Processing plants have undergone numerous changes over the past 60 years. These changes have and continue to present challenges in maintaining safe plant working conditions. Over the years, plants have focused considerable attention on addressing these challenges and the results are evident. Processing injury and illness incidence rates have dropped dramatically.

This Issues Kit outlines some of the many safety challenges the industry has faced over the years, the some of the interventions employed to address them, the many educational endeavors undertaken and collaborations pursued with OSHA (the Occupational Safety and Health Administration of the U.S. Department of Labor) all with the goal of not just complying with safety regulations but in tackling plant safety challenges head-on in a proactive and progressive manner.

The progress that has been made and the successes that have been achieved need to be understood, appreciated, and continued.
BACKGROUND ON THE EVOLUTION OF MODERN PROCESSING FACILITIES

For more than 60 years the Poultry Industry has relied on processing innovations to:

- Improve labor efficiency and safety
- Increase processing throughput
- Enhance processing consistency and food safety
- Extend limited resources and manpower to take on an expanding array of new value-added activities

The Poultry Industry Continues to Develop New Value-Added Products

Prepared by: Georgia Poultry Federation
Source: USDA & National Chicken Council
The advent of the modern poultry processing plant began in the 1940’s and 1950’s when such core innovations as the counter rotating automatic feather picker were introduced to processing operations. In 1957, the Poultry Inspections Act was passed and Federal Inspectors were added to all processing lines. Processing enhancements helped line speeds reach 25 birds per minute by the end of the decade. While streamlining operations, automation, like the picker, also eliminated difficult manual tasks, like picking the feathers off of the bird after scalding (a hallmark of many automation contributions to come).

- Materials handling
- Feather picking
- Immersion chilling
The advances of the 1960’s and 1970’s

The golden age of poultry processing innovation began in the 1960’s with the introduction of industrial engineering concepts that broke processing functions into discrete steps (similar to an assembly line). Machines were ultimately introduced to automate each of these steps until by the mid 1970’s most of the evisceration process had been automated. Automating challenging jobs such as drawing the viscera eliminated the sore hands and wrists that often accompanied performing such tasks. Such automation also allowed higher line speeds to be achieved, letting the industry reach an average of 60 birds per minute by the mid 1970’s. Heavy use of automation also brought new safety challenges, both in the form of the increased risk of serious injuries (lacerations, crushing, amputations, etc.) and an increase in workplace noise levels.

- Automatic eviscerators, openers, croppers, viscera removers, etc.
- Cutup machines
The advances of the 1960’s and 1970’s (con’t)

By the early 1970’s, demand for cut-up parts surfaced first with the school lunch program and then with the emergence of the quick service chicken restaurant. The industry responded by adding cut-up operations at the end of their lines. Initially, these cuts were performed manually, but automated cut-up machines eventually were introduced within a decade. Cut-up operations introduced additional safety challenges with regard to such things as mechanical cutting saws, which increased the risk of serious injury from cuts, lacerations, and/or amputations.

- Automatic eviscerators, openers, croppers, viscera removers, etc.
- Cutup machines
BACKGROUND ON THE EVOLUTION OF MODERN PROCESSING FACILITIES

The advances of the 1980’s and 1990’s

The evolution of processing technology took a major shift in the 1980’s with the emergence of computer technology. Initial breakthroughs occurred in on-line weighing and sorting followed by weigh/price labeling and sorting operations as processing plants began producing case ready product, pre-weighed and priced. By the early to mid 1980’s demand was also growing for deboned products creating new processing plants with no slaughtering capabilities but deboning and other further processing operations only.

Over the years, deboning has continued to grow into a major part of many processing operations. It remains today a highly labor intensive operation that has drawn considerable attention over the years for its potential to contribute to the formation of Carpal Tunnel Syndrome and Tendonitis. Many advances have been introduced, in terms of workstation design, training, and job rotation, to help control these risks. Efforts to automate this function have also been pursued, but with limited success.

