Official websites use .gov A .gov website belongs to an official government organization in the United States. Secure .gov websites use HTTPS A lock ( ) or https:// means you've safely connected to the .gov website. Share sensitive information only on official, secure websites. May 28, 2020 Statement of John Howard, M.D., J.D.,

Director, National Institute for Occupational Safety and Health Centers for Disease Control and Prevention

U.S. Department of Health and Human Services House Education and Labor Subcommittee on Workforce Protections Good morning, Chairwoman Adams, Ranking Member Byrne, Chairman Scott, Ranking Member Foxx, and distinguished members of the Subcommittee. My name is John Howard and I am the Director of the National Institute for Occupational Safety and Health, or NIOSH, which is part of the Centers for Disease Control and Prevention (CDC) within the U.S. Department of Health and Human Services (HHS). I am here today to provide the Subcommittee information about the risks that workers face from coronavirus disease (COVID-19), and the actions taken by the CDC to protect workers. COVID-19 is a new disease, caused by a novel (or new) coronavirus that has not previously been seen in humans. This new disease, officially named Coronavirus Disease 2019 (COVID-19) by the World Health Organization (WHO), is caused by the SARS-CoV-2 virus. There are many types of human coronaviruses including some that commonly cause mild upper-respiratory tract illnesses. Coronaviruses are a large family of viruses. Some cause illness in people, and others, such as canine and feline coronaviruses, only infect animals. Rarely, coronaviruses that infect animals have emerged to infect people and can spread between people. This is suspected to have occurred for the virus that causes COVID-19. Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) are two other examples of coronaviruses that originated in animals and then spread to people. CDC is America’s health protection agency and works 24/7 to save lives and protect America from health, safety and security threats, both foreign and in the United States.

Addressing infectious diseases like COVID-19 is fundamental to our mission and is our highest priority. CDC is building upon decades of experience and leadership in responding to prior infectious disease emergencies, including SARS, MERS, Ebola, Zika, and pandemic influenza to meet new challenges presented by COVID-19. These challenges are many, and they are historic. Every single American is affected by this pandemic, and CDC is leaning into this public health crisis with every applicable asset we have. CDC is drawing on its emergency response capacity and its relationships with state, tribal, local, and territorial (STLT), global, and private sector partners; and is leveraging our workforce's strengths in public health surveillance, and laboratory capacity, to address this public health emergency. CDC is developing guidance for healthcare professionals and the public to encourage safer practices, improve health outcomes, and save lives. CDC is also working with partners to develop guidance and decision tools to assist state and local officials and other stakeholders in adjusting mitigation strategies. Importantly, CDC is preparing the nation's public health system and the private sector for a vaccine when one is available. Abroad, CDC is leveraging investments in global health security, pandemic influenza preparedness and public health infrastructures and capacities built through programs like the President's Emergency Plan for AIDS Relief to support countries in mitigating and containing COVID-19. The emergence and rapid spread of COVID-19 confirms that an infectious disease threat anywhere is a threat to Americans everywhere, including here at home. As of May 21, 2020, there have been 1,551,095 total cases of COVID-19 reported to CDC. Many of these cases are in "working-age" adults with over 900,000 cases in those aged 18-64. In this age group, over 57,000 are cases known to be among healthcare workers. It is not known how many of these infections occurred as a result of their work. Several states are reporting numbers of cases among healthcare personnel on their websites. CDC is working to better understand the full scope of cases among workers in non-healthcare settings. The new CDC case report form, released on May 5,

added questions about categories of healthcare workers and about workplace exposures in critical infrastructure industries. States have been asked to start using this new form by May 15, 2020. CDC is actively trying to learn more about the burden of COVID-19 among various industries and occupations through other data collected by CDC, state and local health departments, and other organizations. The Occupational Safety and Health Act of 1970 established the National Institute for Occupational Safety and Health (NIOSH) as a research agency focused on the study of worker safety and health. NIOSH is a part of the CDC and has the mandate "to assure every man and woman in the Nation safe and healthful working conditions and to preserve our human resources." The actions taken by NIOSH as part of CDC's response to COVID-19 fall into three main categories. First, NIOSH has taken actions to increase and augment the supply of respiratory protective devices, a key component of personal protective equipment (PPE) that workers use as the last line of defense against exposure to toxic and infectious agents. Second, NIOSH staff, with an expertise in workplace safety and health and trained in industrial hygiene, engineering, medicine, and epidemiology, are among members of CDC field teams deployed to carry out site visits at meat processing plants. These teams are responding to requests from state and local health departments, factories, and plants engaged in critical infrastructure activities. Third, NIOSH works in close partnership with our colleagues at the CDC, as well as those in the U.S. Food and Drug Administration (FDA), the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA), and the U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS), to develop information and guidelines for employers and employees to work safely and reduce their risk of workplace exposure to the SARS-CoV-2 virus that causes COVID-19 disease. I will now address these activities in some detail. Through its National Personal Protective Technology Laboratory (NPPTL), NIOSH is responsible for establishing criteria, testing, and certifying approval of respiratory protective equipment, including filtering facepiece respirators (FFRs), also

