LOUISIANA ENTERTAINMENT
A Division of Louisiana Economic Development

MOTION-PICTURE PRODUCTION RETURN TO WORK GUIDELINES

Louisiana Entertainment's top priority is the health and safety of the citizens of this state as well as those that work in the film industry. As we navigate through a new era of motion-picture production, it is imperative that every person takes an active role in maintaining a safe working environment to ensure our film industry continues to thrive into the future.

These guidelines are designed to augment and support any federal, state & local measures that are currently in place as well as the Alliance of Motion Picture and Television Producers' safety measures issued on June 1, 2020 and the joint report titled *The Safe Way Forward* issued on June 12, 2020 by the DGA, SAG-AFTRA, IATSE, and the Teamsters (both documents are attached).*

**documents are subject to change based on any new COVID-19 protocols that may be released in the future*

Productions filming anywhere in Louisiana should at minimum:

- Designate a COVID-19 Compliance Officer
- Provide testing for anyone working on the production
- Require frequent hand washing by all personnel
- Require everyone (except for performers) to wear a face covering
- Socially distance; a minimum of six feet
- Check the temperature of everyone entering their designated workplace-production office or on-location
- Actively monitor and survey everyone for potential exposure and any signs of illness
- Remind everyone to self-monitor for any signs of illness
- Limit the amount of people in all areas in accordance with federal, state, and local guidelines including the State Fire Marshal
- Encourage the use of digital assets (scripts, call sheets, etc.) when possible
- Provide hand-sanitizing dispensers on site and washing stations where needed
- Make additional medical supplies and PPE available
- Place safety regulations and signs in production office, on set, and on-location
- Provide distance markings and directional signs where applicable
- All work areas should be cleaned frequently
- Limit and control access on-location, in a soundstage, or any production area
- File permit applications (if applicable) and any requests to the local governing jurisdiction as soon as possible
- File a safety plan with the local entity providing the permits (even when not required to do so)

RESOURCES

OFFICE OF GOVERNOR JOHN BEL EDWARDS • LOUISIANA ECONOMIC DEVELOPMENT • LOUISIANA DEPARTMENT OF HEALTH • CENTERS FOR DISEASE CONTROL • LOUISIANA FIRE MARSHAL • OPEN SAFELY • LOUISIANA ENTERTAINMENT

STOP THE SPREAD

- Wear a face covering / mask
- Encourage and practice social distancing
- Wash your hands for 20 seconds with soap and water
- Cover your mouth with a tissue, your arm, or inside of elbow when sneezing or coughing
- Avoid touching your eyes, nose, and mouth
- Disinfect areas/objects
- Post signs in all areas

HEALTH CHECK

- Know the symptoms of coronavirus: fever for a few days, difficulty breathing, coughing, chest pain when breathing, fatigue
- If feeling sick at home: stay home and alert your supervisor. Do not return until symptoms are checked out by a healthcare professional
- If feeling sick at work: alert the Covid-19 Compliance Officer (or your supervisor) and leave until checked out by a health care professional
- If exposed to Covid-19: Immediately alert the Covid-19 Compliance Officer (or your supervisor) who will then advise you on your next steps, which may include quarantine

CONTACT

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LOUISIANA ENTERTAINMENT
A Division of Louisiana Economic Development

ATTACHMENT 1

ALLIANCE OF MOTION PICTURE AND TELEVISION PRODUCERS

PROPOSED HEALTH & SAFETY GUIDELINES FOR MOTION PICTURE, TELEVISION & STREAMING PRODUCTIONS DURING COVID-19 PANDEMIC

INDUSTRY-WIDE LABOR MANAGEMENT SAFETY COMMITTEE TASK FORCE

White Paper

Alliance of Motion Picture and Television Producers

Industry-Wide Labor-Management Safety Committee Task Force

Proposed Health and Safety Guidelines
for Motion Picture, Television, and Streaming Productions
During the COVID-19 Pandemic

Submitted: June 1, 2020

Introduction

The Industry-Wide Labor-Management Safety Committee Task Force (the "Task Force") respectfully submits the following guidelines for consideration and adoption for the resumption of motion picture, television, and streaming productions in an environment that minimizes the risk of contracting or spreading COVID-19. These recommendations set forth the consensus of the Task Force and outline guidance regarding protective measures to be used, including regular screening, diagnostic testing, use of personal protective equipment, cleaning and disinfecting work sites, and appropriate response should an employee contract COVID-19 or be exposed to it.

The proposed recommendations were developed by the Task Force at the request of and in collaboration with the various unions of the motion picture and television industry and the Alliance of Motion Picture and Television Producers, which collectively exercised final control over their content, based on the input provided. The Task Force consists of the International Alliance of Theatrical Stage Employees (IATSE) and its West Coast Studio Local Unions, as well as its New York Local Unions, the International Brotherhood of Teamsters as well as the Basic Crafts Unions, the Screen Actors Guild-American Federation of Television and Radio Artists, the Directors Guild of America as well as the Alliance of Motion Picture and Television Producers and other representatives of the producers. The guidelines are based on discussions with health experts, guidelines issued by U.S. Centers for Disease Control and Prevention (CDC) and the Occupational Safety and Health Administration (OSHA), and input from industry participants familiar with the working conditions of motion picture and television production. The participants in the Task Force are listed in the Appendix.

While these guidelines and protocols address many elements of production, productions must consult applicable state and local public health orders as well as applicable federal and state OSHA guidelines. These recommendations are intended to address the circumstances under which production can safely resume. The Task Force recognizes that COVID-19 is a new disease and many of the facts surrounding COVID-19 are still being determined. Several elements of the protocols including testing and PPE are subject to further discussion and agreement between the Employers and the Unions and Guilds representing the cast and crew. As circumstances change, and public health officials issue new guidance, the protocols under which production occurs may be adjusted accordingly.

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Guiding Principles

The intent of this White Paper is to establish recommendations for governments to authorize the safe resumption of motion picture and television production activities within their jurisdiction. These guiding principles may evolve over time. In addition to the recommendations provided in this White Paper, the Unions, Guilds and Employers have acknowledged the need to develop department-specific operational protocols and project-specific workflows, which will be subject to further discussion and agreement between the Employers and the respective Unions and Guilds representing the cast and crew. All have agreed to develop those protocols and workflows separately once government authorizes production to resume.

Guiding principles underlying these recommendations are:

- The health and safety of the general public and all cast and crew is the highest priority. Re-opening the industry and returning to work are also significant and important priorities.
- All state, local, and federal (CDC) public health guidelines will be followed.
- To the extent possible, physical distancing shall be maintained. When physical distancing is impracticable, other risk mitigating measures shall be taken as described below.
- Regular, periodic testing of cast and crew for COVID-19 is critical for a safe return to work.
- Universal symptom monitoring, including temperature screening, may be used to further mitigate risk.
- Appropriate and adequate PPE will be provided to cast and crew by the employer as necessary. Disposable masks will be replaced each day and reusable masks will be cleaned each day.
- Medical expertise must always guide decision making with respect to testing, contact tracing, symptom screening and similar protocols that raise medical questions.
- Infection prevention measures will be developed and applied, including physical distancing at all times when possible, enhanced sanitation (high-touch wipedown, disinfection of equipment), and hand hygiene (increased access to hand washing stations, alcohol-based hand sanitizer).
- One or more autonomous COVID-19 Compliance Officer(s) with specialized training, responsibility and authority for COVID-19 safety compliance and enforcement will be in the workplace to address issues as they arise.
- Thorough training on principles of infection prevention, PPE, physical distancing and signs/symptoms of COVID-19 will be provided to all, with role-specific additional training as needed.
- The judgment of Department Heads and their crews, in collaboration with Unit Production

Managers (UPMs) and Assistant Directors (ADs), will be considered when structural and logistical changes are made to accommodate the new working practices.

- Individual rights under applicable laws intended to protect against discrimination must be respected and safeguarded to support the maintenance of a non-discriminatory workplace.
- Adequate staffing and space for physical distancing is essential for an effective health and safety plan.
- Resuming production during this time may be highly stressful and cause anxiety. The implementation of mental health resources to support the wellness of those participating in a production may be necessary. Options could include:
    - Emotional support hotline
    - Telemedical health and behavioral health resources
    - Mindfulness training; and
    - Provision of online tools and resources.
- Paid leave policies shall be flexible and non-punitive to allow sick and quarantined employees to stay away from co-workers and the general public. These paid leave policies will be implemented to encourage compliance with infection prevention guidelines.
- The National Institute for Occupational Safety and Health's (NIOSH) Hierarchy of Control will guide approaches to mitigate risk:
    - Systems will be employed to assess health/wellness of all personnel prior to entry onto set.
    - Engineering and administrative controls will be developed and emphasized whenever feasible.
    - When engineering and administrative controls are not feasible, personal protective equipment (PPE) will be used.
- Cast and crew are encouraged to report problems, ask questions and suggest solutions to enhance the safety and productivity of the workspaces.
- The CDC advises that those over age 65 and those with co-morbidities consult with their healthcare providers regarding the risks of COVID-19.
- Given the dynamic and evolving nature of the COVID-19 pandemic, these interim guidelines will likely need to be modified and adapted as circumstances change.

Note: *Numerous different job roles are involved in the industry, including pre- and post-production staff, cast, craftspersons, laborers, and many others. To avoid confusion, the term "cast and crew" is used throughout to refer to any/all individuals who are involved in the production process.*

Note on nomenclature: *to maintain consistency with public health and medical guidelines, COVID-19 refers to the name of the clinical syndrome caused by the virus referred to as SARS-CoV-2.*

Reopening Process

Production may resume upon the approval of public health authorities based on the Roadmap to Recovery Framework. A staged reopening process may be necessary, with entertainment industry sectors reopening sequentially based on risk and public health authority approval. For example, aspects of pre- and post-production activities may be deemed lower risk and could reopen sooner than production activities.

In accordance with these plans, this document addresses the following critical areas of concern:

1. Infection control
2. Protecting and supporting cast and crew health and safety
3. Physical distancing
4. Training and education
5. Unique production-specific concerns

The Task Force recognizes that many of the recommendations outlined in this document represent considerable changes in current workflows and processes. The recommendations will need to be applied to specific circumstances and their application will need to be flexible, bearing in mind the utmost priority of safety considerations on production.

Infection Control

Diagnostic Testing

Regular, periodic testing of the cast and crew will be used to mitigate the risk of the spread of COVID-19. Employers will utilize current effective testing protocols that must be developed in conjunction with, and approved by, the Unions and Guilds. Employers, Unions and Guilds shall rely upon medical experts for advice and guidance. As tests are developed and others become more accurate, the testing protocols shall also change. Employers should advise cast and crew that they will be subject to testing as a condition of employment and of continued employment.

Personal Protective Equipment (PPE)

The Task Force recommends use of face coverings at all times when on set or at production/studio facilities workspaces, except when not feasible as noted below. These will be provided by employers to all cast and crew at no cost and meet applicable regulatory guidelines (CDC, Public Health, NIOSH, OSHA) as appropriate. Medical masks, cloth masks and face shields reduce the transfer of saliva and respiratory droplets to people close to the wearer. Appropriate training in donning, doffing, cleaning and safe PPE use is required. The Task Force recommends all cast and crew be issued personal face coverings that are assigned to the individual and are not shared with others; there shall not be a common central pool of shared face shields or face coverings.

The Task Force recommends against universal glove use by all cast and crew. Gloves may lead to a false sense of security and may actually increase risk, particularly due to self-contamination while donning and doffing. Instead, effective and frequent hand hygiene with soap and water or alcohol-based hand rub is imperative, along with avoidance of touching the eyes, nose or mouth. However, gloves may be worn as infection prevention PPE when touching potentially contaminated commonly shared equipment is unavoidable and equipment cannot feasibly be disinfected (e.g., lighting/electrical cables, worn costumes, etc.) Adequate training in glove use, including safe doffing, will be required. Non-medical (work) gloves shall be worn as usual when appropriate.

PPE may be disposed of as regular (non-biohazard) waste. Ample trash receptacles shall be available, and these shall be emptied regularly.

Hand Hygiene

Hand hygiene is a cornerstone of infection prevention and will need to be practiced widely in entertainment industry work environments. Given the potential concern about transmission of COVID-19 via contact, enhanced hand hygiene measures are critical. Hand washing with soap and water is considered more effective than hand sanitizer in preventing the spread of COVID-19.

The Task Force recommends the following regarding hand hygiene:

- Cast and crew should avoid touching their eyes, nose and mouth.
- Handwashing facilities with running water, soap and paper towels (dispensed using a non-touch system, if possible), adequate for the number of cast and crew, shall be available and accessible from the first day of work.
- Handwashing facilities shall be kept clean and well-stocked.
- When production is taking place where handwashing facilities are not readily available, mobile handwashing stations shall be provided.
- Stations with alcohol-based hand rub ("hand sanitizer") with at least 60% alcohol shall be strategically placed around work areas and readily accessible.
- Sufficient supplies of hand sanitizer shall be stocked and maintained.
- Cast and crew shall be provided with pocket-sized hand sanitizer that can be used if hand washing or sanitizing stations are not available, such as in vehicles or remote locations.
- Cast and crew should be trained on hand hygiene practices (washing for a minimum of 20 seconds of duration, scrubbing all surfaces).
- Production should encourage and promote opportunities for cast and crew to practice hand hygiene and perform disinfectant wipedowns of high-touch areas.
- Hands should be washed or sanitized:
    - Upon arriving at the job site;
    - After blowing one's nose, coughing, or sneezing;
    - After using the restroom;
    - Before and after eating or drinking;
    - After contact with animals or pets;
    - After handling shared equipment or objects;
    - After cleaning or disinfecting equipment, tools or workspaces; and
    - At other appropriate times throughout the workday.
- Signage should be posted prominently with instructions on how to stop the spread of COVID-19, including hand hygiene and PPE instructions.

Disinfection and Maintenance

Heightened cleaning and disinfection should be practiced. Those responsible for performing cleaning should adhere to the following recommendations and any other guidance issued by public health authorities with respect to cleaning practices.

- Appropriate, EPA-registered disinfecting methods and supplies with a claim against SARS-CoV-2 shall be available in all workspaces.