- Weigh/Price Labeling
- Automatic sorting
- Deboners
The advances of the 1980’s and 1990’s (con’t)

Another breakthrough in the 1980’s occurred when USDA introduced new inspection protocols allowing some plants to increase eviscerating line speeds to 90 birds per minute. Around this time, new technology allowed carcasses to be automatically transferred from the kill line to the eviscerating line, using an asynchronous onboard buffer system resulting in tremendous labor savings. In most instances, one kill line fed two eviscerating lines. Around the millennium, new inspection protocols were approved to allow processing linkages where one kill line fed one eviscerating line, both operating up to 140 birds per minute. Automated viscera presenters and organ harvesters were also introduced as part of this upgrade. Another innovation that surfaced around the beginning of this period was the employment of dry ice as an alternative to traditional ice in packed product boxes. Its use introduced new challenges with respect to controlling potential CO2 buildup in holding freezers.

- Automatic transfer
- Automatic viscera presenter
- Automatic organ harvester
The industry’s continued push into value-added product led to portion control challenges in the 1990’s as the industry now relied on large numbers of workers to hand trim deboned pieces into everything from nuggets to specially portioned cuts. Around that time, a new automated cutting device was introduced that used computer imaging to scan the deboned meat pieces, a computer to estimate optimal cut trajectories to recover needed pieces with minimal waste and water jet cutters to make the cuts. This innovation was eventually followed by other designs that eventually included steel cutting blades in place of water jet cutters. These devices quickly replaced hand portion trimming activities in many plants. Another innovation during this span was the introduction of fully cooked and IQF (Individually Quick Frozen) product which led to such technologies as the spiral cooker and the cryogenic freezer. Their emergence introduced new safety challenges related to fires, burns, and the proper handling of industrial gases.

- Automatic portioning
- Cookers/Freezers
BACKGROUND ON THE EVOLUTION OF MODERN PROCESSING FACILITIES

Recent innovations in the new millennium

With growing concern over safe handling and final preparation of fresh processed protein products, USDA introduced new food safety rules designed to target and reduce naturally occurring microbial counts on fresh product. In response, the industry incorporated new in-process product rinse stations and began applying various antimicrobial intervention steps. The new rinse steps led to higher water usage, which unfortunately coincided with growing water limitations in many processing regions brought on by drought. In response, the industry turned to a range of water recycling and conservation measures to lower demand on available water supplies. Stepped up use of antimicrobials, such as chlorine also created periodic challenges in managing off-gassing and its resulting impact on eye and throat irritation. Better control of antimicrobial use and improved ventilation systems have helped in managing this situation.

- Water Conservation/Reuse
- Food Safety Interventions
When thinking of workplace safety in modern processing plants, the first thing that typically comes to mind are the many pieces of processing equipment employed. Their very designs (imbedded mechanical cutting blades, large gears, hot frying oil, moving shackles, etc) coupled with the ever present need to have ready access for cleaning present hazards that can clearly lead to serious injury or death. Fortunately, much has been and is continuing to be done in this area to ensure these systems are operated in a safe manner.

The vast majority of safety injuries and illnesses recorded in poultry processing plants come from other less ominous sources (a slippery floor, a mishandled knife, a hot surface, overexertion, etc) and result in sprains and fractures, cuts and punctures, bruises, burns, non-life threatening amputations, carpal tunnel syndrome, and tendinitis. It is here that the industry has also focused considerable attention and where great strides have and continue to be made in reducing incidence rates.
GENERAL SAFETY CONSIDERATIONS

General safety challenges in processing operations go back many years. In response, the industry has adapted a range of safety measures to reduce the risk of injury and illness and to fully comply with federal safety statutes. Some of these measures are outlined in an e-tool developed by OSHA (see Working With OSHA section). While not exhaustive, this list includes:

- From the introduction of modern processing equipment, safety guards have been put on motor drives and sprocket wheels to prevent workers from getting hands, arms, legs, clothing, and even hair caught in the mechanisms that can lead to cuts, fractures, amputations, and death.

- Slippery floor surfaces present constant safety challenges in plants leading to sprains, fractures, bruises, and back pain. Much has been done over the years to address this challenge including the addition of grit to painted floor surfaces to provide better traction against slipping and improved shoe and boot treads that add traction when it is needed.