known popularly as “N95” masks. This is a key part of the personal protective equipment (PPE) ensemble in many workplaces, and particularly within healthcare settings. During this COVID-19 pandemic, NIOSH has taken aggressive steps to increase the supply of available certified FFRs. The focus for the respirator approval program at NPPTL during the COVID-19 outbreak includes: (1) supporting existing NIOSH respirator approval holders to increase their ongoing production; (2) quickly evaluating new domestic respirator applications for approval; and (3) providing up-to-date PPE guidance. According to the NIOSH Certified Equipment list, there are currently 535 active filtering facepiece respirator approvals. These include the N95 respirator, the most commonly used respirator in healthcare. In April 2020, NIOSH more than tripled the rate of respirator approval and denial decisions, from 30 to over 100 decisions per month. This was accomplished by having NPPTL staff scientists, engineers, and technicians working longer shifts, 7-days a week, to help increase the availability of respirators for the workers who need them. To expand the range of respirators available to healthcare workers, NIOSH worked with the FDA who had developed Emergency Use Authorizations (EUA) to significantly expand the inventory of respirators available for use in healthcare settings. The FDA issued these EUAs: (1) permitting use of Powered Air Purifying Respirators (PAPRs), elastomeric respirators, and other NIOSH-approved FFRs that had not been previously cleared for use in health care settings by the FDA; (2) permitting the use of stockpiled respirators that had exceeded their rated shelf-life; (3) permitting use of certain respirators from seven foreign countries approved under the standards in those countries; and (4) permitting use of certain decontaminated FFRs. CDC recognizes that more needs to be done during this COVID-19 pandemic to ensure health and safety products entering the United States from other countries provide the protection our workers have come to expect from NIOSH-approved equipment. To ensure this level of confidence, NIOSH has developed an assessment to evaluate the filter efficiency of respirators approved under

standards used in other countries that are similar to NIOSH-approved N95 respirators. Likewise, NIOSH has set up a limited evaluation program to examine samples from stockpiled respirators and from respirators that have been decontaminated for reuse under FDA EUAs. NPPTL is conducting these tests at our laboratory in Pittsburgh, Pennsylvania, and Morgantown, West Virginia. The international assessments have resulted in the evaluation of over 130 international respirator models in the past two months. More than 50 percent of the models tested were substandard, providing data needed to support the FDA's EUA decisions and other Federal agency decisions to remove substandard and counterfeit products from the market, and data to support state and hospital purchasing decisions. To further expand the types of devices available for the COVID-19 response, on April 14, 2020, NIOSH promulgated an interim final rule that created a new class of Powered Air-Purifying Respirator (PAPR). The PAPR is a type of respirator that includes a battery-powered blower that pulls air through an N95 or high efficiency particulate air (HEPA) filter and delivers clean air across the worker's face into either a tight-fitting face mask or a loose-fitting hood. They provide protection that is at least 2.5-times better than a N95 filtering facepiece respirator. With this rulemaking, parallel performance standards were added to existing regulatory requirements for PAPR, to allow for the approval of a new class known as the PAPR100. The performance requirements for the PAPR100 allow it to be lighter in weight and better suited to the needs of workers in the healthcare and public safety sectors. The previous existing PAPR standard resulted in a heavier unit since it needed to pass tests designed for heavy dust loads found in industry, such as exposures to mineral dusts and welding fumes. Over the past 20 years, PAPRs have played an increasing role in respiratory protection programs in the United States in the healthcare sector. As seen during the 2003 Severe Acute Respiratory Syndrome (SARS), the 2009 H1N1 influenza, and the 2014-15 Ebola virus outbreaks, PAPRs are often used in high-hazard procedures in the healthcare setting because they are designed to filter chemicals, blood-borne

pathogens, and aerosol- transmissible pathogens. Current shortages of non-powered particulate respirators underscore the need for approval of PAPRs more suitable for use by the healthcare workers and first responders dealing with the disease. New, non-traditional manufacturers have entered the market to produce the new PAPR100, thus increasing the supply of reusable PPE for health care workers against COVID-19. With this expanding supply of PPE, this last line of defense against infection is also available for use in non-healthcare workplaces where high dust-loading is not anticipated. For example, a PAPR100 might be used by transit and delivery drivers, grocery and retail store workers, and other non-dusty factory workers. The food and agriculture sector is a part of the U.S. critical infrastructure. Public health strategies need to be implemented to protect workers filling essential roles within the food system, including the meat and poultry industry, to preserve essential functions, and maintain the nation's food supply. Employers in the meat and poultry processing industry can help prevent and slow the spread of COVID-19 by reducing the spread of disease among employees and maintaining healthy business operations and work environments. Since April 2020, NIOSH has deployed staff or assisted virtually to 36 sites in 12 states, covering 5 pork facilities, 19 poultry and 11 beef processing factories representing 18 separate companies. NIOSH scientists and engineers reviewed plant facilities, processes and operational plans. The CDC's epidemiologists and partners from state and local health departments evaluated plant and community infection control plans and infection rates through screening, testing and tracing for dealing with COVID- 19 outbreaks. Together, these agencies are committed to protecting the health of workers, the health of communities, and collaborating to provide a secure supply of food. A typical site visit would examine multiple features of the plant's operations. For example, the team examined the company's plans for employee screening prior to entering the plants. They observed the areas where arriving employees would be asked about their current symptom status and where and how they would be screened for