- High-touch surfaces shall be wiped down periodically with appropriate, EPA-registered disinfectant, following the disinfectant manufacturer's instructions (e.g., safety requirements, protective equipment, concentration, contact time). Examples of high-touch surfaces are tables, doorknobs, countertops, phones, faucets, etc.
- Productions and a COVID-19 Compliance Officer (discussed below) will work with all departments to review and implement specific plans for disinfection of department-specific equipment. Departments will review specific workflows and identify ways to ensure disinfection of equipment and physical distancing (e.g., cleaning of camera dollies, use of remote focus devices, lights).
- All workspaces should be cleaned with increased frequency, with an emphasis on high-touch surfaces.
    - Whenever possible, minimize use of shared office equipment such as copiers and fax machines. When use of such equipment is unavoidable, hand hygiene should be performed after use.
    - Manufacturer's cleaning instructions should be followed for cleaning of sensitive equipment such as electronics.
- Production on set and work off set should designate specific individuals to perform high-touch wipedown, with an emphasis on shared spaces and equipment.
- Shared workspaces should be cleaned daily with an emphasis on high-touch surfaces, including but not limited to production sets, studios, dressing rooms, hair and make-up stations, trailers, on- and off-production offices, break areas, shops and eating/meal areas.
- Dedicated cleaning crews should clean common spaces at appropriate daily intervals.

Props, Costumes, Accessories, Wigs, and Other Specialty Items

Due to inability to clean many of these objects, special care should be taken.

- As many of these items have unique cleaning requirements, those responsible for cleaning such items will do so in the customary manner.
- Hand props (other than those with unique cleaning requirements) shall be cleaned and disinfected before and after use.
- Hands shall be cleaned before and after handling props, accessories and other items.

Personal Equipment

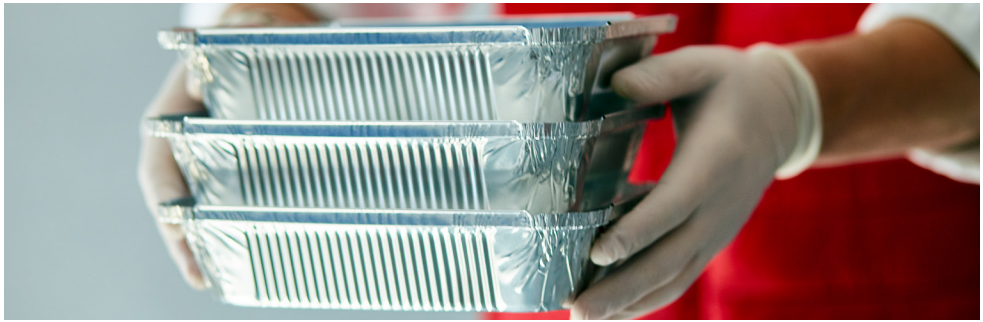
- Personal equipment (such as tools, headsets, microphones and radios) shall be cleaned and disinfected before being issued and then at least once per day. Manufacturer's suggested cleaning instructions should be followed for electronics and other sensitive items.
- Equipment such as radios/walkie-talkies will be issued to a single cast or crew member and used exclusively by that cast or crew member for the duration of production.
- Personal items or equipment that must be shared between members of the cast and/or crew must be wiped down with disinfectant between use and hand hygiene shall be performed after handling.

Vehicles

- High-touch surfaces in vehicles (e.g., steering wheels, controls, seatbelts, door handles, arm rests) shall be cleaned at least once per day and prior to a change in operator or passenger.

Paper

- Whenever possible, use of paper should be minimized. Alternatives such as electronic scripts and electronic sign-in/out should be explored.
- Consider alternatives to petty cash to minimize the need to handle paper money, such as purchase cards.
- When paper scripts are unavoidable, they should be assigned to a specific individual, clearly labeled with their name, and not shared between others.
- Crew lists, call sheets, production reports and other similar documents should be electronic whenever possible.
- When use of shared paperwork is required, such as blueprints or editing binders, hand hygiene before and after handling is recommended.



Food and Beverages

COVID-19 is unlikely to be spread through food or beverages; however, catering, crafts service and eating within workspaces present several unique challenges.

- Those responsible for preparing and distributing food must clean their hands with soap and water or hand sanitizer prior to beginning food preparation and/or distribution and regularly thereafter.
- All local public health regulations regarding preparing and distributing food must be followed, including regulations regarding the use of appropriate food service PPE (hair nets, gloves, and face coverings), safe food temperatures, etc., and all personnel responsible for the preparing and/or distribution of food must be properly certified to do so.
- As face coverings cannot be worn while eating, adequate eating space must be provided to ensure physical distancing can be maintained during meal periods.
- Handwashing facilities and/or hand sanitizer must be readily accessible at the entrance of any designated eating area and shall be used when entering and leaving the area.
- Meal times should be staggered in a manner designed to avoid the gathering of large groups in the same location at the same time.
- All eating surfaces shall be cleaned and disinfected before and after use.
- Eliminate communal "buffet style" food service, including salad bars, trays of food, or any food service that requires sharing of utensils such as serving spoons or tongs.
- Meals and snacks should be served in individually packaged or wrapped portions. Avoid shared communal trays or bowls.
- Eating utensils should be disposable and individually wrapped.
- Cast and crew should not leave the job site to obtain food during the course of the workday.
- Off-production offices, meeting rooms and other workspaces should have infection control protocols for use, especially when used for providing impromptu meals, snacks and coffee. Likewise, break rooms, microwaves, dishes and food deliveries will require regular cleaning and physical distancing.
- If food is to be delivered to the job site, one or more individual(s) should be designated to receive the delivery. Appropriate PPE should be worn when interacting with the delivery person and hand hygiene should be performed after handling the delivery. Cast and crew who bring their own food are encouraged to bring food that does not require refrigeration or heating/microwaving.
- Consider options for cast and crew to place orders ahead of time to minimize the amount

of time they must wait in line. Consider addition of plexiglass (or similar) barriers between servers and cast and crew.
- Avoid using or sharing items such as menus or condiments such as salt and pepper shakers. These items should be disposable and single serve.

Beverages

- Drinks should be individually packaged or, if drinks are to be dispensed from a water station, soda fountain, coffee machine or similar equipment, receptacles should not come into contact with dispensers.

General Infection Prevention Issues

- Limit the duration of workdays and excessive consecutive workdays whenever possible.
- Physical contact should be avoided, including shaking hands, "high fives," fist or elbow bumps, or hugging. Physical contact related to performers is discussed below.
- Visitors to set should be limited unless absolutely necessary. If visitors are provided access, they will be subject to the same guidance as cast and crew, including the need for symptom screening and PPE requirements.
- Union representatives exercising their rights to visit workspaces will be subject to the safety guidelines required of a visitor.
- All cast and crew should avoid touching their eyes, nose or mouth.
- In indoor spaces, ventilation systems and other measures should be used to increase circulation of outdoor air as much as possible (e.g., by opening windows and doors, using fans and other methods).
- Stagger cast and crew call and wrap times to limit the number of individuals arriving to and departing from work simultaneously.
- In the course of performing their duties, various cast and crew members may enter retail establishments during the workday. Applicable public health guidance should be followed, including use of face coverings. They should carry hand sanitizer and practice hand hygiene before entering retail establishments and after exiting.

Protecting and Supporting Cast and Crew Health and Safety

Designated COVID-19 Compliance Officer

- An autonomous COVID-19 Compliance Officer(s) with specialized training and responsibility and authority for COVID-19 safety compliance and enforcement will be in the workplace to address issues as they arise. COVID-19 safety plan oversight and enforcement shall be the principal responsibilities of the COVID-19 Compliance Officer(s), provided they may be assigned additional responsibilities related to workplace safety.
- COVID-19 Compliance Officers will undergo specialized training on health and safety precautions, policies and procedures related to infection prevention practices including COVID-19 prevention, disinfection and PPE.
- Specific duties and responsibilities of the COVID-19 Compliance Officer(s) may include, but are not limited to, overseeing and monitoring physical distancing, testing, symptom monitoring, disinfecting protocols, and PPE education, protocols and adherence and such other duties as may be determined by the employer. A COVID-19 Compliance Officer shall be accessible in the workplace at all times during work hours and all personnel should have access to the COVID-19 Compliance Officer(s). All cast and crew shall be informed who the COVID-19 Compliance Officer is and how to contact him or her.
- In addition to the COVID-19 Compliance Officer, there should be a communication/hotline system to respond to all cast and crew safety questions and concerns (including pre-, post- and off-production offices/spaces). The system shall allow for anonymous reporting.
- Productions should consider engaging a board-certified infectious diseases physician or infection preventionist with certification in infection control (CIC) to assist with development of specific workflows and operational implementation.

- Cast and crew shall not be discharged or disciplined for reporting concerns about COVID-19 or other safety issues in good faith.

Symptom Screening

- All cast and crew will be required to participate in daily symptom monitoring prior to arriving on set or at their workspace. Recommended options include electronic survey, manual screening and/or temperature spot-checks. Productions shall emphasize and reinforce to all cast and crew that working while sick with symptoms of COVID-19 is not permitted. This should be part of training, set orientation and reinforced with posted signage and frequent reminders.

Development of Symptoms

- Cast and crew are expected to immediately report to a designated person or persons (such as the COVID-19 Compliance Officer or such other person designated by the Producer) if they are experiencing, or a member of their household is experiencing, symptoms of COVID-19. If a cast or crew member is experiencing symptoms or has come into close contact with someone who has tested positive for COVID-19 either on or off site, they must report to their employer and follow the employer's contact tracing guidelines.
- If a cast or crew member develops symptoms of COVID-19 when off site, they must not go to work and should immediately contact their healthcare provider. Anyone who reports to work with symptoms of COVID-19 will be instructed to return home and contact their healthcare provider.
- Cast and crew must be notified if they have been exposed to an individual who has exhibited symptoms of COVID-19 or who has tested positive for COVID-19.

Leave Policies

Paid leave policies shall be flexible and non-punitive to allow sick and quarantined employees to stay away from co-workers and the general public. These paid leave policies will be implemented to encourage compliance with infection prevention guidelines.

Physical Distancing

Limiting face-to-face contact with others is the best way to reduce the spread of COVID-19. Cast and crew must practice physical distancing whenever possible. Physical distancing involves maintaining a distance of at least 6 feet from any other person at all times, except when doing so is incompatible with one's job duties (see below). Cast and crew should avoid congregating in groups. When practical, separate work locations into zones to facilitate physical distancing.

Visible physical indicators (e.g., cones, duct tape or signage) marking 6 feet of distance should be placed in areas where people must congregate, such as crafts service, eating/meal areas, make-up and costume trailers.

Meetings

Use phones, videoconferencing or similar technologies for meetings whenever possible. Avoid people gathering around a computer to watch together. Consider virtual production meetings whenever feasible.

Writers' Rooms

Whenever possible, move to virtual writers' rooms.

When virtual writers' rooms are not possible, maintain 6 feet of distance, use face coverings, and perform hand hygiene before and after the meeting. Minimize use of paper.

Video Village

Use technology options such as additional monitors and remote viewing with the prior approval of or consultation with the Director, when required and as applicable, to allow the viewing of video from a separate location to facilitate physical distancing.

Audiences

At this time, the use of live audiences is discouraged. On a case-by-case basis, live audiences may be used as long as audience members:

- Wear face coverings at all times
- Maintain 6 feet of physical distance, including while waiting in line and sitting in a studio; and
- Undergo symptom screening on entry.

An appropriate physical separation shall be maintained at all times between performers working without PPE and audience members. Medical professionals shall be consulted to determine the nature of the physical separation required for the safety of the performer in such situations, including additional physical distance or physical barriers (e.g., plexiglass walls).

Working Remotely (Telecommuting)

On a temporary basis and without diminishing work opportunities, consider remote work/ telecommuting opportunities for cast and crew. This should only apply to those who can perform their job duties effectively while working remotely/ telecommuting.

Shared Workspaces

To the extent possible, reduce crowding of all shared workspaces (e.g., production offices and shops) with a goal of keeping people 6 feet apart.

In control rooms, editing rooms and other small spaces, if physical distancing cannot be maintained, all individuals must wear face coverings and should practice hand hygiene.

Training and Education

- The Task Force recommends that training in the employer's COVID-19 plan to reduce infection risk be mandatory on or before the first day of employment.
- All employees should be educated about the signs and symptoms of COVID-19 as part of their training. People with COVID-19 have reported a wide range of symptoms, ranging from mild to severe. Signs and symptoms include the following:
    - Fever
    - Cough
    - Shortness of breath or difficulty breathing
    - Chills
    - Repeated shaking with chills
    - Muscle pain
    - Headache
    - Sore throat
    - New loss of taste or smell
- All employees should receive dedicated training on the following topics:
    - PPE, with a focus on safe donning and doffing
    - Hand washing, including proper techniques
    - Environmental cleaning and disinfection, including high-touch wipedown
    - Policies and procedures related to COVID-19 on set or in offices
    - Psychological impact of the crisis
    - Protecting yourself at home
    - Preventing cross-contamination
- Post signage in all production workspaces where production activities occur, reinforcing training principles.

Unique Production-Specific Concerns

Special Considerations for Cast and Crew Working in Close Proximity to Performers

The work of some cast and crew members (e.g., hair stylists, make-up artists, costume designers, costumers, wardrobe department personnel, sound technicians, property persons, studio teachers and special effects technicians, etc.) may not be possible while maintaining physical distancing from others. The performers with whom they work may not be able to wear face coverings at all times, for example when make-up is being applied. Testing, contact tracing and task-specific controls such as the following shall be in place:

- Alter workspaces to permit physical distancing.
- Control the entrants to trailers and other workspaces.
- Allow sufficient work time to follow safety protocols.
- Cast and crew in close proximity must wear a face mask and/or face shield at all times and perform hand hygiene before and after the encounter.
- Additional protocols must be established before work of this nature could resume.

Special Considerations for Performers

The work of performers will frequently put them in close (less than 6 feet) contact with other performers or cast and crew including, for example, hair stylists, make-up artists, stunt coordinators, costumers and wardrobe personnel. Face coverings/masks may not be practical during many of these activities. Additionally, certain activities such as fight scenes or intimate scenes increase the risk of transmission.

