The Cal/OSHA Aerosol Transmittable Disease (ATD) standard was adopted in 2009 to protect employees who are at increased risk of contracting droplet and airborne spread infections due to their work activities.

The standard is codified in title 8 of the California Code of Regulations, section 5199.

Section 5199 defines an aerosol transmissible disease as a disease for which **droplet or airborne precautions are required**, as listed in Appendix A of the Standard. These diseases can be transmitted by infectious particles or droplets through inhalation or direct contact with the mucous membranes of the eyes or respiratory tract.
ATD Standard Content

(a) Scope and Application
(b) Definitions
(c) Referring Employers
(d) Aerosol Transmissible Diseases Exposure Control Plan
(e) Engineering and Work Practice
(f) Laboratories
(g) Respiratory Protection
(h) Medical Services
(i) Training
(j) Recordkeeping

Appendix A – Aerosol Transmissible Diseases/Pathogens (Mandatory)

Diseases/Pathogens Requiring Airborne Infection Isolation
Aerosolizable open-contaminated body fluids or other substances that are capable of causing serious human disease, Avian influenza A virus (H5N1) (strain capable of causing severe disease in humans)
Varicella zoster virus (chickenpox) and Herpes zoster virus (shingles), disseminated disease in any ;
Meningitis, Meningococcal (Meningococcal meningitis)
HIV1, Ebola, coronavirus
SARS CoV-2
Tuberculosis (TB) (mycobacterium tuberculosis – Extra-pulmonary, draining lesion. Pulmonary or extrapulmonary)
Any other disease for which public health guidelines recommend airborne infection isolation

Scope of the Cal/OSHA ATD Standard (continued)

(B) Facilities designated to receive persons arriving from the scene of an uncontrolled release of hazardous substances involving biological agents

(C) Police services, provided during transport or detention of persons reasonably anticipated to be cases or suspected cases and police services provided in conjunction with health care or public health operations.

(D) Public health services, such as communicable disease contact tracing or screening programs that are reasonably anticipated to be provided to cases or suspected cases of aerosol transmissible diseases,

(E) The following facilities that are identified as being at increased risk for transmission of aerosol transmissible disease (ATD) infection:
1. Correctional facilities and other facilities that house inmates or detainees
2. Homeless shelters
3. Drug treatment programs

Scope of the Cal/OSHA ATD Standard (continued)

(F) Facilities that perform aerosol-generating procedures on cadavers such as pathology laboratories, medical examiners’ facilities, coroners’ offices, and mortuaries.

(G) Laboratories that perform procedures with materials that contain or are reasonably anticipated to contain aerosol transmissible pathogens

(H) Any other facility, service or operation that has been determined in writing by the Chief of the Division of Occupational Safety and Health

(I) Maintenance, renovation, service, or repair operations involving air handling systems or equipment or building areas that may reasonably be anticipated to be contaminated with aerosol transmissible pathogens
d) Aerosol Transmissible Diseases Exposure Control Plan
(1) The employer shall establish, implement, and maintain an effective, written site-specific ATD Exposure Control Plan which contains required elements; including:
• The person(s) responsible for administering the Plan. This person shall be knowledgeable in infection control principles and practices
• A list of all job classifications in which employees have occupational exposure.
• A list of all high hazard procedures performed, and the job classifications and operations in which employees are exposed to those procedures
• A list of all assignments or tasks requiring personal or respiratory protection
• The methods of implementation of specific control measures shall be listed for each operation or work area in which occupational exposure occurs. These measures shall include applicable engineering and work practice controls, cleaning and decontamination procedures, and personal protective equipment and respiratory protection.

h) Medical Services
(8) Precautionary removal recommendation from the physician or other licensed health care professional (PLHCP).

Medical Services
(8) Where the PLHCP recommends precautionary removal, or where the local health officer recommends precautionary removal, the employer shall maintain until the employee is determined to be noninfectious, the employee’s earnings, seniority, and all other employee rights and benefits, including the employee’s right to his or her former job status, as if the employee had not been removed from his or her job or otherwise medically limited.

Surge Events
“The [surge] plan shall include work practices, decontamination facilities, and appropriate personal protective equipment and respiratory protection for such events. The procedures shall include how respiratory and personal protective equipment will be stockpiled, accessed or procured, and how the facility or operation will interact with the local and regional emergency plan.”

California Code of Regulations, Title 8, § 5199

Benefits of the ATD Standard, from 2009-20
1. Creates clear enforceable requirements – provides notice up front to employers and employees
2. Gives Cal/OSHA a "seat at the table" for infectious disease events
3. Worker/Union participation required
4. Mandates preparedness for health care employers
5. Makes CDPH requirements enforceable

Then the 2020 pandemic ...
Thoughts on a Decade of Experience with the Cal/OSHA ATD

1. Standard should be based on aerosol transmission and not the outdated droplet/airborne paradigm
2. Must cover novel pathogens
3. Consider separate standards for healthcare and related sites (like ATD) and general industry
4. Employer requirement to conduct site-specific hazard assessment and create site-specific exposure control plan
5. Employer requirement for worker and union involvement and recordkeeping
6. Address asymptomatic transmission, with a universal precautions approach when necessary, as with BBP standard
7. Healthcare sector / infection prevention must fully accept responsibility for worker health and aim to excel at preventing occupational exposure to pathogens

Infectious Diseases and Worker Health and Safety

Look forward to discussing this now and later:

Mark Catlin
Industrial Hygienist
MDC Consulting and Training
Columbia, Maryland
mdcatlin@verizon.net