fever and the criteria for following up if positive symptoms were reported or observed. The teams also examined supplementary infection control measures used by the facilities. For example, the availability and use of hand sanitizer dispensers, surface cleaning and disinfection procedures for high-touch areas, and the use of facemasks and other face coverings including face shields. The plant's procedures for maintaining physical distancing of employees were also reviewed within the operational areas of the plant and in locker rooms, bathrooms, lunchrooms, break areas, and other locations where employees may congregate. Teams noted engineering controls, such as locations where physical barriers were installed between workstations at which maintaining the six-foot physical distancing requirements was not feasible. Additionally, the teams examined administrative controls such as company policies offering paid sick leave to encourage and incentivize symptomatic workers to stay home; or providing training and communications software to enable plant communications while maintaining distance. The team examined the plant's own policies for using PPE, including training and demonstrations to determine whether workers knew how to follow proper donning and doffing procedures to avoid contamination, and to understand when PPE could be either disposed of or properly disinfected and stored in a clean location for later reuse. PPE could include respirators, face shields, helmets, gloves, and other protective garments. NIOSH and CDC staff typically provide recommendations based on their observations and on the best available science, and after examining the company's written plans and policies. The recommendations follow the hierarchy of controls, wherever feasible. Hierarchy of controls is an approach to hazard intervention that starts with the controls perceived to be most effective and moves down to those considered least effective. In most cases, the preferred approach is to eliminate a hazard or exposures, install engineering controls, and implement appropriate sanitation and cleaning to shield or reduce employees' exposure to the hazard. Until such controls are in place, or if they are not

adequately effective or feasible, administrative measures and personal protective equipment (PPE) may be recommended. COVID-19 is a new challenge for our food system partners; there are many unknowns. There is no formal reporting or surveillance system indicating to health authorities when COVID-19 affects food facility operations. The number of outbreak reports likely underestimates the number of food system workers affected by COVID-19. Employers need to be innovative in finding solutions to complex problems; there is no one-size-fits-all approach when implementing recommendations. Additional education and training are needed regarding measures workplaces can take to protect workers. Workers are also members of the community; thus, when there are ongoing outbreaks in the community, illness can be introduced into the workplace. Outbreaks of illness in workplaces can also result in increased illness in communities. Culturally appropriate community-based interventions are needed to protect health of workers with large or extended families living in the same household. The American people, communities, public health professionals, medical providers, businesses, and schools look to CDC for trusted guidance on responding to COVID-19. CDC develops and disseminates guidance for individuals and communities. These recommendations include actions that every American should take, such as following good personal hygiene practices, staying at home when sick, and practicing social distancing to lower the risk of disease spread. CDC guidance is available here https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick-prevention.html. First responder and healthcare guidance documents cover a range of topics – from addressing potential work-related exposures, implementing infection prevention and control measures in health facilities, and optimizing the supply of personal protective equipment to clinical evaluation, testing, and clinical care. CDC is providing these recommendations to support communities' efforts, while recognizing that each sector and community is unique and will need to consider these in the context of their community-level data and circumstances. CDC teams on the ground and those aiding

from Atlanta are and will continue working with state and local officials to integrate these recommendations into COVID-19 plans. Mitigation and containment of COVID-19 are the key to public health strategies and CDC is committed to using our expertise and partnering with others on the frontlines. NIOSH and other centers at CDC have worked with our partner agencies including OSHA, USDA, and the Department of Transportation, to produce guidance documents and fact sheets for workers. For example, NIOSH developed 8 fact sheets geared for airport workers including information for gate agents, baggage and cargo handlers, maintenance workers, catering kitchen workers and airport retail and service workers across the country. NIOSH also developed 11 fact sheets covering the millions of people working in small business, schools, and as transit and delivery drivers, first responders, and food and grocery workers. As a joint publication, we developed Interim Guidance from CDC and the Occupational Safety and Health Administration (OSHA) for the Meat and Poultry Packing Industry, and Interim Guidance from CDC and OSHA for Manufacturing Workers and Employers. In summary, NIOSH and other CDC centers have been working tirelessly to protect workers from exposures to the SARS-CoV-2 virus in the course of their employment. We have responded to the unique challenges of this COVID-19 pandemic in multiple areas that impact workers. We continue to assist manufacturers of personal protective equipment and innovators ability to increase the supply of reliable personal protective equipment that workers depend on every day. We are deploying scientists and engineers on field investigations to critical infrastructure plants, particularly those in meat and poultry processing, examining how best to protect critical infrastructure workers. Finally, we are developing and disseminating through fact sheets, guidance, and videos the scientific information we have learned from our field efforts and from our experience and expertise in worker protection.