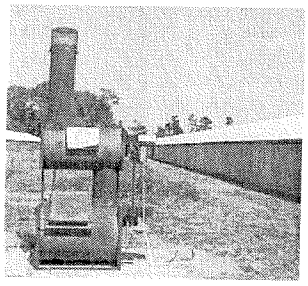
All birds that are put in a spike house must have received identical vaccinations. (i.e. never mix birds that are vaccinated for ILT with birds that are not vaccinated for ILT).

A minimum of 14 consecutive days downtime twice yearly is necessary to prevent the spread of disease. Spike males are the primary means of disseminating certain diseases (MG, MS).

Other Operating Areas – Stage Yellow

Dead Bird Disposal – Stage Yellow

Dead birds should be disposed of on the farm. Composting, incineration, or freezers are the Tyson approved methods of dead bird disposal. Disposal of birds in pits is no longer a Tyson approved method, regardless of local ordinances that may permit it.



In most cases, growers should not be allowed to take their normal mortality to rendering plants or livestock landfills. This practice has proven to start and perpetuate many disease outbreaks. If growers are allowed to utilize livestock landfills or rendering plants, this practice must cease immediately once a severe or serious disease is identified in the area. The complex must have a written protocol that effectively and expeditiously (within 24 hours) communicates this change to all growers when an outbreak occurs. The compliance with this change should also be verified.

In complexes with freezers, the local management must be familiar with the routine activities of the mortality removal vehicle. This understanding will facilitate rapid response in the event of a disease threat. Pickups on "Stage Yellow" farms should be scheduled on the same day, preferably at the end of the week. Mortality removal vehicles must be tarped. The truck should be washed and disinfected at the end of each day.

Complexes utilizing incinerators or composting must protect carcasses from domestic or wild animals. Carcasses being held for incineration must be covered.

Litter Removal – Stage Yellow

Before removing litter from the farm, the live production manager must consult a Tyson veterinarian for the appropriate disease specific procedures.

Live Haul – Stage Yellow

Growers are often concerned about the live haul truck bringing disease-causing organisms onto their farm. Although this seems like a legitimate threat, it is rarely a problem. Most poultry diseases require an active host to allow an organism to live and multiply. In live haul, this is not a problem because all of the "hosts" are caught and taken to the plant. **All live birds may serve as hosts for poultry disease agents from one flock to the next.** It is for this reason that all birds should be culled and disposed of properly after each flock. This is especially important during a disease outbreak.
During "Stage Yellow" more stringent procedures may be required for the live haul process. Consult your Tyson Veterinarian for practices concerning washing trucks, netting trucks, and routing of trucks.

"Stage Yellow" farms must be scheduled at the end of the day / week.

In certain cases, trucks may be netted or birds may be sprayed with water to prevent flying feathers. This will help minimize organisms from spreading to other susceptible poultry. Routing trucks away from other poultry farms is a recommended way to minimize the spread of disease. A great deal of thought should be put into truck routes. In some situations it may be necessary to wash the cages.

Team members that have commercial poultry must always put on clean clothes and shower before entering their own birds.

Hatchery – Stage Yellow

Hatchery – People

Team members must wear clean clothes and footwear when entering the hatchery. Team members should also wash their hands upon entry. Waterless gels, disinfecting hand wipes, or soap and water are all acceptable methods. A footbath that is maintained daily is required at all entrances to the hatchery.

Contact with other noncommercial poultry or avian species (backyard chickens, game fowl, parrots, caged birds, and waterfowl, etc.) is strictly prohibited for anyone in contact with Tyson Foods, Inc. poultry. Team members with commercial poultry must use different clothing for the hatchery and their farm.

The egg truck driver, chick bus driver and assistances must have footwear dedicated for egg pickup or chick delivery. The footwear must be cleaned (to remove ALL organic matter) and sanitized after each farm. When not in use, the footwear should be cleaned and stored in a designated location at the hatchery. Immediately upon arrival to the farm, they must put on disposable coveralls and hairnets. The egg truck driver must enter only the workroom or egg room.

Tyson team members should log each farm visit in chronological order.

Essential Visitors (maintenance, utility, deliveries)
These people must at least follow the same clothing and footwear procedures as team members. Any equipment should be properly cleaned and disinfected before and after service visits. Contact with other noncommercial poultry or avian species (backyard chickens, game fowl, parrots, caged birds, waterfowl, etc.) is strictly prohibited for anyone in contact with Tyson Foods, Inc. poultry.