- The use of sharp knives and scissors always presents challenges with regard to cuts, punctures, and lacerations. Protective gloves are commonly worn on the non-knife hand to help reduce accidental cuts. In addition, knife sharpening programs have been introduced to help workers improve control over the cutting activity reducing accidental knife slips that can lead to cuts.

- The industry has also incorporated confined space protocols, in accordance with federal statutes to prevent individuals from entering limited egress spaces without proper precautions. These precautions include the ability to support breathing in oxygen starved (or rich)
and/or toxic gas (or vapor) environments and protection against being entombed by fluidized solids (such as grain) or soil (with a trench cave-in), all life threatening experiences for both the individual entering the space and others who might be called on to attempt a rescue.

- In accordance with OSHA standards, plants have introduced Lock Out/Tag Out procedures to prevent the accidental startup of equipment while repairs and/or routine maintenance is being performed. Such sudden startups can lead to fractures, cuts, amputations and multiple traumatic injuries.

- The industry has also incorporated confined space protocols, in accordance with federal statutes to prevent individuals from entering limited egress spaces, without proper precautions to support breathing in oxygen starved or rich environments and/or exposure to toxic gases or vapor and/or the risk of being entombed by fluidized solids (such as grain) or soil (with a trench cave-in), all life threatening experiences for both the individual entering the space and others who might be called on to attempt a rescue.

- The industry, also has added electrical safety protocols, in accordance with general industrial safety codes, that include compliance against arc flash accidents, which can lead to severe burns and death to personnel working around high voltage switchgears and transfer stations.

- With the growing use of industrial gases and chemicals in processing operations today for everything from wastewater treatment to refrigeration and freezing plants face new challenges relative to the safe handling and storage of these chemicals and gases. Such exposures can lead to chemical burns and death. In response, plants have developed process safety management programs that comply with federal safety statutes to deal with chemical safety system
maintenance and the handling of accidental chemical releases.

• And plants have implemented general safety procedures to deal with the improper use of manual and powered lift trucks, which can lead to accidents that result in fractures, and death.

In addition, the industry has also faced many special safety challenges requiring added attention:

**High noise levels:** As plants began adding processing machinery, noise levels began to rise in plants. Initially, plants turned to ear plugs, but in the late 70’s industry supported research attempted to develop engineering controls such as sound absorbing panels to reduce high reverberant noise levels resulting from the hard walls and ceiling surfaces required by federal sanitation regulations. After limited success in introducing such measures, the industry returned to personal protection equipment. Today, plant processing floors are larger and reverberant levels are lower than they once were. Equipment manufacturers have also begun using plastic in elements of their designs, which help to reduce overall machine noise levels. While overall plant noise levels are considerably lower than they once were, high noise levels may exist in certain areas of plants and personal hearing protection continues to be required in many plants.

**Industrial Hygiene:** Protecting plant workers from unhealthy internal air quality conditions has and remains an industry challenge area. Some examples faced over the years include initial use of CO₂ snow (dry ice) as an adjunct to traditional ice in packing shipping boxes with fresh product. When the boxes were moved to holding coolers to await shipping, CO₂ levels in these coolers could rise above acceptable levels. Plants reacted by reducing the amount and duration of CO₂
product held in specific coolers and where necessary added air exchange systems to the coolers to prevent dangerous buildups. More recently, with increased use of sanitizers in processing operations, plants have experienced complaints of throat and eye discomfort related to off-gassing of sanitizer chemicals. Improved ventilation systems have been added and better management of sanitizer application have helped control this situation.

**Fire Safety and Emergency Egress:** With rapid growth in demand for cooked products, plants began introducing ovens and fryers to operations. All appeared safe until a 1991 flash fire in the Imperial Foods plant in Hamlet, NC. A hydraulic cooking fluid line ruptured in that plant, spilling flammable fluid onto hot cooking surfaces and a flash fire resulted. The fire ultimately led to the death of 25 workers and injury to 49 others. It will probably best be remembered, however, for the lack of egress options open to employees trying to flee the fire. In some cases, aisles had been partially blocked and some exit doors were locked. Industry received a clear wakeup call on the need for maintaining proper egress routes in the event of an emergency which is now a key part of all safety programs. But what might not be as well known is that the industry, working with equipment manufacturers, introduced a number of necessary modifications to cooking systems, including the use of less hazardous hydraulic fluids in cooker systems, the introduction of indirectly heated cooking systems which eliminate direct fired systems and the addition of fire suppression systems to help control flash fires at their source.