- Whenever possible, performers shall practice physical distancing.

- When maintaining physical distancing is not possible (e.g., between a performer and make-up artist) and the performer cannot wear appropriate PPE, contact must be kept to the shortest amount of time possible, and the other cast or crew member must wear appropriate PPE and observe hand hygiene practices.
- The number of people involved in close proximity with a performer should be kept to a minimum whenever possible. If a performer requires work by more than one make-up artist/hairstylist, make-up artists/hairstylists should observe appropriate PPE requirements, and both performer and make-up artist/hairstylist should observe hand hygiene practices immediately after completing the task.
- Consider measures to minimize scenes with close contact between performers, such as amending scripts or use of digital effects.
- Stand-ins should wear face coverings even if the performer they are standing in for may not.
- When possible, adjust shooting schedules to minimize the amount of back-and-forth travel needed by performers.
- Visitors should be limited unless their presence is absolutely necessary. If visitors must come, they will be subject to the same guidance as cast and crew, including, but not limited to, symptom screening and/or temperature screening, and PPE requirements.
- When performers are in a holding area, waiting to be used in a production, employers and performers must adhere to the recommendations outlined herein, including recommendations regarding physical distancing and the use of PPE.

Personal Protective Equipment for Performers

- When it is possible to do so consistent with their job duties, performers shall wear appropriate PPE.
- When wearing PPE is not possible, such as when a scene is being filmed or after make-up has been applied, the number of people with whom the performer is in close contact shall be minimized.
- As soon as possible after filming a scene, the performers shall put on their PPE and/or physically distance themselves.

Casting and Auditions

- Casting should be conducted virtually via self-tape, online video conference, or other applicable technology whenever possible.
- If that is not feasible, or for any additional calls or live sessions necessary, there must be a sufficient space large enough to accommodate 6 feet physical distancing in all directions.
- If performers will not be wearing PPE during an audition, a plexiglass partition or similar barrier between the performers and those observing the audition shall be provided by the employer and used and cleaned between performances along with any furniture, props etc.
- If no barrier is present, increase the physical

space between those observing to those auditioning beyond the 6 feet physical distancing standard.

- No more than one individual auditioning at a time except for legitimate pairs (e.g., household members, domestic partners, roommates, living together for a minimum of 14 days or more prior to the audition).

Minors

As minors may have difficulty adhering to physical distancing, wearing PPE, and practicing hand hygiene, when not working, they should be relocated to a secure off-set location to the extent possible.

- Extra personnel on set with a minor are strongly discouraged and should be limited to a studio teacher and one guardian only.
- Visitors should be limited unless their presence is absolutely necessary. If visitors must come, they will be subject to the same guidance as cast and crew, including, but not limited to symptom screening and/or temperature screening, and PPE requirements.
- Physical distancing and face coverings should be used at all times on set, including in school areas.
- As studio teachers will need to interact with minors within 6 feet of distance, teachers should wear face coverings, practice frequent hand hygiene, and receive training on COVID-19 prevention. Whenever possible, remote schooling should be made available.
- PPE requirements and options may be modified for minors, especially those of tender years. Face coverings are not expected for minors under two years of age.

Animal Performers

There is presently no data to suggest that companion animals/pets such as dogs and cats serve as vector for transmission of SARS-CoV-2 to humans.

- Animal handlers/trainers should receive training on COVID-19 prevention and should follow all rules regarding physical distancing and PPE.
- Animals should not be handled by others except those necessary for shooting a scene (i.e., no petting, cuddling, feeding). All those involved in touching animals should perform hand hygiene before and after.
- Other animals not involved in production such as personal pets should be kept off sets.

Transportation

- Private (i.e., self-drives) or production-provided transportation to and from sets, offices and locations should be prioritized over mass transit/public transportation whenever possible. All drivers and passengers should wear face coverings and maintain social distancing to the extent possible. High-touch surfaces in vehicles shall be cleaned and disinfected frequently throughout the day.
- If neither private nor production-provided transportation is available or reasonably

practical under the circumstances, public transportation may be used.

- At all times while in transit, cast and crew should wear face coverings per local public health guidance. Whenever it is reasonably possible to do so, cast and crew shall maintain a distance of at least 6 feet from the driver and other passengers, if any. Upon disembarking, cast and crew should promptly practice hand hygiene.
- If public transportation is used, travel should be arranged to avoid peak travel times, if practical.

Special Considerations for Travel

Production travel presents multiple unique circumstances and challenges. Given the changing nature of the COVID-19 pandemic, individual countries are likely to have separate restrictions on travel to and from the United States. Individual states and counties will also have separate restrictions in their jurisdiction. Pandemic "hot spots" may change rapidly, necessitating alterations in plans. Cast and crew traveling for productions should be aware that, should circumstances change in the location, they may be subject to travel restrictions, including enforced quarantine.

- Minimize travel to the extent possible. When travel is necessary, attempt to minimize frequent back-and-forth travel.
- Identify local medical personnel in advance that could assist with care of cast and crew in the event of COVID-19 symptoms.
- Production shall monitor local outbreaks and trends, including local public health guidance and restrictions on travel to and from the U.S., and keep cast and crew informed as appropriate.
- Whenever possible, those traveling for productions should not bring family members or other non-essential personnel.
- Air travel shall be booked only on airlines whose policies comply with the Federal Aviation Administration's regulations with respect to COVID-19.

Special Considerations for Filming on Location

Filming on location can pose certain risks compared with shooting on a studio/stage set. Given the changing epidemiology of COVID-19, particular attention to current public health guidelines and outbreak hotspots is important.

Those responsible for selecting a location should take the following considerations into account.

- Provide adequate space, such as additional trailers, tents and eating space, during location filming to allow for physical distancing.
- Perform wipedown of high-touch areas at least daily.
- Minimize use of crowd scenes or street scenes when a controlled flow of people is not possible.

Outdoor Locations

- Prioritize locations where access can be secured and members of the production can be kept away from the general public when possible.
- The location shall provide sufficient space for performing planned production activities while adhering to physical distancing recommendations.
- Prioritize locations with access to hand-washing facilities. Provide ample mobile hand hygiene stations.
- If shooting in inclement weather, provide adequate shelter facilities such as tents to allow physical distancing of cast and crew.

Indoor Locations

- Productions should avoid locations that recently have been occupied or used by people who may have been infected with COVID-19, if possible.
- If an occupied private home or building location is required for shooting, the occupants should be asked about signs/symptoms of COVID-19 and should vacate the premises for proper cleaning and sanitizing prior to pre-production crew and production cast and crew entering the facility.
- Productions shall select buildings that can be easily and effectively cleaned and that provide sufficient space for performing planned production activities while adhering to physical distancing recommendations. Locations with hand-washing facilities available should be prioritized.
- Allow adequate ventilation of indoor locations.

Scouting

Traditional, in-person location scouting is considered essential to the success of a production. However, given the need for physical distancing and minimizing entry into private spaces, consider alternative options.

- To the extent possible, location teams should pursue alternatives to traditional, in-person location scouting, such as creating virtual options including the use of photographs and digital scouting.
- Tech and director scouting should occur in small groups to the extent possible.
- All departments that provide assessments of scouting locations (environmental hazard assessment, engineering, etc.) as well as the location teams shall be trained in appropriate PPE use and provided sufficient PPE.
- Locations shall be prioritized during scouting that allow complete control of the site, including controlling access, ability to shut down the site for cleaning and high standards of hygiene.

Appendix

List of Participants

Companies

Alliance of Motion Picture and Television Producers
Amazon Studios LLC
Apple Studios
CBS Studios Inc.
Columbia Pictures Industries, Inc.
Disney Television Studios
Fox Corporation
HBO
HBO Max
NBCUniversal
Netflix
Paramount Pictures Corporation
Sony Pictures Television Inc.
Walt Disney Pictures
Warner Bros. Entertainment

Unions and Guilds

Directors Guild of America
International Alliance of Theatrical Stage Employees (IATSE)

- Local #44, Affiliated Property Craftspersons
- Local #52, Motion Picture Studio Mechanics
- Local #80, Motion Picture Studio Grips & Crafts Service
- Local #161, Script Supervisors, Production Coordinators, Assistant Production Coordinators, Production Accountants, Assistants Productions Accountants and Payroll Accountants
- Local #600, International Cinematographers Guild
- Local #695, I.A.T.S.E. Production Sound Technicians, Television Engineers, Video Assist Technicians and Studio Projectionists
- Local #700, Motion Picture Editors Guild
- Local #705, Motion Picture Costumers
- Local #706, Make-Up Artists and Hair Stylists
- Local #728, Studio Electrical Lighting Technicians
- Local #729, Motion Picture Set Painters and Sign Writers
- Local #764, Theatrical Wardrobe Union
- Local #798, Make-up Artists & Hair Stylists
- Local #800, Art Directors Guild
- Local #829, United Scenic Artists
- Local #871, Script Supervisors/Continuity, Coordinators, Accountants & Allied Production Specialists Guild
- Local #884, Motion Picture Studio Teachers and Welfare Workers
- Local #892, Costume Designers Guild

International Brotherhood of Electrical Workers, Local #40
Operative Plasterers and Cement Masons International Association of the United States and Canada, Local #755
Screen Actors Guild – American Federation of Television and Radio Artists (SAG-AFTRA)
Southern California District Council of Laborers and its affiliate, Studio Utility Employees, Local #724
Studio Transportation Drivers, Local #399 of the International Brotherhood of Teamsters
Theatrical Teamsters, Local #817 of the International Brotherhood of Teamsters
United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry of the United States and Canada, Local #78

Medical Consultant

DANIEL Z. USLAN, MD, MS, MBA, FIDSA, FSHEA; Co-Chief Infection Prevention Officer, UCLA Health

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LOUISIANA ENTERTAINMENT

A Division of Louisiana Economic Development

ATTACHMENT 2

THE SAFE WAY FORWARD

A JOINT REPORT OF THE DGA, SAG-AFTRA, IATSE, & TEAMSTERS' COMMITTEES FOR COVID-19 SAFETY GUIDELINES

THE SAFE WAY FORWARD

A Joint Report of the DGA, SAG-AFTRA, IATSE and Teamsters' Committees for COVID-19 Safety Guidelines

INTRODUCTION

This document represents what we believe to be a path for employers to provide a safer workplace for their cast and crew members in a pre-vaccine COVID-19 world. Taking action based upon these guidelines is an essential and necessary element of any such return to work.

This document was conceived and initially drafted by a DGA committee of working members, based upon close consultation with infectious disease epidemiologists and other experts including W. Ian Lipkin, Larry Brilliant and Baruch Fischoff. SAG-AFTRA was simultaneously but independently working on its own protocols through its President's Blue Ribbon Commission on Safety, its staff, and expert consultants including Jonathan Fielding, Mark Katchen, and Monona Rossol. IATSE was also engaged in a similar process with experts including Letitia Davis, Gregory R. Wagner and David H Wegman.

SAG-AFTRA, IATSE and the Teamsters all subsequently joined with the DGA in the effort to create this document.

These guidelines follow the Industry White Paper, developed by the Industry-Wide Labor-Management Safety Committee Task Force,[1] that was recently delivered to the Governors of New York and California. While that White Paper offered a foundation for the appropriate state agencies to examine the resumption of production and provides guidance employers must follow to provide a safe working environment, it expressly provided that the specific protocols regarding mandatory testing, personal protective equipment, and department-specific procedures would be the subject of further discussions and agreement between the producers and the unions. These guidelines are our recommendations with respect to testing and department-specific protocols related to employees represented by DGA, SAG-AFTRA, IATSE, Teamsters and the Basic Crafts (the "Unions").

Not surprisingly, there's been a wealth of smart and detailed work done by members of the industry all over the world on possible pre-vaccine safety guidelines. Some of that work is summarized and/or incorporated in Parts Three and Four of this document (by the way, if someone out there recognizes their work in these documents, THANK YOU VERY MUCH). **What we are trying to describe and contribute is an *organizing principle*, an *overlay*; the granular detail that lies beneath can be tailored to each production.**

[1] The task force consists of representatives from the DGA, International Alliance of Theatrical Stage Employees (IATSE), the International Brotherhood of Teamsters, the Basic Crafts, the Screen Actors Guild-American Federation of Television and Radio Artists (SAG-AFTRA), and Alliance of Motion Picture and Television Producers.

PART ONE – GUIDELINES FOR A SAFE SET IN THE CURRENT ENVIRONMENT

The Unions' members' strong desire to return to work is obvious but comes with a question: *Can it be done safely*? As we contemplate and plan for resuming production, there are some important facts to keep in mind:

- First, this is a truly dangerous, easily transmitted disease;
- Second, scientists have learned in the early months of this novel virus that it spreads in an uneven way, and many outbreaks have been traced back to "events and places" like markets, community gatherings, and musical events, which represent outbreaks that could have been prevented by planning with best practices. Given these facts, a working film set provides an exceptional opportunity for virus spread. (The "set" can also include any work space or place that a cast or crew member may be performing work);
- Third, we still don't know whether antibodies confer immunity, and if so, at what threshold and for how long (along with questions about the antibody tests themselves); and
- Fourth, the nucleic acid tests are also challenging—false negatives endanger lives and false positives slow production.

Given these facts, and without a working vaccine, **how does one mitigate the risk of people getting sick when they are violating every physical distancing guideline** for hours on end, for weeks at a time? As you might imagine, it ultimately comes down to **testing**. A *lot* of testing.

TESTING IS THE CORNERSTONE

We believe strategic testing for the presence of COVID-19 is critical for a safe return to work. Without such testing, the entire cast and crew would be asked to work each day in an environment of unknown risk; a single confirmed case would lead to a quarantining of all who came into close contact with that person. This could potentially lead to shooting delays, and—should that person be a key actor/performer or director—to production shutdowns, not to mention the real possibility of illness and death. Our belief in regular, consistent testing is based on the best available public health science. **The modeling in Part Two clearly shows how testing is the most effective option in preventing infection during production.**

THE ZONE SYSTEM

The Zone System is the foundation of our safe set strategy. It is step one. All subsequent production decisions regarding safety should be engineered to fit its premise.