Each complex should maintain a current list of ALL essential visitors. In the event of a change in biosecurity status, these people must be informed of precautions needed upon entering/exiting a farm.

Nonessential Visitors (tours or other visitors)
Non essential visits must be kept to a minimum or not allowed. If visits occur, the visitor must not have had previous exposure to any poultry within the last 72 hours and must follow the same biosecurity practices as team members or essential visitors.

Hatchery Equipment

Egg Transport - Farm racks, egg flats, paper commercial egg supplies, and other associated articles used in the delivery or shipping of eggs from the breeder farm should be properly cleaned before delivery to the farm.

Eggs from *Mycoplasma sp.* infected breeder flocks (MG) must be segregated in specific setters and hatch machines. Chicks from these flocks need to be processed last and placed together.

Chick Delivery - Moffitt loaders, hand trucks, dollies and other equipment associated with the delivery of the processed chicks to the broiler farms should be cleaned daily. Attempts should be made to remove organic matter from the Moffitt loaders, hand trucks, dollies and other equipment between farms.

Chick boxes coming back to the hatchery from a "Yellow Zone" should be disinfected before entering the hatchery. Paperless chick boxes should be cleaned and disinfected twice a week (for example, Wednesday and Saturday). In papered boxes, the paper should be changed at a minimum of twice a week and the boxes washed at least once a week.

Hatchery Vehicles

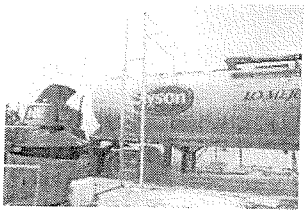
The cab and tires of the egg transport and chick delivery vehicles must be disinfected between farms and the entire truck should be washed and disinfected weekly and upon leaving a "Yellow Zone" before traveling into a "Green Zone". Managers should check for cleanliness of vehicles on both routine and unannounced inspections.

Feed Mill – Stage Yellow

Team members must wear clean clothes and footwear when entering the feed mill. Team members should also wash their hands upon entry. Waterless gels, disinfecting hand wipes, or soap and water are all acceptable methods. A footbath that is maintained daily is required at all entrances to the feed mill.

Feed truck driver must have footwear dedicated for feed delivery. The footwear must be cleaned (to remove ALL organic matter) and sanitized after each farm. When not in use, the footwear should be cleaned and stored in a designated location at the feed mill. Feed truck drivers should never enter the poultry house. Feed tickets should be left in a designated location outside of the poultry house.

The cab and tires of the feed truck should be disinfected upon leaving the farm. Feed trucks must be washed weekly and when obviously dirty. Additionally they will be washed upon leaving a "Yellow Zone" before traveling into a "Green Zone".



No feed left over at the end of a flock will be picked up without first consulting a Tyson veterinarian. The practice of using reclaim trucks to clean up in-house feed spills may be discontinued in Stage Yellow.

Feed mill team members must not own or be associated with any other noncommercial poultry or avian species.

Offices – Stage Yellow (Growout, Plant, Feed Mill, Truck Shop/Service center)

A footbath that is maintained daily is required at all entrances to these facilities. Service staff should not report to the office on the same day after entering a "Yellow Zone".

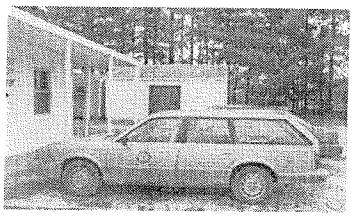
Team members who are also Tyson contract growers must change into clean clothes and shoes before entering a Tyson facility and before returning to their poultry farm. Team members who are non-Tyson contract growers must shower and change into clean clothes and shoes before entering a Tyson facility and before returning to their poultry farm.

Because equipment and team members from the shop and service center may potentially have direct contact with live poultry on the farms, it is crucial to keep the shop manager informed with the current biosecurity status in the complex. Specific questions regarding biosecurity may be directed to the Tyson veterinarian. When visiting a farm, shop/service center team members should follow the same biosecurity measures outlined in each section of thus manual.

Each complex should maintain a current list of ALL essential visitors. In the event of a change in biosecurity status, these people must be informed of precautions needed upon entering/exiting a farm.