**Third Shift Sanitation and Maintenance Safety:** Processing plants undergo a daily routine of cleaning and disinfection together with equipment repairs after normal operations have been discontinued. During this span, the risk for injury can increase, particularly with both functions operating at the same time. Repair personnel need
to have equipment locked out and guards removed while they make repairs, while sanitation personnel may need equipment running to more thoroughly clean various moving mechanisms. Furthermore, sanitation personnel, frequently use temporary perches (such as ladders or equipment ledges) to gain an cleaning angle needed to hose down a device, which increases the risk of falls. In response to these and other unique challenges the industry has assembled training materials that discuss the unique risks poised by third shift sanitation and maintenance and proper safety protocols to use to minimize that risk. This initiative was underwritten by funding from OSHA’s Harwood Training Program.

**Fleet Safety:** Many poultry companies have large truck fleets delivering chickens from the farm to the plant, fresh and frozen products to the market, and feed to farms. Fleet safety is a growing challenge for many poultry companies. Feed and livehaul trailers, in particular, have higher centers of gravity than traditional tractor trailers, which increases the potential for single vehicle rollovers. To help assist driver awareness in this area, the U.S. Poultry & Egg Association’s Poultry & Egg Institute has developed a special CD for use in company training programs.
Perhaps no safety challenge has been more difficult to tackle, more of a target for public discussions or has received more attention from the poultry industry than Ergonomic issues. During the period when cut-up and deboning operations were being added, reported cases of repetitive stress injury (carpal tunnel syndrome, tendinitis) began growing as more and more tasks were introduced in the workplace requiring repetitive use of the hands and upper extremities. Little was understood at the time regarding interventions and prevention, so the industry initiated a series of proactive measures.

• The industry developed the Medical, Ergonomics, Training (MET) program in 1986 to focusing attention on three key aspects of the challenge (better medical management of pre and post injury conditions, improved ergonomic workstation designs and aggressive training on proper ergonomic techniques).

• In 1990, five of the nation's top ergonomic specialists working in the application field of poultry processing plants spoke at the Safety Workshop for the Poultry Industry (later to be renamed the National Safety Conference for the Poultry Industry) in a special session devoted to discussing problem areas they were observing in plants, approaches they were recommending to resolve these problems and successes they were seeing. In addition, several hand tool vendors were present to exhibit the latest offerings in ergonomically designed hand tools for poultry processing.

• In 1991, 1993, and 1995, conferences on Medical Management of Cumulative Trauma Injuries for physicians and therapists were organized through Emory University to bring together medical
professionals from across the country involved with treating industry related cases. The goal was to discuss treatment options being tried, their relative effectiveness, and their risks.

- In 1991, with the release of the draft Meat Packing Ergonomic Guidelines by OSHA, poultry companies expanded their efforts to address workstation designs used throughout processing operations. Some examples of interventions tried are outlined in the select case studies write-up elsewhere in this section.

- In 2004, with input from the industry, OSHA issued new Poultry Processing Ergonomic Guidelines highlighting some of the many interventions that had been tried by the industry. OSHA also addressed ergonomics in its e-tool, again with input from the industry.

- In 2005, the National Chicken Council and the National Turkey Federation signed an Alliance with OSHA focused on Ergonomics. That same year, working with Georgia Tech and the U.S. Poultry and Egg Association, a National Poultry Processing Ergonomic Training Program was generated and shared across the industry through a special grant from the OSHA's Susan Harwood Program. This endeavor provided industry specific video and Powerpoint training materials that were used to educate 196 industry trainers. Those trainers in turn used it to supplement existing in-plant training programs across the industry reaching more than 15,156 workers with this informative new material.