It proposes this: **Production will consist of three ZONES: A, B, and C.** Consistency in the terminology in this area could be helpful and reassuring to cast and crew.

Zone A is any perimeter within which activity occurs without physical distancing or the use of PPE. In most cases, this will mean performers working on set *with no protection* alongside crew. Zone A is a bubble encasing closely vetted vulnerable people. It can be as small or as large as necessary, can function only for a few hours if need be, and can include controlled points of access between different Zone As. It can also exist within a Zone B (and often will, if your set is on a stage with production offices).

Zone B is everywhere the production has a footprint that is not Zone A. Use of PPE and stringent physical distancing practices are observed and enforced within Zone B, with variations and modifications specific to both general filmmaking demands and specific production needs. This could be a production office, base camp, a vehicle, a control room/truck, basically any work space or place that a crew member may be performing work. Again, the goal is that *people cleared to work in Zone A ONLY come into contact with people in Zone B who are rigorously practicing physical distancing*. Think of it this way: from door to door, people working in Zone A travel along a cocooned path—sometimes involving multiple Zone As—laid out and controlled by people working in Zone B.

Zone C is the outside world: homes, hotels, wherever people employed in the production go when they're not working.

No one can be allowed access to Zone A or Zone B for the first time unless they have been tested and cleared within the last 24 hours. The reason is simple: People often begin to shed the virus before they're symptomatic, and there have been no indications to date an infected person is shedding virus in less than 48 hours from initial virus exposure. (An argument for testing twice is that a false negative test, whether due to inadequate sampling or a technical error, could have devastating effects on a production.) Going forward from that initial test, there are several potential testing scenarios, with varying degrees of risk attached. We have modeled a series of these scenarios, ranging from no testing at all (for those who think such a thing is an option) to testing every day. The risks associated with each of these scenarios are discussed in detail in Part Two, and the modeling shows a clear variance between testing once a week and testing three times a week (the latter being safer). For this reason, **Zone A personnel should be tested three times a week *at a minimum*, with the understanding that certain circumstances may require daily testing (such as performers and crew involved in production of scenes that require close or intimate contact, or extreme exertion, etc.). Turnaround time for testing, which can range from hours to days, will be a key factor in determining when and how often tests are administered.**

People working in Zone B are tested at least once a week, preferably on a Monday or Tuesday, but they too will have been tested and cleared prior to entering Zone B *for the first time.* Again, they adhere to strict physical distancing guidelines and use PPE at all times. Also, no one can be instantly "bumped" from Zone B to be permitted to enter Zone A; they would have to be tested and cleared 24 hours before entering Zone A.

Generally speaking, by staggering tests and tailoring them to each cast and crew member's work obligations, a sourcing bottleneck and long testing lines at the end of a wrap day can be avoided.

To anticipate a question: if traveling by plane, cast and crew members must be tested and cleared within 24 hours of the flight. They will be tested and cleared again before entering Zone B or Zone A for the first time.

SARS-CoV-2, the virus that causes COVID-19, enters through the mucous membranes of the mouth, nose, and eyes. Accordingly, these surfaces must be protected by PPE. We consider N95 masks (subject to their availability) and either goggles or a face shield to be the best available standard, while acknowledging face shields may make some jobs awkward or impossible to perform. Surgical masks, while not ideal, are still better than nothing for people who cannot wear N95 masks because of sizing or grooming issues. A reminder: a proper testing program shows you're not *spreading* the virus; it doesn't mean you can't *get* the virus. For this reason, we support crew cleared for Zone A to use PPE as an added precaution until the evolving science provides more clarity.

For particularly close physical encounters between actors/performers, it is possible to implement a rapid CEPHEID test that can be completed on site in less than 60 minutes. These tests will also help the producer respond to (what we hope will be) the rare instance where the company needs to bring people from Zone B to Zone A without the usual prescreening procedure.

Like we said, it's a *lot* of testing, and it still doesn't guarantee a virus-free set (and people who are at high risk from COVID-19 should be made aware of the limitations of *any* plan). What the Zone System tries to limit is the possibility that someone contracts COVID-19 *while at work*, but it should be understood that as long as the cast and crew are going home at night and on the weekends, they are open to contagion, which is what all the testing is for. With the Zone System and regular testing, an employer will have put in place a robust system to significantly mitigate risk on set.

It is also recommended that all employees maintain up-to-date status with influenza, pneumococcal and pertussis immunizations to reduce possibility of misdiagnosis.

While we support the use of temperature monitoring, it is neither sensitive nor specific. First, someone could be running a temperature for any number of reasons; second, many people shed the virus and are infectious before they become febrile; and third, temperature testing has historically led to a false sense of security.

It's important to remember that performers are the most vulnerable people on the set. While it's terrible we're surrounded by a lethal, highly transmissible virus, that is our current reality, and unless all stories in a pre-vaccine world portray every character wearing PPE and standing six feet apart behind plexiglass, the Zone System is how we believe we can stay as safe as possible.

AND THIS WILL WORK HOW, EXACTLY?

We fully understand and acknowledge the practical and perceptual implications of the Zone System.

On a practical level, sourcing the tests, the personnel, and the equipment at any sort of scale will be an enormous task, not to mention the interactions with multiple city and state agencies regarding coordination and waivers. Fortunately, our expert consultants believe testing scarcity will be resolved in the near future, which would address the primary question of testing availability.

Also, this is an industry with a long history of solving logistical problems creatively; why not use those powers to work back from a starting point of maximum safety?

Perception will play a significant role in any proposed safety plan, and we cannot be viewed as poaching supplies and personnel from the public sector during a time of perceived testing and resource scarcity. This issue will require continual close attention to ensure the results of our approach are objectively transparent and perception is aligned with reality.

The volume of testing required will prompt a deeply critical analysis of who really needs to be in Zone A and how often. Think about it this way: who really needs to be within six feet of an *unprotected* performer as part of a normal workday?

There are currently several apps available to monitor cast and crew testing status, along with contact tracing capability in the case of a confirmed positive test. Also, we have verified an easy-to-use app could be developed based on factors used to create the models in Part Two to allow each production to assess its risk regarding COVID-19 exposure and test accordingly.

At present we are recommending nasopharyngeal testing because it is the gold standard for sensitivity. We are nonetheless closely tracking developments in saliva and anterior nares testing for COVID-19. In the event that these less invasive methods are proven to be as reliable as nasopharyngeal testing we would adjust our sampling strategy accordingly.

These protocols would necessitate the creation of a Health and Safety Unit solely dedicated to their execution. This unit would be supervised by qualified professionals and technicians in the requisite field to ensure compliance and accuracy.

IN CONCLUSION

We believe the approach outlined herein provides a vigorous set of protections under current conditions to have a safe set. What we are in the dark about is the real-world emotional effect on the cast and crew. Early projects that share information transparently will provide key, live data in a timely, public fashion, so the entire industry can take advantage of the real-world knowledge being accumulated. Of particular value will be contemporaneous how-to postings that illustrate the myriad ways cast and crew are adapting to our new way of working. Success in a safer return to work will also depend on cast and crew being willing and able to engage in good safety practices when at home and in areas throughout Zone C.

Part Three of this report, A VIRTUAL TOUR THROUGH THE ZONE SYSTEM, gives examples of how this approach would work and what it would require in a much more specific way.

Also, except for Part Two, this is not a static document; it will likely never be "finished." We intend for it to be improved by the industry as production resumes. Occasionally, you will see questions—both practical and philosophical—asked aloud that have no solutions (yet). We felt they were important to retain for their contextual value (of particular interest is the effect on small-scale independent projects of the resources required to stay safe).

Remember that all things related to the virus will improve over time—better, faster, cheaper testing, a clear understanding of immunity, a drug that helps fight the virus, etc. The Zone System is a plan to get us started *today*. With it, we can move forward safely and learn a lot in the process.

PART TWO: TO TEST OR NOT TO TEST…IS NOT A QUESTION, IT TURNS OUT

Jeffrey Shaman of Columbia University modeled the effectiveness of various testing protocols. The key factors were: the community infection rate in the area contemplated for production, equal to the percentage of individuals with active infections; the community transmission rate, equal to the number of people infected by each newly infected individual (known as the R-naught, or R0); the number of daily crew members working in Zones A and B (100 was used for the models); the number of shooting days; and the accuracy of available testing, measured in terms of sensitivity (the percentage of people with the disease who test positive) and specificity (the ability of the test to correctly identify those without the disease).

The community in this case is Zone C, the world to which cast and crew return each evening.

The model predicts the risk for a production in two ways. The first is the expected number of new infections during the shoot (on the left in the figures below). The second is the probability that there will be at least one new infection during the shoot (on the right in the figures below). The first measure allows estimating the resources needed to deal with infections (e.g., health care, contact tracing). The second measure allows estimating the chance that a production will be shut down and attract negative publicity because someone tests positive.

Each model was run a hundred times with a randomizing element to mimic real-world x factors. We looked at four possible testing protocols:

1. No testing
2. Testing once per week
3. Testing three days per week
4. Testing every day (7 days per week)

We have run these analyses for various scenarios. The figures below show one set of scenarios. The bottom-line conclusions are similar for other scenarios.

The models assume a 30-day shoot, with 10-hour workdays, with 100 cast and crew working in LA County. We look at community infection rates from 0% to 0.35%, a plausible range over areas in the County, at various future times. We look at community transmission rates ranging from low enough that the disease is slowly dying out (R0 = 0.96) to high enough that it is exploding (R0=3.0). We assume a very accurate test (99% sensitive and specific) and a low transmission rate on set (R=0.96), given the many precautions taken to avoid it (PPE, etc.).[2]

[2] These models can be run with alternative assumptions, regarding each element (e.g., shorter shoots, less sensitive or specific tests). They provide a way of evaluating different ways of managing productions, in terms of costs and risks. They provide a basis for communicating those risks to cast and crew, investors, management, and insurers. By way of illustration, we show analyses informing one production decision: the length of the workday.

The figures on the left show the expected mean number of infections acquired on set during the 30-day shoot for the three scenarios. The color code gives the number of expected infections, ranging from 0 (blue) to 4 (yellow). For example, if the community infection rate is 0.2% (x axis) and the community transmission rate is 2.0 (y axis), then we would expect 2 infections on set (medium green, in the column on the right).

The figures on the right show the probability of at least 1 infection acquired on set. With the same assumptions about community infection rate (0.2%) and community transmission rate (R0=2), there is about a 50% chance of at least one infection (light green on scale on the right).

The four figures in each column show the analyses for the different testing protocols. The text inserts give the story that the figures tell. With no testing (top figures), the shoot should expect at least one case, and likely more, unless conducted in an area (Zone C) where the community infection and community transmission rates are low. With daily testing (bottom figure), the risk is very low in any Zone C. Weekly testing (second row) makes a big difference.

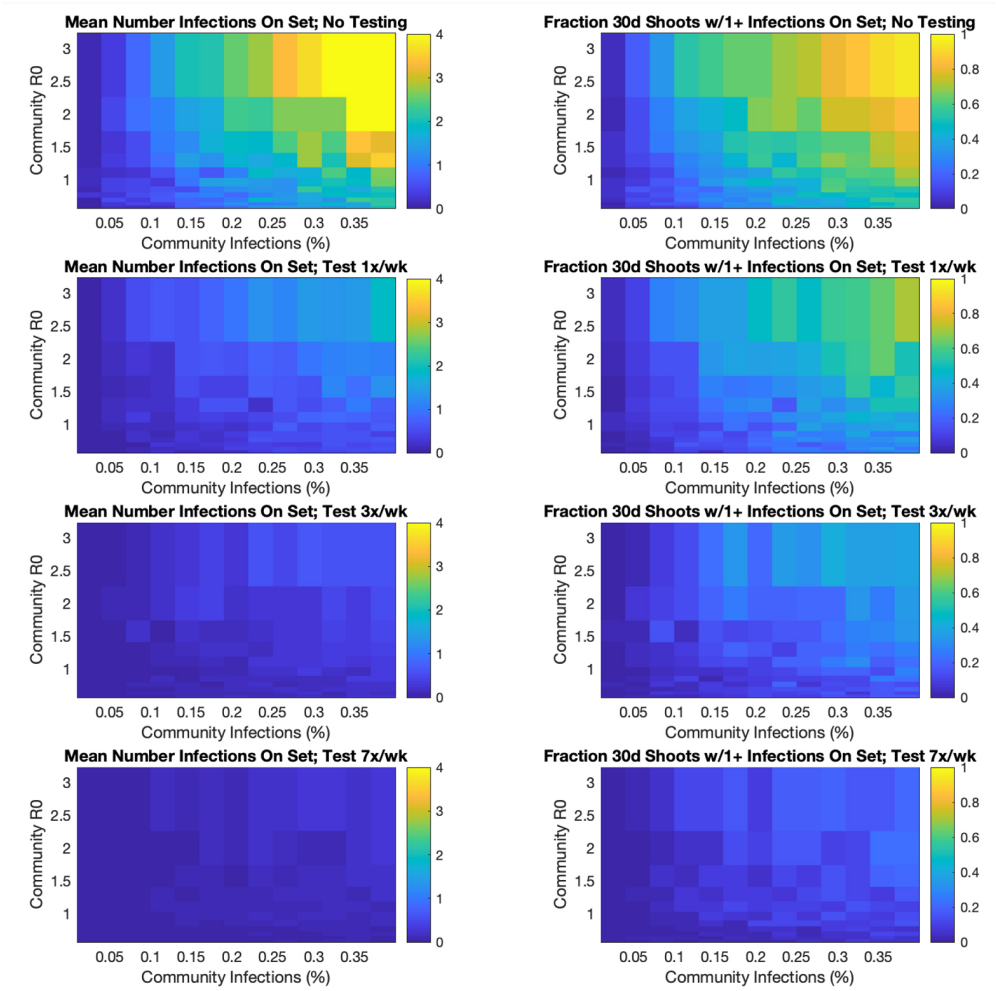
In layperson's terms, deep blue is the desired result.