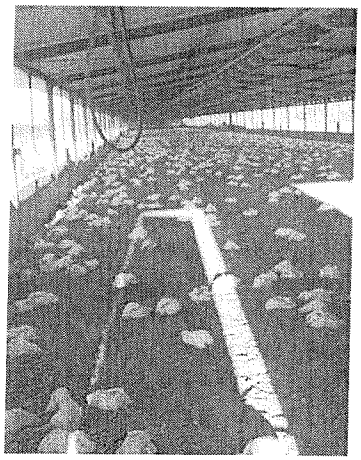
Unnecessary sales visits are discouraged. Offsite meeting places with allied support personnel are preferred.

Operating Practices during Stage Red



Stage Red indicates a unique and serious condition in our operations. One can expect significant cost increases and interruptions in normal procedures while operating in this stage. This level of biosecurity will require the utmost awareness of practices that will minimize the spread and facilitate the elimination of contagious diseases. Verification of biosecurity practices is essential to success. The destruction of flocks may be required as an integral part of the disease eradication process.

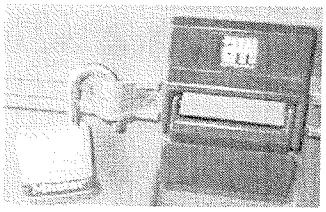
Individuals expected to visit farms must have a pre-prepared Biosecurity Kit and if necessary an Emergency Response Kit. The purpose of the Biosecurity Kit is to minimize cross contamination from unnecessary items brought to the farm. The vehicle must be emptied of all nonessential items before going to the farm. The Biosecurity Kit should be a sealed container that will contain the following items:



- Disposable clothing - coveralls, boots, hair nets, gloves
- Personal protective equipment (PPE) – (goggles, masks, etc) may be necessary in the event of avian influenza or exotic Newcastle disease.
- Hand sanitation items - waterless gels, disinfecting hand wipes and paper towels
- Trash bags - All disposable items must be double bagged and left on the farm.

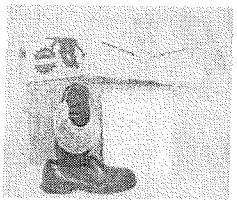
An Emergency Response Kit may also be needed so that blood and tissues can be collected and sent to reference for a rapid disease conformation. The kit should be prepared and stored in an accessible location. This Emergency Response Kit should contain the following:

- Appropriate sample collection materials including:
  - Blood Collection - blood vials with sealable tops, needles & syringes or scalpels, Whirl-Pak bags
  - Small biohazard container
  - Tissue Collection - posting kit (knife and scissors) and Whirl-Pak bags
  - Sterile Culture Swabs – (Fisher catalog #B220144)
- Lockable Shipping/Transport Containers – a container that can be sealed by the APHIS veterinarian.
- Markers
- Trash bags – for double bagging samples before leaving the farm. All samples leaving the farm must be double bagged.
- An envelope containing NVSL's (National Veterinary Services Laboratory) phone number, address, and directions to the lab from your complex.



Broilers – Stage Red

Broilers – People



Farm visitation is an exception rather than the rule. All visits must be absolutely necessary and must be approved by the live production manager. Communication with growers by telephone will be necessary to avoid contact with positive or suspect farms.

Team members must wear disposable coveralls, hair nets, gloves, and footwear (other PPE may be necessary) when entering a farm. These materials will be in the biosecurity kit mentioned above. Arrangements with the grower should be made so that disposable attire (coveralls, boots, hair nets, etc.) may be left on the farm in an enclosed container.

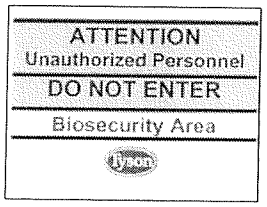
Team members must wash hands upon entry and before leaving the farm even when using disposable gloves. Waterless gels, disinfecting hand wipes, or soap and water are all acceptable methods.

Routine procedures (vaccination, weighing, routine bleeding, etc.) must be systematically reviewed with the live production manager and a member of the veterinary staff to assess the necessity of any activity.

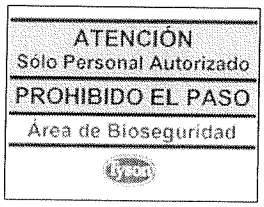
Tyson team members must log each farm visit in chronological order.

Essential Visitors (maintenance, utility, temporary farm helpers)

The necessity of all visits must be approved by the live production manager. Contact with other noncommercial poultry or avian species (backyard chickens, game fowl, parrots, caged birds and waterfowl, etc.) is strictly prohibited for anyone in contact with Tyson Foods, Inc. poultry. All visitors must abide by the 72-hour rule. Essential visitors must at least follow the same biosecurity procedures as team members. Any equipment should be properly cleaned and disinfected before and after the service visit.