These actions have helped to contribute to a steady decline in the industry’s recordable incident rate related to this class of injury (which are classified as illnesses), resulting in their dropping as a percentage of the total injury/illness recordables, from 42% of the total in 1994 to 19% of the total in 2007.
One of the great stories to emerge from the industry's many efforts to enhance workplace safety has been the growing relationship that has unfolded with OSHA. From the initial formation of the Joint National Chicken Council/National Turkey Federation (NCC/NTF) Safety Task Force, a rapport has been building with the Agency to keep communication lines open with regard to regulatory compliance and safety challenges. Regular interactions have and continue to take place between the NCC/NTF Safety Committee and OSHA. OSHA has been regularly included in industry educational events. Since 1990, industry planners have included an OSHA speaker on the agenda of every National Safety Conference for the Poultry Industry, sharing updates on new regulations, enforcement actions, and cooperative programs. Three of the past four years, the Assistant Secretary of Labor for Occupational Safety and Health has been the keynote speaker for the conference and in 2004, Assistant Secretary John Henshaw released the Poultry Ergonomic Guidelines for the first time at the conference.

On January 6, 2005, NCC and NTF signed the first of two Alliances with OSHA centered on Training and Education, Outreach and Communication, and Promoting the National Dialogue on Workplace Safety and Health. This first alliance targeted Ergonomics and ran through January 7, 2007. During that period, OSHA provided speakers at numerous industry events, shared industry success stories and launched a Poultry Processing Industry eTool outlining ergonomic challenges and control measures. In 2005, a National Ergonomic Training Program was generated and shared across the industry through a special grant to Georgia Tech from the OSHA's Susan Harwood Program coupled with a matching grant from the U.S. Poultry and Egg Association. This endeavor provided state-of-the-art materials and training to 196 Industry Trainers.
and supplemented in-plant training programs in plants across the industry with new CD and video materials specific to poultry operations that were used to train more than 15,156 workers. In addition, Georgia Tech placed the material on its OSHA program web site and received an additional 20,000 hits in a little over one year.

On November 15, 2007, NCC and NTF signed a second Alliance with OSHA, focusing on machinery hazards and providing potential solutions to reduce injuries. Current activities include the development of equipment pre-purchase and pre-installation checklists to review the adequacy of available machine guards.

Finally, in certain situations, particularly when a new regulation is released, OSHA employs a comprehensive agreement with a cited company, requiring them to share their insights on compliance issues and the corrective measures taken. While these agreements can be viewed in many ways, they have and do help others in the industry understand how a regulation is being interpreted by OSHA and the steps that can be taken to reach compliance. Over the years, poultry companies have entered into such comprehensive agreements on such topics as ergonomics, process safety management, and sanitation safety, to name a few. In each case, articles have been written and/or presentations made to share across the industry.
DEALING WITH THE MEDIA

The Poultry and Egg Industry has done a good job on worker safety in recent years, making the workplace safer and reducing the rate at which accidents and repetitive motion problems occur. However, the industry does not always get credit for its improved record. The industry also has critics who are eager to accuse it of poor performance.

Elements of the news media sometimes want to report or comment on the industry’s performance on worker safety or on the performance of a specific company. The purpose of this paper is to assist companies in dealing with news media in this area.

In general, a company should be open and cooperative with the news media. Hopefully you have nothing to fear from the facts. A defensive posture will only cause the media to ask even more questions and take more seriously any critical statements made by former employees, labor union, or social critics.

Structure and Personnel

- Someone in your company should be in charge of news media relations in order to allow the company to speak with one voice. If you do not have a full-time public relations or communications person, this role should be delegated to someone in Human Resources or Marketing. This person should receive media training and other appropriate resources that will help him or her effectively and accurately respond to media inquiries.

- Your media relations representative should have access to top management so that his or her responses are fully reflective of company policy and priorities.

- Your media relations representative should be able to draw accurate
information from departments across the company and compile it to create relevant media statements, talking points, Q&A, and other communication pieces.

- In addition to the media relations representative, the relevant personnel in your company — such as the safety director or HR manager — should also be prepared to respond to the news media as appropriate, after consulting with the media relations rep, and should be given the appropriate media training and other resources if they are expected to be a company spokesperson.

