

# CDPH Weekly Infection Prevention Webinar

Wed 7/21/2021, 3:00pm to 4:00pm

California Department of Public Health (CDPH)—with the California Association of Long Term Care Medicine (CALTCM), California Association of Health Facilities (CAHF), and Health Services Advisory Group (HSAG)—hosts a weekly Wednesday webinar on infection prevention for long term care facilities.

<https://www.hsag.com/cdph-ip-webinars>

# Today's talking heads include...

- **Derrick A. Denis**

- Indoor Environmental Quality (IEQ) Professional, Industrial Hygienist, Presenter, Author, Inventor, and Expert Witness
- 27+ years and over 20,000 projects domestically and abroad
- V.P. of IEQ with the environmental consulting firm [Clark Seif Clark, Inc.](#)
  - [www.csceng.com](http://www.csceng.com)
- Inventor of [Sewer Gas Solutions](#), a product preventing sewer gas infiltration by inhibiting the evaporation of water from plumbing traps
  - [www.sewergassolutions.com](http://www.sewergassolutions.com))
- Been on Board of numerous IEQ Industry Organizations
  - e.g. [IAQA](#), [EIA-AZ](#), [ACAC](#), etc.



# It takes a village...

- Call it what you like...
  - Infection prevention (IP),
  - Good indoor environmental quality (IEQ), or
  - industrial hygiene (IH)
- By any name it requires...
  - a holistic or team approach, and
  - is everyone's responsibility.

# Verticals in long term care, such as SNFS including, but are not limited to:

- Administration
- Clinical
- Building Engineering
- Occupational Therapy
- Custodial
- Kitchen
- Environmental Services (Laundry)
- Infection Prevention
- Outside vendors
  - general contractors,
  - HVAC contractors,
  - plumbers,
  - cooling tower maintainers,
  - pool maintenance firms,
  - etc.
- Landscaping
- Residents
- Visitors

# But, other verticals have extremely important and often overlooked roles to play in LDB control (1)

- Administration –
  - Needs to promote a culture of safety, to make IEQ (including water quality and LDB control) an emphasis, and to provide budgets
- Clinical –
  - Needs to be tracking atypical pneumonia for patterns and should be recommending lab work for Legionellosis.
- Custodial –
  - Needs to be running bathroom faucets & showers, kitchen faucets and showers, custodial mop sinks, etc. for 3-5 minutes regularly in every unit
- Kitchen –
  - Needs to regularly change coffee maker filter, change ice maker filter, clean ice machines and verify sanitizer temps are 170 F.

# But, other verticals have extremely important and often overlooked roles to play in LDB control (2)

- Infection Prevention –
  - Needs to be looking at all verticals and educating, cheerleading and verifying compliance
- Landscaping –
  - Needs to ensure the backflow preventer, where the irrigation system branches of the domestic supply, is serviced at least annually
- Public Relations (Executive Director or Administrator) –
  - Needs to develop resident, family and caregiver messaging for outbreak scenarios, to ensure all staff get some LDB education, to develop town hall meeting scripts
- Residents –
  - Need to use their water shower regularly and need to report illness
- Visitors –
  - Need to use hall bathrooms and drink from water fountains and need to report illness of loved ones

# Everything is Connected...

- Everyone (every department/every vertical)
  - needs to consider and understand how their work affects others, and
  - needs to see the bigger picture of resident and staff health.



# Verticals are often operated as islands or little fiefdoms, when in fact they are all part of a bigger picture.

- Infectious agents or environmental hazards are not limited to any single vertical.
- If fact, hazardous and infectious agents affect, and are affected by, all verticals.
- We often see the points of failure at the interface between verticals
  - Plumber/HVAC
  - Building engineer/Custodian)



# My recent hospital stay in an airborne infection isolation room (AIIR)

- I design these rooms to function, but they are:
  - Noisy AFDs running next to your head 24/7 prohibit rest
  - Air movement dries the skin, dry's your eyes and makes you cold
  - Isolating causing anxiety, loneliness and even despair
  - Give you a stigma, so staff avoids or appears to avoid the normal operating procedure of compassion and kindness
  - Less check ins by custodians and nurses
  - No exercise due to sequestration promoting atrophy and bedsores
  - Staff in PPE look like Darth Vader and seem impersonal and faceless
- Whose job is this? Who checks on wellness?