Each complex should maintain a current list of ALL essential visitors. In the event of a change in biosecurity status, these people must be informed of precautions needed upon entering/exiting a farm.



Nonessential Visitors (family, friends, other visitors)
Nonessential visitors will not be allowed.

Broilers – Equipment

Any piece of equipment (tools, scalpel blades/ handles, cellular phones, catch pens, etc.) entering the farm must be disinfected prior to entering the farm and again just prior to

leaving the farm. Efforts must be made to minimize the number of possible disease carriers.

- The Biosecurity Kit must be used to minimize the amount of supplies in the cab or the toolbox of the truck.
- Only take into the poultry house or farm items that are absolutely necessary.

Broilers – Vehicles

Service and crew vehicles must be kept clean and orderly truck cabs, floor mats, and tires must be sprayed with disinfectant before and after each visit. Vehicles must be washed with soap and water and disinfected upon leaving a red farm or red zone. Particular attention must be paid to cleaning the interior of the vehicle. Managers should check for cleanliness of vehicles by performing both routine and unannounced inspections.

Vehicles should not be parked near the poultry house. If possible, park at the gate or at least 100 feet from the house.

Broilers – Farms

Entrances to the farm may need to be roped off to discourage unnecessary visitors.

Before depopulation, the veterinarian should be contacted for specific cleanout procedures. Repopulation of the premises will occur after an appropriate downtime is established by the company veterinarian.

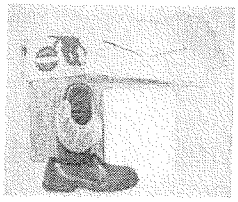
No other poultry shall be kept on the premises. Contact with poultry on other premises is strictly prohibited. It is recommended that other domesticated species (cattle, pigs, horses, cats, dogs, etc.) be separated from poultry housing. This separation protects the producers, equipment, and facilities, in addition to reducing disease-causing organisms.

See Dead Bird Disposal section for appropriate methods of mortality disposal.

Communications pertaining to the current disease situation should be disseminated to the growers, potential visitors, and pertinent team members in a timely and routine manner.

Pullets – Stage Red

Pullets – People



Farm visitation is an exception rather than the rule. All visits must be absolutely necessary and must be approved by the live production manager. Service staff should schedule visits from youngest to oldest birds. Known positives or suspect flocks must be visited only when necessary and at the end of the day. Communication with growers by telephone will be necessary to avoid contact with positive or suspect farms.

Team members must wear disposable coveralls, hair nets, gloves, and footwear (other PPE may be necessary) when entering a farm. These materials will be in the biosecurity kit mentioned in the introduction to Stage Red. Arrangements with the grower should be made so that disposable attire (coveralls, boots, and hair nets) may be left on the farm in an enclosed container.

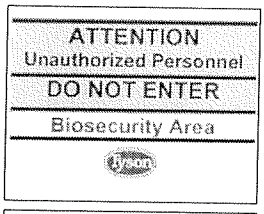
Team members must wash hands upon entry and before leaving the farm even when using disposable gloves. Waterless gels, disinfecting hand wipes, or soap and water are all acceptable methods.

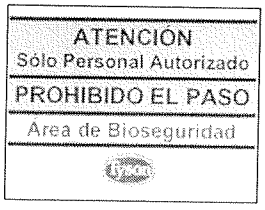
Routine procedures (vaccination, weighing, routine bleeding, etc.) must be systematically reviewed with the live production manager and a member of the veterinary staff to assess the necessity of any activity.

Tyson team members must log each farm visit in chronological order.

Essential Visitors (maintenance, utility, temporary farm helpers)

The necessity of all visits must be approved by the live production manager. Contact with other noncommercial poultry or avian species (backyard chickens, game fowl, parrots, caged birds and waterfowl, etc.) is strictly prohibited for anyone in contact with Tyson Foods, Inc. poultry. All visitors must abide by the 72-hour rule. Essential visitors must at least follow the same biosecurity procedures as team members. Any equipment should be properly cleaned and disinfected before and after the service visit.



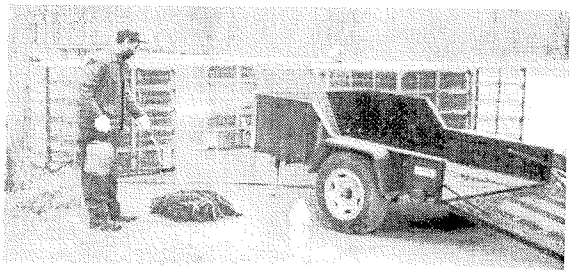


Each complex should maintain a current list of ALL essential visitors. In the event of a change in biosecurity status, these people must be informed of precautions needed upon entering/exiting a farm.