- All media inquiries should be directed to the media relations representative, who should work with top management to determine how to manage each inquiry. Anyone taking calls from the media should record who is calling, what media outlets he or she represents, and what he or she is calling about, and the reporter’s deadline, and pass that information on to the media relations representative.

- Legal counsel should be consulted regarding inquiries of any significant media interest that may have legal implications for your company. However, remember that responding to media inquiries is a communications function and not a legal one.

**Incident Management**

In the event of a safety incident, your media relations representative should quickly pull together the basic facts and write them into a statement that can be released upon request. This should explain what happened, when it happened, and how the company and emergency personnel, if any, responded to it. Names of employees generally should not be released unless they have become public otherwise.

- Remember, time is always of the essence. “Let me get back to you tomorrow” is not a viable approach. Respond quickly, even if all you have are basic facts.
Resources

Your media relations representative should have ready access to the necessary facts and figures, even when there is no active media interest. These include statistics on injury rates for the industry and for your company. (Industry information is available from the National Chicken Council, Richard Lobb, Communications Director.) Your media relations representative should also be fully informed on the steps your company takes to improve workplace safety and reduce accidents, injuries, and illness. They should be able to clearly articulate this to media and be sure the reporter fully understands the information and its context.

Media Interviews Do's and Don'ts

**DO**

- Know your facts. When you speak to the media, you should have accurate and meaningful information to share.

- Prepare message points. Decide the key points you want to make, write them down, and use them as often as possible in responding to inquiries – even if they are not exactly the answer to the questions asked. In most situations, you should identify the three to five key messages you are trying to get across, and “bridge” back to these. Example: “I can’t tell you XXX, but what I can tell you is [message #1].

- Stay positive. Keep coming back to your company’s good record and its safety program. Don’t get sidetrack on fighting the critics.

- Stay calm. A steady, calm demeanor (but not bored or disinterested) communicates that you are trustworthy and in control. Do not react angrily or defensively to a reporter’s questions.

- Be concise and straightforward. Speak in simple, clear terms. Avoid jargon or “corporatespeak” that may make you sound evasive or distant.
• Admit when you don’t know. Especially in the early phase of an incident, you are not expected to have all the answers. Where appropriate, however, either say that you will seek the answer to the reporter’s question (and do so), or explain what is being done by others to answer the question.

• Assume all cameras and microphones are on, and all reporters are listening. Especially in a high-pressure crisis environment, remember that you may be overheard or that a supposedly informal conversation with a reporter may be recorded. Keep all comments not intended for public consumption behind closed doors. Do not assume the interview is over until the reporter has left your property.

**DO NOT**

• Never speculate. Reporters will ask you how or why an accident happened before you have sufficient information. Don’t respond until you know.

• Don’t speak “off-the-record.” Assume everything you say to a journalist can and will be reported.

• Don’t comment on hypothetical questions, i.e., “What would you do if...”

• Don’t repeat a reporter’s negative language. For example:

  – Reporter: What is the company doing about this disaster?

  – Spokesperson: I wouldn’t characterize it that way. This is a serious situation and we’re taking a number of steps to protect the safety of our customers.

  – Reporter: How do you respond to those who say you were too slow to act?
Spokesperson: I can tell you that we took action immediately when we learned of the situation. Our priority is always the safety of our customers.

• Never say “no comment.” The fact is that “no comment” is not an appropriate answer to any known question. It will be perceived by the media as evidence of a completely lack or preparation or candor. If you cannot provide the requested information, explain why not (e.g., The facts on that simply aren’t confirmed,” “we don’t want to say anything that could interfere with the investigation by law enforcement officials,” “It wouldn’t be appropriate to discuss the details of litigation”). Then move on to a key message point. (Dick, one note here: my standard statement regarding lawsuits, etc. is that “it is our company policy that we do not comment on pending or threatened litigation.” This is usually included as a quote in the story, so it’s not a “no comment.”)

Post-Crisis Review

The following are among the key questions that should be asked and answered in a post-crisis review:

• What event or events precipitated the crisis?