# Do no harm, Do know harm...

- IPs MUST understand building science.
- Building engineers MUST understand infection prevention.
- Custodians MUST understand aseptic techniques.
- “I didn’t know” or “It’s not my job” are not acceptable responses to HAIs (healthcare-associated infections)



# Controlling & Responding to Legionella Disease Bacteria (LDB), A Team Approach:

- Sure, the lion's share of water quality management falls to facility engineering
- Engineering needs to be managing water quality by establishing and following a Water Management Plan
  - Comply with ASHRAE 188
  - Verify water temperatures at heaters & taps,
  - verify chlorine concentrations at main and on campus,
  - monitor sediment,
  - service sink aerators,
  - draining water heaters regularly,
  - service cooling towers,
  - service fire line and city main back flow preventers annually,
  - etc.

# Building science is a skill set every IP must strive to understand.

- Building science = understanding...
  - Building systems
    - Structure,
    - Plumbing,
    - HVAC,
    - etc.)
  - How system interact or influence one another, and
  - The role of building science in prevention and response to IEQ and IP issues.

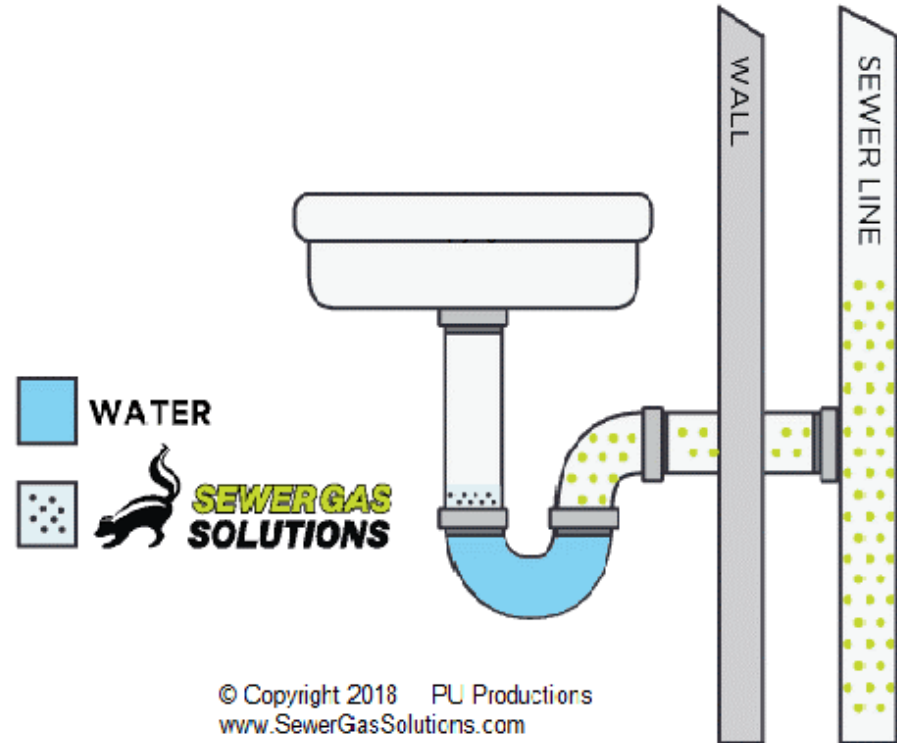
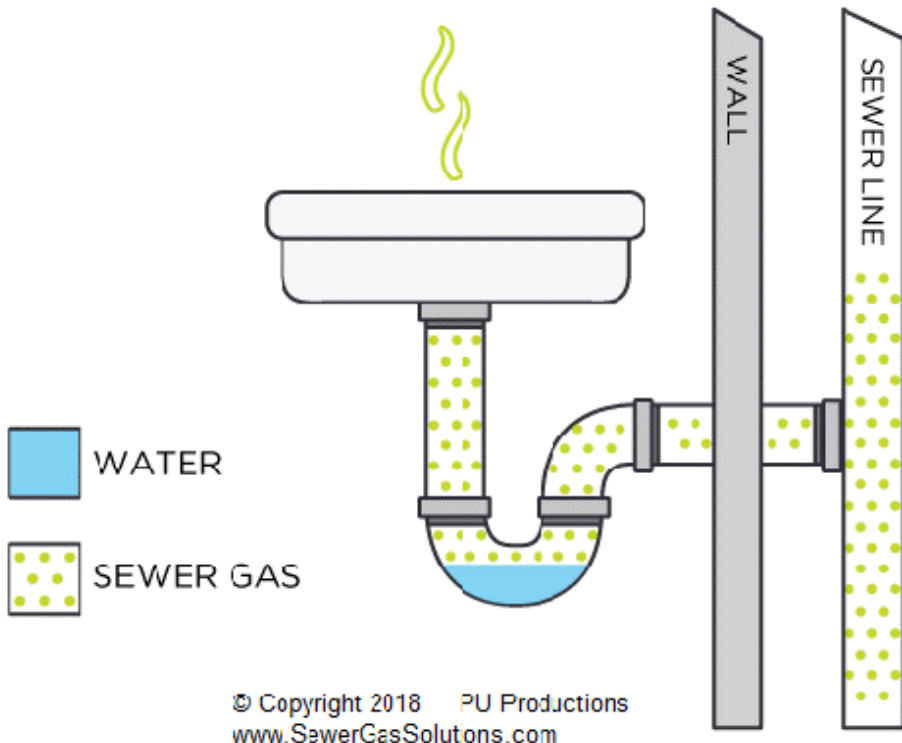
# Infection Preventionists (IPs) Must See the Both the Forest and the Trees