Nonessential Visitors (family, friends, other visitors)
Nonessential visitors will not be allowed.

Pullets – Equipment

Clean equipment is essential for handling long-lived birds. All equipment should be made of stainless steel and hard plastic (nonporous) without holes or crevices that will allow organic material to accumulate. Benches, tables, wheels, stools, chairs, fans, drop cords, lights, debeakers, baskets, and equipment trailers should be easily cleaned and not made of wood. All needles must be disposed into an approved biohazard container that is double bagged and disinfected prior to leaving the farm.



- Weighing pens must be provided for each farm.
- Nets must be purchased for each farm and moved with the pullets.
- Cold sterilization with Nolvasan is an acceptable method for sterilization of vaccine guns. Heat sterilization may also be used. **CAUTION:** when heat sterilization is used the O-rings in the vaccinating guns may be damaged, resulting in improper dosing of vaccine.
- All other reusable equipment (scales, catch hooks, etc.) should be thoroughly cleaned and disinfected before leaving the farm.
- Vaccine wells should be rinsed and dried.
- The clean area/dirty area concept must be applied to the vaccination equipment.
- The trailer, when properly cleaned and disinfected, may be used as the clean room.

If birds are allowed to move, all catching equipment, including cages, trailers, loaders, and equipment trailers, must be thoroughly cleaned and disinfected prior to entering and upon leaving the farm.

Designated cages for the breeder/pullet operation are required. This allows for sufficient time for the washing and disinfecting of cages and downtime.

The same biosecurity measures for vaccinating crews apply for pullet moving crews (see above).

Pullets – Vehicles

Service and crew vehicles must be kept clean and orderly. Truck cabs, floor mats, and tires must be sprayed with disinfectant before and after each visit. Vehicles must be washed with soap and water and disinfected upon leaving a red farm or red zone. Particular attention must be paid to cleaning the interior of the vehicle. Managers should check for cleanliness of vehicles by performing both routine and unannounced inspections.

Vehicles should not be parked near the poultry house. If possible, park at the gate or at least 100 feet from the house.

Pullets – Farms

Entrances to the farm may need to be roped off to discourage unnecessary visitors.

Before depopulation, the veterinarian should be contacted for specific cleanout procedures. Repopulation of the premises will occur after an appropriate downtime is established by the company veterinarian. At this time, any multi-age farms will be placed as a single age facility.

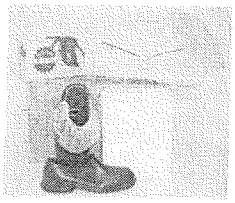
No other poultry shall be kept on the premises. Contact with poultry on other premises is strictly prohibited. It is recommended that other domesticated species (cattle, pigs, horses, cats, dogs, etc.) be separated from poultry housing. This separation protects the producers, equipment, and facilities, in addition to reducing disease-causing organisms.

See Dead Bird Disposal section for appropriate methods of mortality disposal.

Communications pertaining to the current disease situation should be disseminated to the growers, potential visitors, and pertinent team members in a timely and routine manner.

Breeders – Stage Red

Breeders – People



Farm visitation is an exception rather than the rule. All visits must be absolutely necessary and must be approved by the live production manager. Communication with the growers by telephone will be necessary to avoid contact with positive or suspect farms.

Team members (including egg truck drivers and feed truck drivers) must wear disposable coveralls, hair nets, gloves, and footwear (other PPE may be necessary) when entering a farm. These materials will be in the biosecurity kit mentioned in the introduction to Stage Red. Arrangements with the grower should be made so that disposable attire (coveralls, boots, and hair nets) may be left on the farm in an enclosed container.

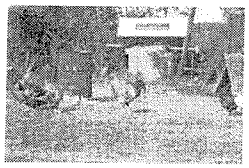
Team members must wash hands upon entry and before leaving the farm, even when using disposable gloves. Waterless gels, disinfecting hand wipes, or soap and water are all acceptable methods.

With certain diseases feed delivery and egg pick up may be discontinued. If feed delivery and egg pick up are continued, the egg truck driver must enter only the workroom or egg room and feed truck drivers must never enter the poultry house. Feed tickets must be left in a designated area outside of the poultry house.