With no Testing there is a Much Higher Risk of Infection Acquired in Zone A

Dramatic Reduction in Infections Acquired on Set with Testing Once Per Week

With Testing 3 Times per Week there are Few Infections Acquired on Set

Enormous Effect: Virtually NO Infections Acquired on Set with Testing Every Day



Conclusions:

Increased testing frequency reduces the risk of acquiring infection on set. Weekly testing makes an enormous difference, taking the risk from it being almost certain that if someone comes to the set with disease, additional cases of COVID-19 will occur on the set to a high chance of avoiding them. Testing every three days reduces the risk further still. Daily testing largely eliminates it. We see the cost and logistics issues associated with testing coming down, to the point where such testing should not be prohibitive, by the time the productions are ready to begin.

Community infection and transmission rates make a big difference. If public health measures are successful, these rates will come down over time, reducing the need for testing; if those measures fail, the opposite will be true.

PART THREE: A VIRTUAL TOUR THROUGH THE ZONE SYSTEM

According to William of Ockham, in problem-solving, "Entities should not be multiplied without necessity." In other words, don't make things harder than they need to be. That being said, the transition to safer production procedures requires a methodical approach, based on the best information from scientists as well as experienced production professionals. The responsibility for providing a safe workplace always rests with the employer, and we realize that employers may need to expand these protocols to ensure their effectiveness in particular applications. So, here are our protocols, in granular detail, with examples of how they might work in practice.

These protocols are for all types of sets and studios/stages including any work space or place that a crew member may be performing work that falls under the Unions' jurisdiction, and are meant to be global for production, so alternate job titles are added in for clarity where appropriate. Additional protocols applicable to other settings (e.g. edit bays, sound houses, recording studios) will be released separately.

KEY ASSUMPTIONS

The following assumptions, some of which we have discussed in the first section, form the foundation of our recommended approach:

1. There will be regular testing of the cast and all crew involved in the day's work and over time it is expected that tests are being developed that will become less and less intrusive.
2. Testing is not infallible. Thus, physical and social controls will be essential to ensuring a safe work environment.
3. The Zone System will be in place, carefully guarding against contact between those in the main company and other untested individuals.
4. There will be closed sets so that only those people required to be in proximity of the filming will be present.
5. There will be a health safety team in a discrete unit to oversee the production process.
6. Strict physical distancing guidelines and the use of appropriate PPE at all times will be in effect except where not possible due to on-camera performance or in circumstances where the individual's job function does not allow for physical distancing, in which case appropriate PPE will be worn at all times.
7. There will be reduced shooting hours, preferably a 10-hour shooting day, to allow time for monitoring, cleaning and protocols that reduce transmission risk, and to keep the cast and crew well rested.

In the previous sections we have focused on testing and discussed the use of PPE, before we go much farther, let's focus on the health safety unit.

THE HEALTH SAFETY TEAM

Executing the Zone System will require the creation of one new position and one new department. First, there will be a dedicated Health Safety Supervisor (referred to in the Industry White Paper as the "COVID-19 Compliance Officer"), and second, there will be a Health Safety Department, with a Manager and staff.

The Health Safety Supervisor (HSS) will be the final authority on COVID matters and cannot be overruled in their efforts and activities to enforce COVID-19-related safety practices. In other words, the HSS can hit the pause button on the production. The Unions and the Employers will work together to create criteria that ensure this key position is filled by individuals with the experience and knowledge commensurate with this high level of responsibility.

The Unions and Employers will work jointly to develop and provide industry-specific training for the HSS and the Health Safety Manager (HSM) as well as industry-specific COVID-19 training for workers. This training will include programs to accomplish the necessary training outlined in the Industry White Paper and its addendums. Also, an individual worker's rights and responsibilities will be described, along with the benefits available to them should they be exposed to COVID-19. Occupational medicine and infectious disease professionals shall be available to the production for consultation and advice as well as updates of health and safety plans and oversight.

1. **The Health Safety Supervisor (HSS)** hires and coordinates the necessary COVID-related medical staff and is responsible for COVID-19-related health safety for the production. They have the authority to pause the production in event that a breach threatens the health of the cast or the crew.

2. **The HSS would consult with the production on the hiring of the Hygiene Crew and the Security Unit** (which we will describe shortly).

    a. The HSS primarily works with the Producers, UPM (Line Producer or equivalent on multi-camera productions), 1st AD/Key SM, Department Heads and the Health Safety Manager (HSM).

    b. The HSS is in charge of the testing process (assigning medical personnel to posts, gathering biological material for transport to the testing lab, collecting/maintaining all related paperwork), and is among the first recipients of the test results, which will be kept confidential except as permitted to be disclosed and used. The HSS will be responsible for notification of positive COVID-19 test results to all individuals entitled to notification under these protocols.

    c. The HSS ensures that all cast and crew complete a daily attestation form that screens for symptoms and potential exposure to individuals who may have symptoms consistent with COVID-19.

d. The HSS, with their team, monitors the cast, crew, catering and craft service for compliance with Zone protocols.

e. The HSS ensures that all sets, locations and workplaces are prepared for and managed during use which shall include an assessment of ventilation, air filtration and circulation, and the disinfecting of surfaces, property, equipment and tools.

f. The HSS also works with the HSM to coordinate placement of handwashing, sanitizing, and disinfection stations and any medical posts.

g. Along with the 1st AD/Key SM, the HSS gives instructions at the daily safety meetings. The HSS can ask the 1st AD/Key SM to stop any time during the day for a meeting to give further or revised health safety instructions.

h. The HSS shall be provided with the resources and staffing necessary to oversee or to provide directly adequate, daily attention to the many exposure control activities. Examples of this include attention to ventilation (including the use of foggers or atmosphere), PPE selection, fit-testing, and maintenance, and appropriate surface cleaning and disinfecting practices.

The premise is that whereas the HSS understands epidemiology, the Health Safety Manager understands production. Clearly this will be a close collaboration, but ultimately the Production will have to work back from what the HSS declares safe practices.

The DGA team and Department Heads will consult with the HSS and the HSM, in determining who needs to be tested, and when and where they will be tested.

3. **The Health Safety Manager (HSM)** oversees the execution of HSS directives in conjunction with the UPM, 1st AD/Key SM, and other relevant department heads. The HSM has a staff who together:

a. Set up and maintain the hand washing, sanitizing and disinfectiing stations (overseeing the Hygiene Crew).

b. Set up Medical Checkpoints. Remember, this would apply as soon as Production begins to occupy ANY physical space. The Checkpoint could be an office, a truck/bus/RV or pop-up tent.

c. Bring whatever the Health Safety Supervisor requires, such as tables and chairs. Production will provide PPE at the Medical Checkpoint.

d. Coordinate the placement of catering and craft service. They place Bio-Hazardous Material trash cans and oversee their proper use.

e. Assist the HSS in stocking, restocking, and distributing PPE. The Health Safety Department is also in charge of disposing of Hazardous Materials (testing waste and discarded or damaged PPE).

f. Coordinate the Security Unit (more below) regarding the Zone System. This would include the implementation of requisite badges, IDs, and app technology (if utilized) to identify and, when necessary, track cast and crew members.

g. Purchase and place bottles of hand sanitizer through the set, as well as giving bottles of sanitizer to the departments or any crew member that needs them. (Hand sanitizer stations should be placed around the set including any work space or place that a crew member may be performing work with an emphasis on entrances and exits.)

h. Stock the bathrooms with soap, hand sanitizer, paper towels, toilet tissue, and paper gaskets for toilet seats.

4. **There is a dedicated Hygiene Crew.** The HSM (working with the UPM and/or the Location Manager) coordinates and supervises the Hygiene Crew (which may have multiple arms). They will be responsible for:

   a. Overnight sanitizing of all production spaces, either at the studio or on location. This crew will have access to top-level gear, like fogging systems.

   b. Working with Transportation regarding sanitizing any vehicles (especially cast-related vehicles) used by Production for any purpose.

5. **There is a Security Unit.** The HSM also oversees the Security Unit, which is responsible for:

   a. Keeping outsiders from entering Zone A without a testing clearance.

   b. Providing security for the equipment that is dropped off by vendors for use on set in a staging area for cleaning by the Hygiene Crew.

   c. Other tasks that may arise involving security for cast, crew, locations and equipment.

6. **The Company provides PPE**. Face masks, gloves, goggles, and face shields. The crew can get their PPE at the Medical Checkpoint at the start of the day.

7. **There is consistent monitoring.** Prior to starting and during production:

    a. The Production and Health and Safety team should monitor country, state, and local centers for disease control and implement/communicate local and national regulations.

    b. The Production and the Health Safety Team should research local medical providers/hospitals. What is the access to emergency rooms, respirators and other life-saving equipment? This information should be shared with cast and crew.

8. **Testing considerations.** We also need to think through the effect of false positives. No test is 100% accurate, so a production with 50 people lasting 50 days could have 2500 tests, and a 2% false positive rate means at least 50 awkward at least or real moments of concern. Immediate re-testing would hopefully resolve this, as two false positives in a row is, mathematically speaking, extremely remote. If a cast or crew member does test positive, that person is put into immediate self-quarantine for two weeks, and a second test will be run to confirm or refute the diagnosis. In the event of a discordant result, a third test will be run and the decision on how to proceed referred to the director, producers, and the HSS. Contact tracing will be employed to identify the source of infection and any close contacts within the production. Local health authorities should also be informed to minimize transmission in the world outside the production. Production should be prepared to medically monitor the infected person closely and use all available methods of care.

9. **Compensation for those that test positive.** It is important to emphasize that if a cast or crew member tests positive for COVID-19 or is required to self-quarantine, they will be paid until they can return to work or until their planned work on the project ends, whichever is less. These payments may also be covered by federal, state, and local laws.

10. **Commitment to protocol.** Prior to production the HSS will lead a training discussion with the cast and crew to delineate strategies for reducing risk. The director and producers should be present as an indication that they are committed to the safety of every member of the production team. Every member of the production team will sign an attestation that they have participated in protocol training and committing to the principles and practices described therein.

GROUND LEVEL: IN ACTUAL PRODUCTION

SO CAN YOU WALK ME THROUGH THIS, STEP-BY-STEP?

The following is one example that anticipates the real-world process of using the Zone System.

1. **This is a CLOSED SET**. Absolutely NO VISITORS. All crew must adhere to the Zone System. Limits will apply to producers, writers, studio or network executives and location contacts. Important parties should participate virtually.

2 Union representatives exercising their rights to visit work spaces will be subject to the safety guidelines applicable to the Zone they will be visiting.

3. **Virtual Viewing/Remote Monitors.** As we limit the number of people on the set, the electronic transmission of sound and images must be carefully managed to protect the creative process on the set and at the same time avoid cumbersome procedural delays. The DGA has guidelines which have been negotiated and are part of the Basic Agreement (most recently revised in its 2020 agreement), and we also suggest some preferred practices for use during these extraordinary times.

   On feature films and long form television programs (90) minutes or longer, video assist (including any transmission from the set) may not be used without the director's permission. If the director elects to use video assist, he or she shall determine the number and the placement of the monitors to be used.

   In episodic television, no images or sounds may be transmitted from the stage or control booth without first informing the director. In addition, the continuous, unrestricted electronic transmission of images and/or sounds throughout the workday (e.g., a fixed 'open mike') from the set, stage or control booth to a location outside the production area is prohibited. This includes the unauthorized use of iPhones or other recording devices on the set unless such recordings or transmissions are approved and made for publicity or marketing purposes.

   For intimate scenes, special care should be given to limiting the number and placement of monitors to ensure that only those individuals who would be authorized to be present during the recording of the scene have access to any monitors. The expansion of use of remote monitoring for COVID-19 prevention must not result in an expansion of the number of people with access to monitors during intimate scenes.

4. **Testing prior to Day 1 or after a weekend/break.** This could be the production office, but it is highly recommended that a dedicated room off the stage, a trailer at base camp, or, if numerous cast and crew are sharing a hotel, the mobile unit be utilized.

5. **Shooting hours. We recommend a 10-hour shoot day from crew call to camera wrap.** Limited crew pre-calls and early makeup calls are allowed. Wrap and testing may go beyond those hours. Consider having a rigging crew load in equipment ahead of time. This is all about the effort to maintain good health and strong immune systems. To avoid unnecessary crowding, meals will be staggered or taken during work hours.

6. **Protect performers.** Since performers will not be wearing PPE while performing—unless scripted, of course—it's essential to reduce clusters of crew around them when they are unprotected.

THE PRODUCTION OFFICE

Many of the traditional ways of working in a production office and what the office does will change. This section covers both preproduction and production phases, and most of these guidelines apply if the main production office includes space for the Art Department and/or the Costume Department. Those departments will also have specific requirements.

1. **Office Setup**. Whether rented at an office complex or on a studio lot, deep cleaning and disinfection must be done. There should also be good ventilation.

2. **Cleaning and disinfection** should take place each night by the Hygiene Crew or an outside contractor.

3. **Health and Safety Staff**. The Health Safety Supervisor and the Health Safety Manager are engaged as the offices are being set up. They will arrange with the UPM to schedule the Hygiene Crew hours. The HSS will assign an HSS staff person to the office for testing and daily check-ins.

4. **Testing and Medical Checks**. The testing protocol will begin in pre-production at the production office (or the designated central testing space) and all company facilities. Office staff and crew will check in every day at their start time with the medical person assigned by the HSS.

5. **Safety Briefings and Written Guidelines**. Office staff and new department heads and crew must be given a COVID-19 health briefing on their first day of work. The HSS will give weekly health safety meetings and daily reminders. These will be repeated at other facilities (Costume Department, Art Department & Construction shops) if they do not share the same space.

6. **Health Safety Signage**. Signs will be posted in all facilities reminding crew about physical distancing and practicing good hygiene.

7. **Physical Distancing**. The office should have enough room to separate desks by 6 feet. Bullpen-style work areas should be avoided. It is recommended to have individual or department offices for their exclusive use.

8. **Remote Working**. Reduce the number of personnel that need to work at the office.

9. **Videoconferencing**. This should be the primary method for departmental meetings, director's meetings, casting, location photo reviewing, table reads and production meetings.

10. **In-person Meetings**. If necessary, then there should be ample space to allow physical distancing.