- IPs need to be generalists and must have broad and deep training in building science.

# Tidbits to illustrate the need for IPs to have understanding of basic building science

# Sewer gas Infiltration

- Stinks (#1 odor issue in buildings)
- Unnecessary “natural gas leaks” evacuations
- Damages building systems (fire life and safety and water pipes)
- Sewer critter infestations (sewer flies and roaches)
- 90% of time it is merely a dry trap
- Add water or add [Sewer Gas Solutions](http://www.SewerGasSolutions.com) evaporation inhibitor ([www.SewerGasSolutions.com](http://www.SewerGasSolutions.com))



# Building Pressures

- Negative pressure in biohazard rooms, bathrooms, kitchens and janitors closets
- Positive pressure in greater building
- Inadvertent depressurization of areas and consequences
  - Laundry room, drier and backdrafting
- Tight buildings pros and cons



# Focusing on any Single Regulation, Standard or Guideline is Myopic

- Regulations are usually laser specific, but the broad principles to environmental hazard control and response are common regardless of the unique hazard.
- So, make it a point to understand the broad concepts.
- Broad concepts prepare and empower you for you in emerging or unforeseen events

# Hungry for more info?...

- There are resources developed by CAHF Emergency Preparedness and Physical Plant Services that are available at no cost to call participants
- And, there are plans to continue to deliver even more content and services

# Websites

- [CAHF Disaster Preparedness Program | Sacramento, CA](#)
- <https://www.cahfdisasterprep.com/>

or

- [California Association of Health Facilities \(CAHF\)](#)
- <https://www.cahf.org/>

# Live Events

- Attend CAHF 2021 Annual Convention and Expo
  - Palm Springs this November 14-17, 2021
- Attend CAHF's Really Ready! Disaster Preparedness Conference
  - April 2022

# Publications

- Join our Really Ready! Newsletter
- <https://www.cahfdisasterprep.com/newsletter>

# Videos

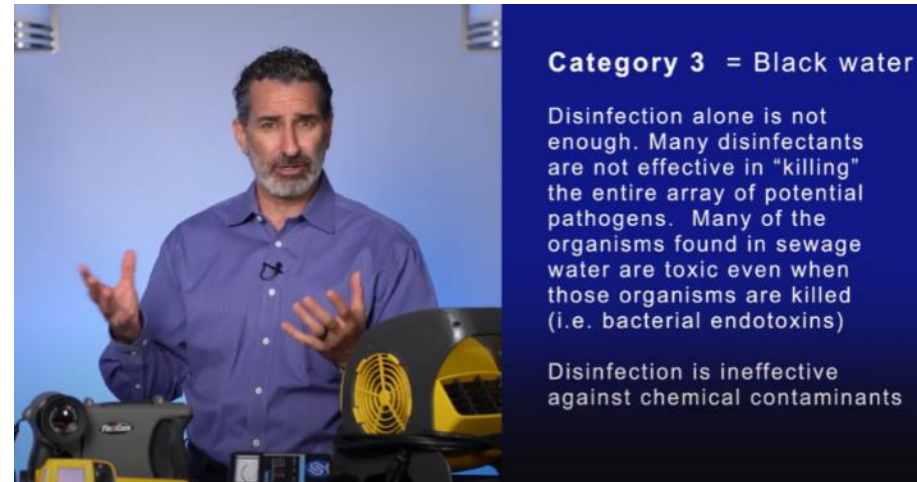
- Drumroll please...
- <https://www.youtube.com/user/CAHFTV/videos>

# CAHF-DPP sponsored videos

Public links available over the next month or so.

Continuing education credits available

- Mold (~22 min.)
- Wildfire Smoke (~16 min.)
- Water Incursion (~21 min.)
- HVAC (~25 min.)
- Legionella (~23 min.)
- Airborne Infection Isolation Rooms (AIIRs) (~30 min.)
- N95 Respirator Fit Testing (Train-the-Trainer) (~70 min.)