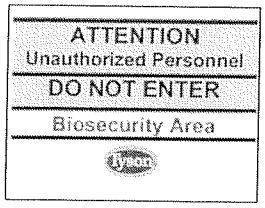
Routine procedures (vaccination, weighing, routine bleeding, etc.) must be systematically reviewed with the live production manager and a member of the veterinary staff to assess the necessity of any activity.

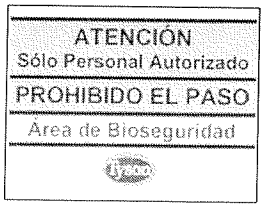
Tyson team members must log each farm visit in chronological order.

Essential Visitors (maintenance, utility, temporary farm helpers)



The necessity of all visits must be approved by the live production manager. Contact with other noncommercial poultry or avian species (backyard chickens, game fowl, parrots, caged birds and waterfowl, etc.) is strictly prohibited for anyone in contact with Tyson Foods, Inc. poultry. All visitors must abide by the 72-hour rule. Essential visitors must at least follow the same biosecurity procedures as team members. Any equipment should be properly cleaned and disinfected before and after the service visit.





Each complex should maintain a current list of ALL essential visitors. In the event of a change in biosecurity status, these people must be informed of precautions needed upon entering/exiting a farm.

Nonessential Visitors (family, friends, other visitors)
Nonessential visitors will not be allowed.

Breeders – Equipment

Farm visitation is an exception rather than the rule. All bird handling must be absolutely necessary and must be approved by the live production manager. Communication with growers by telephone will be necessary to avoid contact with positive or suspect farms. Routine procedures (weighing, routine bleeding, etc.) must be systematically reviewed with the live production manager and a member of the veterinary staff to assess the necessity of the activity.

Clean equipment is essential for handling long-lived birds. All needles should be disposed into an approved biohazard container. Equipment should be cleaned and sanitized between farms in the following manner:

- Weighing pens must be provided for each farm.
- Nets should be provided for each Stage Red farm and disposed of when the flock is removed (unless cleaning and disinfection is approved by the complex veterinarian).
- All other reusable equipment (scales, catch hooks, etc.) should be thoroughly cleaned and disinfected before leaving the farm.

The same biosecurity measures for pullet crews apply for breeder crews (see above).

Breeders – Vehicles

Service and crew vehicles must be kept clean and orderly. Truck cabs, floor mats, and tires must be sprayed with disinfectant before and after each visit. Vehicles must be washed with soap and water and disinfected upon leaving a red farm or red zone. Particular attention must be paid to cleaning the interior of the vehicle. Managers should check for cleanliness of vehicles by performing both routine and unannounced inspections.

Vehicles should not be parked near the poultry house. If possible, park at the gate or at least 100 feet from the house.

With certain diseases feed delivery and egg pick up may be discontinued. If feed delivery and egg pick up are continued, egg trucks and feed trucks will be sprayed (cab, floor mats, and wheels) with disinfectant before entering and leaving a Red Farm. The entire truck will be washed at a designated truck wash facility after leaving a Red Farm or a Red Zone.

Breeders – Farms

Entrances to the farm may need to be roped off to discourage unnecessary visitors.

Before depopulation, the veterinarian should be contacted for specific cleanout procedures. Repopulation of the premises will occur after an appropriate downtime is established by the company veterinarian. At this time, any multi-age farm will be placed as a single age facility.

No other poultry shall be kept on the premises. Contact with poultry on other premises is strictly prohibited. It is recommended that other domesticated species (cattle, pigs, horses, cats, dogs, etc.) be separated from poultry housing. This separation protects the producers, equipment, and facilities, in addition to reducing disease-causing organisms.

The use of cats for rodent control will be discontinues on a Stage Red farm.

See Dead Bird Disposal section for appropriate methods of mortality disposal.

Communications pertaining to the current disease situation should be disseminated to the growers, potential visitors, and pertinent team members in a timely and routine manner.

Breeders – Catching

When a severe disease is present, the destruction of certain flocks may be necessary. In this case, equipment used for destruction of the flock should be thoroughly washed and disinfected before it is used again. The use of rental equipment may be warranted. This equipment must also be thoroughly cleaned and disinfected after use.