11. **No Visitors**. Visitors should be discouraged from coming to the office. Visitors should not use the bathrooms meant for the office staff and crew, which will require a "visitors only" bathroom.

12. **Security**. The main entrance to the office should have a Security Person posted to stop visitors and check any health I.D..

13. **PPE**. Face masks and face shields should be provided and worn. Gloves, hand sanitizer, and spray disinfectant should be available.

14. **Clean and Disinfect**. Office staff and crew should clean their own work areas every four hours or more frequently if there is concern about contamination.

15. **Computers and Other Electronics** are meant for individual, personal use. Disinfect any items that are shared, like photocopiers, fax machines and landline phones.

16. **Reception/ Delivery Area**. This is where all deliveries—anything that comes from outside—are received and disinfected (including office supplies, mail and packages, food and beverages). The Health Safety Supervisor will work with the HSM and the Hygiene Crew on a disinfection protocol. This duty could possibly be delegated to a dedicated office PA.

17. **Bathrooms** should be disinfected every four hours during the day, or more if they are in frequent use. If in a studio complex, bathrooms must not be shared with other productions. There may be additional protocols in this area based on input from medical experts.

18. **Office Kitchen Area**. The kitchen area must be disinfected frequently during the day. All craft service items should be wrapped, and there should be no open containers of food. Kitchen duty can be assigned to a dedicated office PA.

19. **Paperless.** Scripts/rundowns, memos, call sheets, production reports, schedules and lists should be in digital form, including "sides." If sides are printed, they should be individual use and assigned to a specific individual and clearly watermarked with that individual's name.

20. **Accounting Department.** Ideally paperless. Start work paperwork, contracts, timecards, invoices, etc. should all become digital.

21. **Art Department and Costume Department**. If they have offices that are separate from the main office, they should adhere to the above guidelines regarding their own Reception Delivery area, general hygiene, PPE, physical distancing, bathrooms, kitchen area and no visitors.

22. **Restricted Flow**. Once photography starts, no shooting crew may go to the office and likewise no office staff can go to the set or location—unless tested and designated as Zone A personnel. A dedicated office PA can travel between set and the office but cannot enter the Zone A working area.

PREP

The following provides guidance and considerations for prep activities.

1. **Script/Rundown/Schedule.** Locked scripts should be available at the earliest possible stage of production to allow time for enhanced planning, taking into account restrictions around COVID-19. This will provide a much better chance of mitigating additional costs through comprehensive preparation of the episode or film.

    a. Script/rundown/schedule review would include the show's Health Safety Supervisor, and an epidemiologist or someone versed in public health.

2. **Casting.** Unless otherwise required for a particular reason, use remote casting sessions and callbacks with live broadcast capabilities.

    a. Schedule "live" auditions at spaced intervals to accommodate physical distancing. Make available a waiting place for actors to congregate where physical distancing can apply. If appropriate, they can wait in cars and be called.

    b. Digitally distribute scripts/rundowns/schedules with provisions made for confidentiality, i.e., digitally signed confidentiality agreements.

    c. Consider utilizing app technology that checks an actor in via their phone from outside the casting area and sends the actor a text when it's their time.

    d. Although in-person auditions are discouraged, if an in-person group audition is required, actors should have a partition placed in between them, or at a minimum wear clear face shields, all of which to be provided by the producer.

3. **Persons with Disabilities.** In all of our activities, it is crucial to provide appropriate access for persons with disabilities. This is the law, and we should be doing it anyway, but this takes on an additional element of importance as part of COVID-19 prevention, because productions have, in the past, sometimes relied on personal assistance as a way of avoiding dealing with structural accommodation issues (e.g., having someone help a PWD to access an inaccessible bathroom, etc.). Proper accommodations must be in place to avoid this approach.

    a. Make appropriate plans for access for PWDs. Do not rely on having physical assistance provided by crew.

    b. Minimize any touching of a PWDs assistive devices. If it cannot be avoided, it should be done only with permission of the PWD, and anyone touching such devices must perform hand hygiene before and after, wear PPE, maintain physical distance as much as possible, and wipe down devices after touching them.

c. All hand washing and hand sanitizer stations must be physically accessible for all PWDs, including wheelchair users and little people.

d. Ensure that vehicles used for transportation of PWDs are appropriately equipped to ensure minimal contact between drivers and PWDs (e.g., wheelchair lifts to avoid the need for lifting by drivers, etc.), and to ensure physical distancing can be maintained within the vehicle.

4. **Travel and Housing.** On location, plans and arrangements that take into consideration the health and safety of individuals being transported and housed will be needed. If traveling by plane, cast and crew members must be tested and cleared within 24 hours prior to the flight. They will be tested and cleared again before entering Zone B or Zone A for the first time.

5. **Locations scouting in general:**

   a. Give consideration to size and space when deciding among location options.

   b. Carefully consider the number of locations that need to be director scouted in-person.

   c. Rely more on locations repped by agents (less cold scouting).

   d. Most of the scouting could be done via photo libraries. The Location Manager would do virtual tours of locations once they have been selected for the crew.

   e. If in a people mover, everyone should be practicing physical distancing; masks, gloves, etc.

   f. Consider renting multiple vehicles to allow distance between seats.

   g. Consider using walkie-talkies during scouting.

   h. Sites must be treated as if they were infected (unless they were disinfected ahead of the scout) and the crew must use PPE accordingly.

   i. Permit applications and location contracts should go in as early as possible.

   j. Greater care than usual must be taken in populated neighborhoods. Neighbors may have a diminished appetite for a film crew.

   k. Acquiring signatures will be difficult logistically.

   l. Provide alternative lodging to house occupants for the duration of the shoot (they should not be permitted to enter during span of production).

   m. Board animals.

   n. Provide plenty of space for lunch.

o. Consider logistical and safety challenges of a location:
    i. Is the location used by other people? Is it open to the general public?
    ii. Can exclusive use of work areas be arranged for prep and shoot?
    iii. Can it be thoroughly cleaned before all work commences?
    iv. If residential, is the location inhabited?
    v. Are any residents in a vulnerable category?

p. Locations would need to be booked long enough before their shoot day for the Art Department to dress them and then seal them up for quarantine if required.

q. Consider permitting backup locations in the event that a location pulls out or otherwise becomes unavailable.

r. Locations could be selected in clusters to limit base camp moves as little as possible.

6. **Tech Scout:**

a. Schedule the tech scout as early as possible, participants must be tested.

b. Digitally distribute tech scout packets.

c. While at location, have as much conversation outside as possible. To avoid overcrowding, those on the Tech Scout should maintain physical distance.

d. Try to maximize space and air flow when designating spaces for a shoot (video village/truck/control room, lunch, equipment staging, placement of monitors, etc.). Consider whether you will have to relocate any of these areas at some point during the day, in order to accommodate different camera positions.

THE START OF THE SHOOT DAY

There are many possible types of shoot days, with sets at the studio or on location. Those locations could be urban, suburban, or rural, interior or exterior. Shooting could be at dawn, day, or night. With all the differences in places or start times, the system laid out can be adjusted accordingly.

1. **Transportation to Location or Crew Parking**. Self-drive, report-to locations are easier to deal with. At this moment in time, Crew and Day Players will be discouraged from taking public transportation if in an urban area. Production should make efforts to provide transportation and self-drive rental cars. In some cities, multiple convenient departure points for company transportation could be provided. The AD staff should list all cast members that might need car service pickups and crewmembers with any special needs. Once you are riding in company transportation, you have entered Zone B, and physical distancing must be adhered to.

2. **Transportation from Crew Parking to Location or Cast Base Camp**. Anywhere that Crew Parking is provided becomes an entry into Zone B and will require a Medical Checkpoint. Again, once you are riding in company transportation, you're in Zone B and physical distancing must be adhered to. Crew Parking must be secured from the general public, including any owners or attendants.

BASE CAMP

The following provides guidance and considerations for base camp activities.

1. **Cast Base Camp start time requirements**. Upon arrival, cast and crew must report to the Medical Checkpoint. They will be met by a medic to receive any PPE. ID badges must be worn. There will be trash cans for biohazardous materials disposal.

2. **Cast vehicles and the hair, makeup, and costume spaces have been sanitized overnight.**

3. **Reception/Delivery Area.** The Unit Department should set up an area, preferably outside the Base Camp, where any deliveries by a vendor including additional food supplies for the caterer may arrive. It's a disinfecting area. A suggestion regarding equipment: Whenever possible, try to minimize the coming and going of new equipment making using run-of-show deals.

INTERIOR LOCATION OR SET

The following provides guidance and considerations for interior location or set activities.

1. **Crew Arrives at Truck Parking/Tech Basecamp**. This is Zone B. Sometimes trucks are adjacent to the location and at other times they can have their own parking lot that is still a long walk or short drive away. If in a public area, the Tech Basecamp must be cordoned off and secured by a Security Team. If it is in a parking lot or on a studio lot, it must be secured to prevent any outsiders from mingling with the crew or equipment. In either scenario, the crew must report to the Medical Checkpoint. They will be met by a medic and receive any PPE. ID badges must be worn (possible combination of a general crew badge and daily COVID status badge). There will be trash cans for disposal of Hazardous Materials.

2. **Breakfast**. A boxed breakfast should be made available. Breakfast Catering cannot be on the street in an urban area. Food is always covered. There is no self-service. It must be monitored by the catering staff and the Unit Department.

3. **Craft Service** cannot be on the street in an urban area and instead should off-load from their truck and load interior. In a controlled studio lot, location or parking lot, they can remain in their truck. Food and snacks are always wrapped, and the area must be monitored by the craft service department and the Security Unit.

4. **Catered Meals and Craft Service are touchless.** Meals are boxed and/or wrapped. There should be a place close to set where crew members can eat and maintain PD. There must be a system for those people with allergies and food restrictions to receive their own boxed lunch. Whenever possible, stagger lunch times to reduce crowding.

   a. Cast members will be given a chance to eat the catered meal with appropriate physical distancing. Food options from outside Zones A and B cannot be provided, but they should feel free to bring their own food. Actors and staff who are at the Cast Base Camp will have lunch brought to them in a place where they can eat and maintain PD.

   b. Background performers will also be provided the catered meal and a place to eat and maintain PD.

5. **Load In or commencement of lighting.** After the Medical Checkpoint, the crew may start working in Zone B. Crew might be loading in to the interior or lifting equipment onto stake beds to be moved. The equipment should be sanitized by each department.

6. **Access to bathrooms must be maximized**. If in an urban setting, the use of private property (other homes or apartments) requires attention to sanitation. Zone A personnel must have access to a Zone A only bathroom. Any hand-drying air blowers should be deactivated and replaced with single use paper towels.

7. **Reception/Delivery Area.** The Unit Department should set up an area, preferably outside the location, where any deliveries including equipment from a vendor may arrive. It's a disinfecting area.

8. **Space.** It should be assumed that the production will need more stage space than normal, to accommodate protocols.

   In a theater or soundstage environment, each department will need a work space or holding area large enough to allow for safe distancing. Some departments will need this space closer to the stage then others, but this would become "home base" for each department. The DGA team will determine what department needs quicker access to the stage or shooting area and designate "home base" areas accordingly.

   Set design and pre-production planning should take into account the number of crew members in each department and designate the space needed for them to work safely and have a "home base" to return to. Set design should allow for fire lanes in all backstage spaces to double in size to allow for crew holding.

   Television control room/truck workstations as well as green rooms might need to be reconfigured to allow for safe distancing (when not possible, plexi dividers installed or remoting some positions to help create a safer work space for all).

THE ZONE A SET

An actor waiting area is sanitized and apart from the crew. For scenes of elevated physical intimacy, perhaps explore CEPHEID testing for on-the-spot results to give performers added security.

Obviously, there will not be a customary or traditional video village. Monitor requirements and access should be organized by necessity and preference (some directors may want a handheld monitor close to the performers, etc.), with an emphasis on minimal crowding and sensitivity to issues surrounding the broadcasting of video signals.

The background performers holding area for small scenes should be as close as possible with adequate bathrooms and hand sanitizer, etc. All background performers changing areas should be organized for single person occupancy, not group changing areas.

Equipment staging areas are as normal. Whenever there is any downtime, equipment should be cleaned.

As described earlier, the Unit Department has placed the hand washing and disinfecting stations per the 1st AD/Key SM and Health Safety Supervisor. They post health reminders around the outside of the set.

HOW THE SET RUNS

The following provides guidance and considerations for the daily running of the set.

1. **There is always a daily Safety and Health Safety Meeting** run by the 1st AD/Key SM with the help of the Health Safety Supervisor. Regular safety meetings for specific action throughout the day will be organized as is already the norm. Health specific safety reminders will also be given. Posted signs will reinforce health advice throughout the location (posted by Unit Department).

2. **Director and DP arrive and call for a rehearsal**. This should be timed for the cast to be totally ready to work on camera. Whether or not a rehearsal is needed must be determined the night before, and when possible rehearsals should take place the night before, since it will be a major adjustment in set operations once the cast arrives on set. This could be at the crew call or part way through the lighting process, but the actors should be ready. Whenever possible, rehearsals should be scheduled to be done so performers can wear PPE.

3. **Cast Travels to Set.** On a day-to-day basis it should be determined if cast can remain on set. If there hasn't been any lighting prior to their arrival or if there is a great deal of lighting to be done, it should be determined the night before and the cast call times should be adjusted. All hair and makeup should be considered part of Zone A, and steps taken to minimize the distance cast members have to move after hair and makeup (and therefore without PPE). Hair, makeup, and costume departments should try to have one member of their department cover the set while the remainder of their crews wait at Cast Base Camp. This is subject to any particular actor's needs or the resources of the Company. Note that performers should be provided, and use, whatever PPE may be possible under the circumstances, for example, handheld face

shields while moving about the set after hair and makeup are done, or when physical distancing cannot be maintained.

4. **The process of rehearsal, lighting and shooting are basically the same as always with some exceptions**.

   a. Sanitizing the set happens between setups if necessary, depending on crew and cast activity.

   b. Minimize the consumption of actual food and drink in the scene as much as possible. When actual food or drink must be consumed, provide multiple identical food and drink setups to reduce or eliminate touching of food and drink by crew. All food and drink must be handled in compliance with the safety protocols for cast and crew meals.

   c. Crew can work near each other assuming they are wearing PPE, though appropriate physical distance should be maintained whenever possible. The important thing is to minimize crowding. If shooting in a small place, the departments should take turns doing their work, coordinated by the 1st AD/Key SM.