• Why did it escalate into crisis?

• What external factors caused or contributed to it? Could they have been anticipated and eliminated or minimized? Can we take steps now to do so?

• What internal factors caused or contributed to it? Could they have been anticipated and eliminated or minimized? Can we take steps now to do so?
• In what ways, if at all, could the crisis have been avoided or reduced in magnitude?

• What worked well during the crisis response? What did not?

• What actions could have been taken at key points that might have produced a more favorable outcome?

• In what ways, if at all, could we have saved money or resources in our response to the crisis?

• How well did our existing communications resources work? What needs to be changed, if anything, to make them work better?

• Did we communicate effectively with all of the relevant stakeholder groups? If not, what needs to be changed so we do a better job next time?

• What is our assessment of the news media coverage and the impact of the coverage on the organization? In what ways, if at all, could we have managed media coverage more effectively?

• What would we do differently if we had to do it all over again?

• Did the crisis cause any lingering damage to corporate reputation among any of our internal and external stakeholder groups? If so, what needs to be done to repair it?

• What are our next steps/action items?
POULTRY PROCESSING INJURY/ILLNESS STATISTICS AND TRENDS

Poultry processing has significantly reduced nonfatal injury and illness recordable incident rates over the past decade and a half. Statistically, their illness incident rate has declined from 950 cases/10,000 hours worked in 1994 to 116.3 cases/10,000 work hours in 2007 (an 88% reduction). Their injury incidence rate has similarly dropped from 1320 cases/10,000 hours worked in 1994 to 493.7 cases/10,000 work hours in 2007 (a 62% reduction). As a percentage of the total injury/illness rate, illness recordables have declined from 42% of the total in 1994 to 19% of the total in 2007.

*Repetitive Motion Injuries are reported as illnesses, per OSHA recordkeeping requirements.
Source: U.S. Bureau of Labor Statistics
As compared to industry and manufacturing totals, poultry reductions have also occurred at a faster pace.

![Graph showing injury and illness incidence rates for poultry processing vs. manufacturing/total industry from 1994 to 2007.](source: U.S. Bureau of Labor Statistics)

The dramatic reduction in recordable injuries and illnesses is not surprising when you consider that over the past 25 years, the industry has put considerable emphasis not only on complying with safety regulations but also on proactively tackling safety challenges head on. From the formation of the Joint NCC/NTF Safety Task Force in 1983 to the launching of the annual National Safety Conference for Poultry Processing in 1984 to the many alliances and collaborations with OSHA and universities, these efforts have changed the way safety is handled in plants today.

With repetitive motion injuries (such as carpal tunnel syndrome) recorded as illness instead of injuries, it is not surprising to see that illness recordables have declined, as a percentage of the total injury/illness recordables, from 42% of the total in 1994 to 19% of the total in 2007.
A LOOK AT THE FUTURE

Even with the gains that have been made in reduced recordable workplace injuries and illnesses, efforts are continuing to focus attention on new and remaining challenges. For instance, the recent OSHA Alliance on Machine Hazards has focused new attention on purchasing checklists and other tools for ensuring that adequate equipment guarding and design safety are part of operations planning. Industry training efforts on Third Shift Sanitation and Maintenance are focusing new attention on some of the special challenges poised by these critical but sometimes dangerous activities. And in the area of ergonomics, expanded research is underway to enhance the industry’s ability to better manage repeat trauma injuries and to make knife use safer.

From an equipment perspective, the industry has and continues to turn to new technologies to make processes more efficient and safe. Key among the safety advantages to be gained are the automating of manual processes that pose continuing risk of injury. Yet, some of these new technologies also pose safety risks of their own. Lasers, for instance, are becoming an integral part of many new devices to help provide product location and product volume information. They have special safety risks with regard to preventing inadvertent eye exposure to the laser beam, particularly during maintenance and repair activities. And robots, which are beginning to work their way into the industry, present special safety challenges with regard to keeping workers outside of work and reach envelopes while they are operating. Maintenance workers must also ensure the unit is completely de-energized before pursuing repair work.

For the industry, such challenges and opportunities will continue to demand a proactive focus on workplace safety.