If birds are sold, all catching equipment, including cages, trailers, loaders, and equipment trailers, should be thoroughly cleaned and disinfected between movements. Contract breeder catchers must be made aware of our biosecurity programs and must adhere to our guidelines. Contractors' equipment should be evaluated for cleanliness at the time of load-out. An off-site area for cleaning and disinfecting contractors' equipment will be required. The cleanliness of contractors' equipment is of paramount importance on multi-age breeder facilities. Contract catchers must be aware that there might be other at risk poultry on the farm. Therefore, contract catchers should enter only the houses in which they are catching.

For further details on catching and disposal, see the Live Haul section of Stage Red.

Spike Male - Stage Red

The practice of using spike males must be discontinued until the threat of disease no longer exists.

Other Operating Areas – Stage Red

Dead Bird Disposal – Stage Red

Tyson approved methods of on-farm disposal of daily mortality is mandatory. Dead birds must be disposed of on the farm. Composting, incineration, or freezers are the Tyson approved methods of dead bird disposal. Disposal of mortality in pits is no longer a Tyson approved method, regardless of local ordinances that may permit it.

Without approval, growers are not allowed to take their daily mortality to rendering plants or livestock landfills. This practice has proven to cause and perpetuate many disease outbreaks. If growers are allowed to utilize livestock landfills or rendering plants, this practice must cease immediately once a severe or serious disease is identified in the area. The complex must have a written protocol that effectively and expeditiously (within 24 hours) communicates this change to all growers when an outbreak occurs. Compliance with this change should also be verified.

In complexes with freezers, the local management must be familiar with the routine activities of the mortality removal vehicle. This understanding will facilitate rapid response in the event of a disease threat. Pick ups on "Stage Red" farms must have veterinary approval. Mortality removal vehicles must be tarped. The truck must be washed and disinfected at the end of each day.

Complexes utilizing incinerators or composting must protect carcasses from domestic or wild animals. Carcasses being held for incineration must be covered.

In the occurrence of a Stage Red event, and the entire flock must be depopulated, consultation with a Tyson veterinarian is required before proceeding.

Litter – Stage Red

In the occurrence of a Stage Red event, government agencies may dictate litter removal practices. Consultation with a Tyson veterinarian is required before proceeding.

Live Haul – Stage Red

In addition to **the information in Stages Green and Yellow,** it may be necessary to dispose of the birds on the farm. If birds are to be destroyed on the farm, it is important to destroy all of the birds. Upon approval, the birds may be buried onsite or hauled to an authorized landfill. Any live birds that are left on the premises may serve as a reservoir for disease. If the birds are to be buried on the farm, a pit should be dug deep enough to insure wild animals and dogs will not uncover the bird carcasses. If the birds are moved off of the farm, they must be scheduled at the end of the day or week and extreme measures should be used to insure that no feathers or organic matter escape from the

transport vehicle. The birds may be sprayed down with water after they are put on the vehicle to minimize flyaway feathers. The disposal vehicle must be securely covered.

All live haul equipment must be thoroughly cleaned and disinfected upon leaving the farm. An additional, detailed cleaning and disinfecting must be completed at the end of the day.

All entries to the farm should be minimized including equipment, vehicles, and people. A pre-prepared Biosecurity Kit that includes disposable coveralls, boots, hair nets, gloves, hand washing materials, and other PPE if necessary may need to be utilized. All of this material must be discarded on the farm. The persons who dispose of the birds or the equipment they use must not come into contact with other live birds for a minimum of 72 hours unless approved by the veterinary staff.

Hatchery – Stage Red

Hatchery - People

Team members must wear clean clothes and footwear when entering the hatchery. Team members should also wash their hands upon entry. Waterless gels, disinfecting hand wipes, or soap and water are all acceptable methods. A footbath that is maintained daily is required at all entrances to the hatchery.

Contact with other noncommercial poultry or avian species (backyard chickens, game fowl, parrots, caged birds, and waterfowl, etc.) is strictly prohibited for anyone in contact with Tyson Foods, Inc. poultry. Team members with commercial poultry must shower and put on clean clothing before coming to the hatchery and again before returning to their farms.

Chicks will not be delivered into a "Red Zone".

It is likely that egg pickup will be discontinued from "Red Zone" farms; consult a Tyson veterinarian for specific recommendations. If the eggs are allowed to be picked up the egg truck drivers must wear disposable coveralls, hair nets, gloves, and footwear when entering the farm. These materials will be in the biosecurity kit mentioned in the instruction section of Stage Red. Arrangements with the grower should be made so that disposable attire (coveralls, boots, and hair nets) may be left on the farm in an enclosed container. The egg truck driver must wash his hands upon entry and before leaving the farm, even when using disposable gloves. Waterless gels, disinfecting hand wipes, or soap and water are all acceptable methods.