5. **Going through the work, shot by shot.** The 1st AD/Key SM, with the DP, manages the crew work on each setup in order to minimize overcrowding. Again, departments may need to take turns on set. Complete reverses that require walls or furniture being moved will need extra time. Cast will retreat to their safe waiting area. This is not much different than what happened pre-virus, but with some added time for caution.

6. **The company changes sets within a location**. Everything above is adjusted to a new Zone A. Waiting and holding areas may have to shift to a new place. The movement of people should be coordinated by the Assistant Director or Stage Manager staff. The Unit Department must have enough hand washing and sanitizer stations to be able to make a mini-move. Cast should leave the location (e.g., go to personal trailer) or be placed in a secure, sanitized waiting area to wait.

7. **Company Moves**. This will be a slow process and if possible, it should be avoided when scheduling the project. In any event, the next location has been sanitized by the Hygiene Crew, including bathrooms. The Unit Department has gone ahead to install the hand washing and disinfecting stations.

   a. Cast should leave the first location and return to Cast Base Camp or be placed in a secure, sanitized waiting area if not needed for rehearsal immediately at the previously sanitized second location.

   b. The organization of the second location is the same as the first location as regards the Zone System security, sanitation, parking, and the setup of support by the Unit Department.

THE END OF A SHOOT DAY

The following provides guidance and considerations for end of shoot day activities.

1. **The cast and crew are tested by the end of the workday, per the production's testing schedule.** Tests will be given under the supervision of the Health Safety Supervisor and the medical team. Tests can be given earlier than the official camera wrap to performers/crewmembers who have downtime during the day or who have been dismissed earlier. The Medical Checkpoint should be moved close to set for this purpose. There could be one each at the Tech Base Camp and the Cast Base Camp. The Health Safety Supervisor coordinates with the AD and Transportation departments to get the completed tests to the lab. There will be a plan in place for the results by the UPM in consultation with any individual that tests positive and their Department Head. A prompt notification must be made to cast and crew who have been or may have been exposed to an individual who has tested positive, without disclosing the identity of the individual. For transparency, the existence of a positive test result should be shared with all cast and crew, again without disclosing the identity of the individual.

2. **It is the responsibility of every crewmember to be tested before leaving on the scheduled test day(s)**. This will be the case even if there is available testing with rapid on-site results.

3. **Wrap**. The AD/SM staff will keep a secure area at the set for wrap. The Unit Department and security will continue to keep a secure, cordoned off area at the Tech Base Camp until the last truck leaves the site. The same goes for the Cast Base Camp. The crew must maintain Physical Distancing with the public.

4. **Again, new daily crew and new cast members must be tested in advance**. In cases where travel is involved, testing happens before traveling, then again before physical engagement within 24 hours of engaging with Production. A reminder this includes **all** new cast and crew.

5. **Base Camp facilities.** Cast trailers and the hair, makeup, and costume vehicles must be sanitized each night under the supervision of the Unit Department.

6. **Travel Home**. Zone A and Zone B personnel should travel in personal vehicles or sanitized vehicles from Transportation.

EXTERIOR LOCATIONS

All the previously mentioned protocols for travel, arrival, and the start and end of the day are the same.

1. **No Visitors, even outside.** Maintain a footprint as small as possible with space for physical distancing. No customary video village as described before. Producers, Agency and Client are involved virtually when required.

2. **Cast Base Camp and Tech Base Camp** plan is the same. Security cordons, Medical Checkpoints and breakfast catering remain the same.

3. **Area of the Set**. The Unit Department in conjunction with the Location Department will place and maintain hand washing and disinfecting stations. Bathrooms should be sufficient and maintained.

4. **Working among the public**. Whether it's a busy urban area, or a suburban area, the crew and cast are in proximity to the public. There should be a security cordon for the immediate area where the cast and crew are working. Production people doing crowd control or clearing the public out of the shot must wear a hi-viz vest, Sam Browne belt (safety patrol) or some other way of identifying themselves. Full PD measures are required to deal with the public (masks, gloves, goggles/glasses); civilians should be shown area where they can be out of the way.

5. **Possible new daily personnel and equipment**. New crew members are tested and cleared within 24 hours of physically joining production. Equipment coming from an outside vendor (like a crane) should be sanitized by the vendor before it's picked up, sanitized again by the shooting crew.

6. **Maintain the integrity of Zone A**. All cast and crew must be cautioned to stay away from the public and obey all Zone A health and safety directions.

7. **Lunch**. If possible, do hot, boxed lunches while outdoors. Otherwise, break for a half hour in a controlled catering space that allows for physical distancing.

8. **Wrap.** As described before but populated urban locations will need added caution for security. Equipment movement and movement of people will have to be done in a step-by-step, orderly, protected fashion.

9. **Testing**. Same as above. The Medical Checkpoint should be close to set. Then go back to your home or hotel, stay safe, and get ready to do it all again tomorrow.

Lastly, a reminder that Zone C, the outside world, is the most likely source of infection in Zones A and B. Diligence away from work is critical, especially when it comes to cell phone handling. When working on location, make sure cast and crew are equipped with disinfectant wipes for hotel and motel electronic devices and surfaces.

IN CONCLUSION, AGAIN

Inclusion. With resources for production likely being scarce (as costs rise due to new protections), we must all ensure that groups making strides (women, people of color, persons with disabilities, etc.), do not see backsliding in hiring practices.

Distant Locations. What kind of special protocols or modifications may be necessary for production occurring in remote areas or outside the United States?

In closing, we understand what a sea change this will be for production. But while films and television shows are important, they do not trump the importance of getting the people who make them safely home to their families or loved ones. As you can see from this document, we are willing to go to great lengths to ensure a safer environment for all of us.

We hope you are as well.

Stay safe. Keep the faith.

PART FOUR: DEPARTMENTAL CONSIDERATIONS

There are excellent department-specific guidelines from multiple sources including the Industry-wide Safety Committee about best practices which we consulted when researching this document. More details and specific protocols will be forthcoming from the Unions. Therefore, this section is not intended to be an exhaustive list of duties or recommended actions for each and every category. We looked specifically at the testing protocols and the Zone System and areas where the Unions' members have the most interaction. We consider the following ideas as preliminary guidelines - which each production department will have to consider and adapt to their specific needs.

Each production shall have a specific COVID-19 safety plan to be coordinated with this and other industry guidelines. Such plan shall cover each set, location, and any place a member of the production crew may work. This plan must be provided in writing to every crew member upon their employment prior to such person starting work and must also include contractors, vendors, guests (when approved), suppliers and executives.

Actors/Performers

1. Consider on-set rapid testing up to 1-12 hours (the shorter the better) prior to intimate scenes, fight/stunt scenes, or scenes involving extreme exertion (e.g., dancing) for actors'/performers' security.
2. Actors/performers may benefit from extra tender loving care. Remember, they have to give an on-screen performance in the midst of all this.
3. Background holding areas must be larger than customary to accommodate physical distancing.
4. When electronic sign-in is not available, provide one pen for each Actor/Performer to execute paperwork—and not to be shared.

Stunts

1. Stunt Coordinator should discuss with 1st AD/Key SM and Health Safety Supervisor how new protocols will impact the stunt department. The Stunt Coordinator, Stunt Doubles and key Stunt personnel and Stunt Riggers—those who interact with anyone working without PPE or physical distancing—must be tested for Zone A.

Assistant Directors/Stage Manager

As members of Zone A, the AD/SM team will have added duties during the COVID period. Here are only some of the ways the work would be slightly different:

1. The 1st AD/Key SM, conferring with the UPM and Line Producer, will keep all the guidelines in mind when scheduling any project.
2. The 1st AD/Key SM will work with the HSS to implement the guidelines and remind the crew about safe practices especially Physical Distancing and run the set being mindful of overcrowding.

3. The Key 2nd AD will need to schedule and monitor the traffic of crew and cast in the Cast Base Camp, especially at the start of the day.
4. The Key 2nd AD will help facilitate the testing process for Cast Members and Background Performers.
5. The Key 2nd AD will work with the Production Office and Transportation about special transportation needs for cast and crew.
6. The 2nd ADs/Key SM will coordinate with the Unit Department about needs for any changing and holding area as well as the on-set waiting area for principal cast.
7. The 2nd ADs/Key SM will follow the guidelines when moving Cast members and Background Performers from and to Cast Base Camp and Background Holding.

Locations Department

The Location Manager, ALMs and scouts are Zone B personnel. In pre-production, Scout will find locations in person but show-and-tell and meetings should be virtual.

1. Interior Locations:
   a. Plan to have space around the potential set for breathing room, equipment staging and physical distancing.
   b. Consider—more than ever before—minimizing major company moves. Offer wise choices.
   c. Ventilation is a priority.
   d. Spaces for actors/performers and staff from Zone A need to be found. “Satellite” holding for background performers must be as close as possible, and with space and ventilation.
   e. Work with the Unit Department to facilitate special COVID needs.
   f. The Location deal will require more days for “Set Quarantine” or Commercial Disinfection.
   g. Ask Location owners to remove personal items or arrange it with them
   h. Do not touch items native to a location while scouting (also the art department and all crew)
2. Exterior Locations:
   a. Consider space around the potential set for breathing room, equipment staging and social distancing.
   b. In urban areas, consider the flow of the general public around trucks, staged equipment, and access to the location. Can the public be re-directed in order to prevent mingling with the cast, crew and equipment?
   c. Will require all the ancillary spaces described above.
   d. Some exterior locations may require Commercial Disinfection.

Catering

1. In the Zone System, catering would be a part of Zone B. **No Guests**.
2. Catering Staff & Craft Service will be required to wash their hands at least every 30 minutes.
3. Catering Staff & Craft Service will be required to wear gloves and masks at all times.
4. Food will be served to the crew, as opposed to self-serve. No communal containers, salad bar, etc.
5. Food that has been freshly cooked by catering should be covered when not served.
6. Boxed meals are recommended.
7. Wrapped Utensils should be handed out individually.
8. Catering/Dining Rooms must be spacious (if breaking) and have good ventilation.
9. If breaking for lunch, consider staggering breaks to allow for less cramped dining areas.
10. A hand washing station must be near the catering line or at least in the dining room.
11. Production may consider not providing fully catered meals and instead operate similar to takeout—offering crew meal choices in the morning and then delivering those meals to each individual department.
12. Some cast and crew may prefer to bring their own food.
13. Even when boxed lunches are served, the caterer must accommodate food allergies and restrictions.

Craft Services

1. Only buy individual, prepackaged portions--no communal bowls or canisters of snacks to reach into. Alternatively, make and wrap small portions—nuts, fruit etc.
2. Everyone must wash their hands before entering the craft services area.
3. Table should be set up so that people can take individual portions and only touch what they are taking.
4. Craft services should have capability to refill an individual's personal reusable water bottle without contact between refill source and a bottle.
5. Use disposable cups at 5-gallon water dispensers or use individual, single service water bottles, using environmentally friendly options to the extent possible.
6. Install foot-operated water dispensers.
7. Reduce and streamline variety of beverages. Have samples on display for a crew member to request. No one should be reaching into an ice cooler for beverages.
8. With reduced craft services offerings, Craft Services can help Unit Department cleaning and maintaining supplies for wash stations and sanitization.

Video Assist and Playback

1. There will be no room for a typical “Video Village” for crew to watch video assist. This is to avoid physical distancing issues.
2. The Director and the Script Supervisor will each have a dedicated monitor.
3. The Director must have a wireless monitor as an alternative video source.
4. Key Crew should be able to use wireless monitors or Q-Take.
5. The individual(s) who set up and handle the monitors should be in Zone A, due to working proximity with the director, the DP, and the script supervisor. All other video personnel may be Zone B.

Visual Effects

1. If the project is determined to be VFX heavy, there will be an On Set VFX Supervisor for the run of show.
2. If not VFX heavy, then there will be a Remote VFX Supervisor who can advise the director/cinematographer on how to set up limited VFX shots as needed.
3. VFX will be performed by shops set up for remote work.

Walkie Talkie/PL & Headset Protocols

1. One of the Set PAs should organize and sign walkies to the crew.
2. Walkies/PLs should be disinfected and individually bagged and handed to the user.
3. Do not share walkie talkies.
4. Replacement batteries must be disinfected in between uses, bagged, and handed to crew as needed
5. If a set cell phone ban is enacted, the production may require additional walkie rentals.
6. Headsets should be provided to enable quiet, detailed conversation on set without the need for close contact or a huddle.
7. Headset battery changes are usually required once a day. A dedicated PA should manage a charging station, and ensure all batteries are disinfected before being handed over.

Additional Protocols to be Developed

The Unions agree that this paper will need to be further supplemented with detailed protocols, including those relating to protection of performers and others working without PPE and/or physical distancing.

CONSULTANTS:

For Directors Guild of America

W. Ian Lipkin, MD

Lipkin is internationally recognized for his contributions to global public health through the innovative methods he developed for infectious diseases diagnosis, surveillance, and discovery. Most notably, he had the first use of subtractive cloning in microbial discovery, the first use of next generation sequencing for investigating outbreaks, and developed gene capture technologies including VirCapSeq-VERT and BacCapSeq as well as multiplexed serological assays to detect vector-borne diseases. These advances have been critical in replacing culture-dependent methods of global health management by creating new criteria for disease causation and de-linking spurious associations between putative agents and diseases. Such examples include refuting the MMR vaccine having a role in autism and XMRV in ME/CFS. Lipkin has been at the forefront of outbreak response to many of the world's recent outbreaks, including West Nile Virus in NYC (1999), SARS in China (2003), MERS in Saudi Arabia (2012-16), Zika in the US (2016), encephalitis in India (2017), and COVID-19 (2020). He promotes public health awareness via print and broadcast media and also served as the scientific advisor for the Soderbergh film "Contagion". Some of his most prestigious honors include Pew Scholar (Biomedical Sciences), Walter Reed Distinguished Lecturer, the Drexel Prize in Translational Medicine, the Mendel Medal (Villanova University), the International Science and Technology Cooperation Award of the Peoples Republic of China, and a recipient of an award of appreciation given by the Chinese government in the 70th anniversary of the People's Republic of China for his service to the country during the SARS epidemic along with the subsequent scientific support he has given since. He is the Director of the Center for Solutions for ME/CFS, the Director for the Center for Research in Diagnostics and Discovery, and the Director for the Center of Infection and Immunity with the Mailman School of Public Health at Columbia University.