# Still Want More?...

- Ask, because the squeaky wheel gets the grease
  - How about private EH&S audits?
  - How about fit test parties?
  - How about review of WMPs?

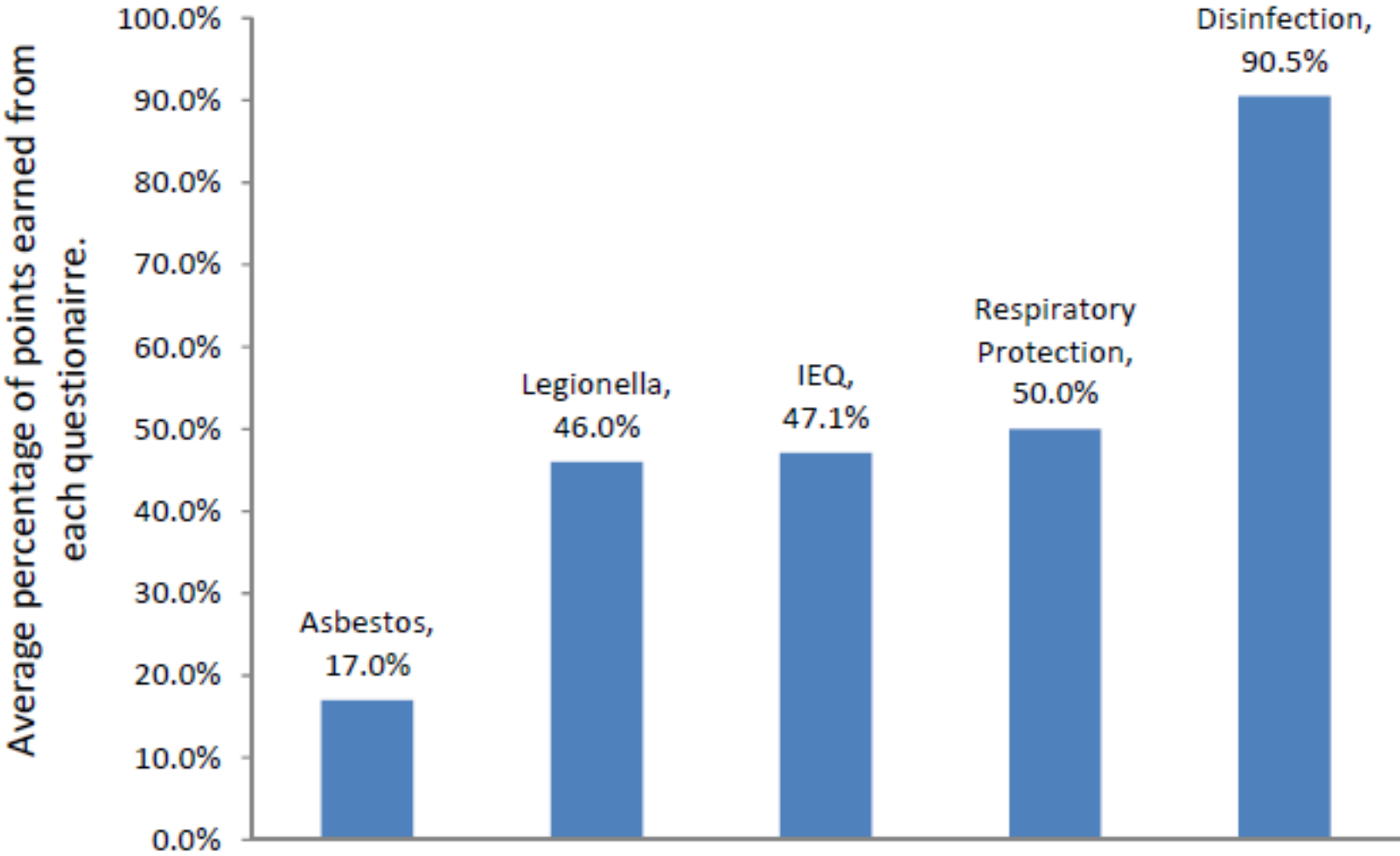


# Arizona Audits

- CSC audited multiple skilled nursing of behalf of the DR EPIC Program.
- We focused on the following general categories:
  - • Asbestos
  - • Chemicals
  - • Disinfection
  - • Indoor Environmental Quality
  - • Legionella
  - • Pest Control
  - • Respiratory Protection

We found opportunities for improvement in the interfaces between verticals

### Overall Scores per Category



# Direct post-class questions to:

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  - Clark Seif Clark, Inc. (CSC) & Sewer Gas Solutions
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