The egg truck driver must enter only the workroom or egg room.

Tyson team members should log each farm visit in chronological order.

Essential Visitors (maintenance, utility, deliveries)
These people must at least follow the same clothing and footwear procedures as team members. Any equipment should be properly cleaned and disinfected before and after service visits. Contact with other noncommercial poultry or avian species (backyard chickens, game fowl, parrots, caged birds, waterfowl, etc.) is strictly prohibited for anyone in contact with Tyson Foods, Inc. poultry.

Each complex should maintain a current list of ALL essential visitors. In the event of a change in biosecurity status, these people must be informed of precautions needed upon entering/exiting a farm.

Nonessential Visitors (tours or other visitors)
Non essential visits are not allowed.

Hatchery Equipment

Egg Transport - It is likely that egg pickup will be discontinued from "Red Zone" farms, consult a Tyson veterinarian for specific recommendations. If they are allowed to be picked up, farm racks, egg flats, paper commercial egg supplies, and other associated articles used in the delivery or shipping of eggs from the breeder farm should be properly cleaned before delivery to the farm.

Eggs trucks should be fogged with an approved disinfectant before unloading eggs or equipment from a "Stage Red" farm.

Eggs from *Mycoplasma sp.* infected breeder flocks (MG) must be segregated in specific setters and hatch machines. Chicks from these flocks need to be processed last and placed together.

Chick Delivery – Chicks will not be delivered into a "Red Zone". Consult your Tyson Veterinarian for specific when moving chicks between complexes.

Hatchery Vehicles

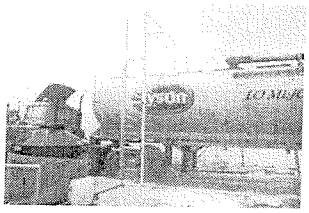
Before entering and leaving a "Stage Red" farm, egg trucks will be sprayed (cab, floor mats, and wheels) with disinfectant. The entire truck will be washed at a designated truck wash facility before returning to any farm and at the end of the day.

Feed Mill – Stage Red

Immediately upon arrival at the farm, the feed truck driver must put on disposable coveralls, hair nets, gloves, and footwear. These materials will be in the biosecurity kit mentioned in the introduction to Stage Red. Arrangements with the grower should be made so that disposable attire (coveralls, boots, and hair nets) may be left on the farm in an enclosed container. The feed truck driver must wash his hands upon entry and before

leaving the farm, even when using disposable gloves. Waterless gels, disinfecting hand wipes, or soap and water are all acceptable methods.

Feed truck drivers must never enter the poultry house. Feed tickets must be left in a designated area outside of the poultry house.



Feed trucks must be kept clean and orderly. Particular attention must be paid to cleaning the interior of the vehicle. Before entering and leaving a Red Farm, feed trucks will be sprayed (cab, floor mats, and wheels) with disinfectant. The entire truck will be washed at a designated truck wash facility before returning to any farm and at the end of the day. Managers should check for cleanliness of vehicles by performing both routine and unannounced inspections.

No feed left over at the end of a flock will be picked up.

Tyson team members must log each farm visit in chronological order.

Offices – Stage Red (Growout, Plant, Feed Mill, Truck Shop/Service center)

A footbath that is maintained daily is required at all entrances to these facilities. Service staff should not report to the office on the same day after entering a "Red Zone".

Team members who are also Tyson contract growers and Non Tyson contract Growers must shower and change into clean clothes and shoes before entering a Tyson facility and before returning to their poultry farm.

No person having had contact with birds on a farm in Stage Red within 24 hours should be allowed to enter areas or facilities within the complex unless approved by the Live Production Manager. Furthermore, these persons are not to visit any other poultry operations for a minimum of 72 hours.

Because equipment and team members from the shop and service center may potentially have direct contact with live poultry on the farms, it is crucial to keep the shop manager informed with the current biosecurity status in the complex. Specific questions regarding biosecurity may be directed to the Tyson veterinarian. When visiting a farm, shop/service center team members should follow the same biosecurity measures outlined in each section of this manual.

Each complex should maintain a current list of ALL essential visitors. In the event of a change in biosecurity status, these people must be informed of precautions needed upon entering/exiting a farm.

Unnecessary sales visits are prohibited. Offsite meeting places with allied support personnel are allowed absolutely necessary.