Larry Brilliant, MD, MPH

Dr. Larry Brilliant is a physician and epidemiologist, CEO of Pandefense Advisory, and Chair of the Advisory Board of the NGO Ending Pandemics. He is also a senior advisor to Jeff Skoll and serves on the board of the Skoll Foundation. Dr. Brilliant was previously the president and CEO of the Skoll Global Threats Fund, vice president of Google, and the founding executive director of Google.org. He also co-founded the Seva Foundation, an NGO whose programs have given back sight to more than 5 million blind people in two dozen countries. In addition, he co-founded The Well, a progenitor of today's social media platforms. Earlier in his career, Dr. Brilliant was a professor of epidemiology and international health planning at the University of Michigan. Dr. Brilliant lived in India for nearly a decade where he was a key member of the successful WHO Smallpox Eradication Programme for SE Asia as well as the WHO Polio Eradication Programme. More recently, he was chairman of the National Biosurveillance Advisory Committee, which was created by presidential directive of President George W. Bush, he was a member of the World Economic Forum's Agenda Council on Catastrophic Risk, and a "First Responder" for CDC's bio-terrorism response effort. Recent awards include the TED Prize, *Time* magazine's 100 Most Influential People, "International Public Health Hero," and four honorary doctorates. He has lectured at Oxford, Harvard, Berkeley and many other colleges, spoken at the Royal Society, the Pentagon, NIH, the United Nations, and some of the largest companies and nonprofits all over the world. He has written for Forbes, the *Wall Street Journal*, the *Guardian*, and other magazines and peer reviewed journals and was part of the Global Business Network where he learned scenario planning. Dr. Brilliant is the author of *"Sometimes Brilliant,"* a memoir about working to eradicate smallpox, and a guide to managing vaccination programs entitled *"The Management of Smallpox Eradication."*

Baruch Fischhoff, PhD

Dr. Baruch Fischhoff is a world-renowned expert on decision and risk analysis. He is Howard Heinz University Professor in the Department of Engineering and Public Policy and the Institute for Politics and Strategy at Carnegie Mellon University. Dr. Fischhof is an elected member of the National Academy of Sciences and National Academy of Medicine and currently serves on its COVID-19 committee. He has chaired the Food and Drug Administration Risk Communication Advisory Committee and been a member of the Eugene (Oregon) Commission on the Rights of Women, the Department of Homeland Security Science and Technology Advisory Committee and the Environmental Protection Agency Scientific Advisory Board, where he chaired the Homeland Security Advisory Committee. He is past president of the Society for Judgment and Decision Making and the Society for Risk Analysis and has received awards for his intellectual contributions and teaching excellence. Dr. Fischhof's 13 books include *Acceptable Risk, Risk: A Very Short Introduction*, and *Counting Civilian Casualties*. He is a graduate of the Detroit Public Schools, Wayne State University (BS, mathematics, psychology), and the Hebrew University of Jerusalem (PhD, psychology).

Jeffrey Shaman, PHD

Jeffrey Shaman, PHD, is the Professor, Mailman School of Health Environmental Health Sciences (in the International Research Institute for Climate and Society/Earth Institute); Director, Climate and Health Program and focuses on climate, atmospheric science and hydrology, as well as biology, and studies the environmental determinants of infectious disease transmission and infectious disease forecast. For the former, Dr. Shaman investigates how hydrologic variability affects mosquito ecology and mosquito-borne disease transmission, how atmospheric conditions impact the survival, transmission and seasonality of pathogens, and, how meteorology affects human health, in general. For the latter, he is engaged in developing mathematical and statistical systems for generating forecasts of infectious disease outbreaks at a range of time scales. In addition, Dr. Shaman is studying a number of climate phenomena, including Rossby wave dynamics, atmospheric jet waveguides, the coupled South Asian monsoon-ENSO system, extratropical precipitation, and tropical cyclogenesis. PhD, 2003, Columbia University; MA, 2000, Columbia University; BA, 1990, University of Pennsylvania.

For SAG-AFTRA

Jonathan Fielding, MD, MPH, MBA

Jonathan Fielding is a Distinguished Professor of Health Policy and Management and of Pediatrics in the Schools of Public Health and Medicine at UCLA. Previously, he served for 16 years as Public Health Director and Health Officer for Los Angeles County, and earlier as Massachusetts Commissioner of Public Health. He has been involved in public health preparedness and response to Ebola, Swine Flu, anthrax, HIV and COVID-19.

Dr. Fielding served as a founding member of the U.S. Clinical Preventive Services Task Force and, for 17 years, as Chair of the U.S. Task Force on Community Preventive Services. He chaired the Advisory Committee for the U.S. Healthy People 2020 objectives and Co-Chaired the Healthy People 2030 objectives. He is an elected member of the National Academy of Medicine.

Dr. Fielding founded the UCLA Center for Health Advancement, which models policies and programs to cost-effectively improve health and health equity and also researches waste in medical care. He has authored or coauthored more than 300 original articles, commentaries, editorials and

chapters on various aspects of public health, preventive medicine, and health services. He is the longstanding editor of the Annual Review of Public Health and currently writes a monthly opinion column on health issues for The Hill.

Dr. Fielding holds MD, MPH, and MA degrees from Harvard University and an MBA from the University of Pennsylvania. His honors include the UCLA Medal, the Sedgwick Medal, and the Roemer, Fries and Porter prizes, as well as honorary doctorates. The UCLA Fielding School of Public Health is named for him and his wife Karin.

Mark Katchen, MS, MBA, Industrial Hygienist

Mark Katchen is the Managing Principal for The Phylmar Group, Inc. with expertise in industrial hygiene, toxicology, occupational health, risk communication, professional ethics and sustainable supply chain practices. His consulting expertise includes helping organizations optimize the EHS/Sustainability function by focusing on mission alignment, resource allocation and utilization, business process improvement, and demonstrating the value of EHS/Sustainability to the organization. He also has extensive litigation support expertise having testified in numerous cases involving a wide variety of chemical and biological agents.

He received his B.A. in Psychobiology from UCLA, M.S. in Environmental and Occupational Health from California State University, Northridge, and M.B.A. from Loyola Marymount University. He is a Certified Industrial Hygienist. Mr. Katchen has more than 35 years of experience in occupational and environmental exposure assessment in a variety of industries.

Mr. Katchen has taught at the University of California, Los Angeles and Irvine campuses. He also serves on the California State University, Northridge Department of Environmental and Occupational Health Advisory Board. He is a past chair of the American Industrial Hygiene Association's International Affairs Committee, current Scholarship Committee Chair for the Occupational Hygiene Training Association and is past Chair of the AIHA's Joint Industrial Hygiene Ethics Education Committee. Mark is also an AIHA Distinguished Fellow and Lecturer who frequently speaks to business and academic groups on environmental risk assessment, management, communication, ethics and sustainable business practices and is the author of several published technical and business-related articles.

Monona Rossol, MS, MFA, Industrial Hygienist

Monona Rossol was born into a Vaudeville family, began working as a professional entertainer at age three, and continues to perform occasionally to this day. She has a BS in Chemistry with a minor in Math, an MS and MFA with majors in art and a minor in music. Monona worked seven years as a research chemist for the University of Wisconsin and a year with an industrial research laboratory. From 1977 to 1987, she practiced industrial hygiene at the Center for Safety in the Arts in New York, a group which she co-founded. In 1987 she founded Arts, Crafts, and Theater Safety (ACTS) for which she works today. She has been a full professional member of the American Industrial Hygiene Association since 1984. Since 1995, she been a Safety Officer for Local USA829, United Scenic Artists, IATSE. In 2017, she was retained as Safety Consultant for SAG-AFTRA. She has been the safety consultant in the planning of over 80 buildings specifying ventilation and safety features. She has three architectural awards for environmental planning and in 2020 she became a member of the ACGIH Committee on Industrial Ventilation. She has consulted in the US, Canada, Australia, England, Mexico, Portugal, the Netherlands, and the United Arab Emirates. She has written nine books, one of which won a 1996 Choice Outstanding Academic Book Award from the Association of College and Research Libraries. Two of these books are used as college texts today.

For IATSE

David Wegman, MD

David H. Wegman is a physician- epidemiologist who has been involved in academic research and teaching related to occupational health, initially at the Harvard and UCLA schools of public health before building the Department of Work Environment at University of Massachusetts Lowell. He subsequently served as founding Dean of the School of Health and Environment at Lowell. His research originally focused on work-related risks for lung disease, cancer, musculoskeletal disorders, and injuries and has continued in areas related to occupational health surveillance and occupational health policy. Since 2014 his major work effort has been with the La Isla Network directing studies of etiology and intervention effectiveness for Chronic Kidney Disease of Unknown Origin (CKDu) in El Salvador and Nicaragua. A current doctoral student is studying heat stress and kidney disorders among construction workers in Saudi Arabia. Since 2018 he has been a participant in the CURSOR/KIROS projects on Precarious Employment and in 2019 he joined as a participant in the Precarious Work Research (PWR) consortium. Current appointments are as Emeritus Professor at UMass Lowell and Adjunct Professor at the Harvard School of Public Health. He is also a member of the Board of Directors of the Alpha Foundation for Improving Mine Safety and Health and he teaches an advanced graduate course to public health students at Harvard.

He is co-editor with Dr. Barry Levy of one of the standard textbooks in the field, Occupational Health: Recognition and Prevention of Work-Related Disease, 7th Ed 2017. the seventh edition of which will be published by Oxford University Press in October 2017. Dr. Wegman's professional engagement has included service on the Executive Board of the International Epidemiological Association and on the Board of Directors of the International Commission on Occupational Health. He was named a National Associate of the National Research Council in 2002 and has been an active participant or chair for a number of National Academy of Science (NAS) expert panels, most recently as a member of the Committee on Developing a Smarter National Surveillance System for Occupational Safety and Health in the 21st Century.

Dr. Wegman received a BA degree at Swarthmore College and his MD and MSc at Harvard University. He has been a Fulbright Senior Fellow and received Lifetime Achievement Awards from the Occupational Health and Safety Section, American Public Health Association and International Commission on Occupational Health's EPICOH for outstanding contributions to occupational epidemiology.

Gregory R. Wagner, M.D.

Dr. Gregory Wagner is the Adjunct Professor of Environmental Health Harvard T.H. Chan School of Public Health. Throughout his career, Dr. Wagner has provided organizational leadership at the intersection of scientific research and public health policy, both nationally and internationally. Until 2017, he worked at the U.S. National Institute for Occupational Safety and Health (NIOSH), where he was senior advisor to the director of NIOSH, directed the Division of Respiratory Disease Studies (including a period overseeing the testing and certification of Personal Protective Equipment (PPE), led the process creating a National Occupational Research Agenda, and developed and led the WorkLife Initiative, seeking to better understand and promote policies and workplace practices that support worker health, safety, and wellbeing.

Wagner interrupted his work at NIOSH to serve as Deputy Assistant Secretary of Labor for Mine Safety and Health from 2009 to 2012 during the Obama Administration, where he led efforts to develop and enforce regulations protecting U.S. miners and played a primary role in responding to the worst U.S. mining disaster in 40 years.

Wagner has worked closely with both the World Health Organization and International Labour Organization and has served on numerous expert committees nationally and internationally. A physician, Dr. Wagner is board-certified in both internal and preventive medicine (occupational health). He has practiced rural primary care medicine and taught both medicine and public health. Wagner received his BA from Harvard University and his MD from Albert Einstein College of Medicine.

At Harvard, Dr. Wagner teaches about the science behind occupational and environmental policies and regulations, and the process of improving health protections at work. At Harvard he also serves as Senior Advisor to the Center for Work, Health, and Wellbeing, and is an Affiliated Scientist with the Harvard Center for Health and Happiness working to understand the relationships between working conditions and workers' ability to thrive.

Dr. Wagner has published widely in the areas of screening and surveillance, prevention of disease and injury from work, and workplace programs and policies supporting worker and enterprise health, safety, and wellbeing.

Letitia Davis, ScD Ed M

For over 30 years, Dr. Davis served as director of the Occupational Health Surveillance Program (OHSP) in the Massachusetts Department of Public Health. As director, she worked to develop the state's capacity to track work-related injuries and illnesses and to use surveillance findings to promote prevention to improve the safety and health of Massachusetts workers. She oversaw development of multiple occupational health surveillance systems including the Massachusetts Occupational Lead Registry, a comprehensive surveillance system for fatal occupational injuries, the Massachusetts Sharps Injury Surveillance System, a surveillance system for work-related asthma, a model surveillance system for work-related injuries to young workers, and case-based surveillance and follow-up of work-related amputations, burns and acute chemical poisonings. She has conducted numerous surveillance research studies exploring use of existing public health data sources to document work-related health problems, and has a special interest in better understanding the needs of underserved worker populations. At OHSP, she was also responsible for the development of and implementation of prevention initiatives to address identified occupational health problems and served as advisor to the Department leadership on matters of occupational health policy. From 1998 through 2015 Dr. Davis was a lead consultant in occupational health to the Council of State and Territorial Epidemiologists (CSTE), working on the national level to promote integration of occupational health into public health practice in the states. She is a past member of the Board of Scientific Counselors of NIOSH and the Advisory Committee to the Directorate of Construction in OSHA. She has also served on a number of National Academy committees, including a recent panel on smart occupational health surveillance in the 21st century. Since her retirement from OHSP in June 2019, she continues to work, consulting on both local and international epidemiologic studies of work and health and advising worker advocacy organizations. She is currently active in CSTE's efforts to improve public health surveillance of COVID-19 in the workforce and protections for working people. Dr. Davis received her doctorate in Occupational Health from the Harvard School of Public Health in 1983.