

## 2017 MOLD/IAQ SEMINAR July 19, 2017

# Mercury Emissions from a Synthetic Gym Floor

Jill Asch, MPH, CIH Hillmann Consulting, LLC





#### **Mercury Containing Synthetic Floors**

- Resilient, rubber-like
- Gyms, tracks (mostly)
- 1960's to the mid-1980's
- Many 3M "Tartan" brand
- Release elemental mercury
  - Health effects
    - Students
    - Physical education teachers



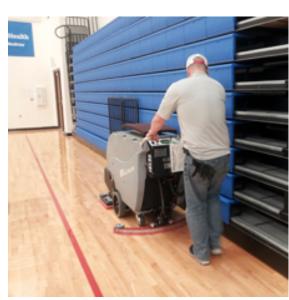
## Assessments

- Determine if gym floor is rubber-like
- If so, air monitoring can determine if there are exposures to mercury
  - Direct Read Instrumentation
- Confirmation that flooring contains mercury
  - Sampling of floor cores
  - Greater than 1 ppm

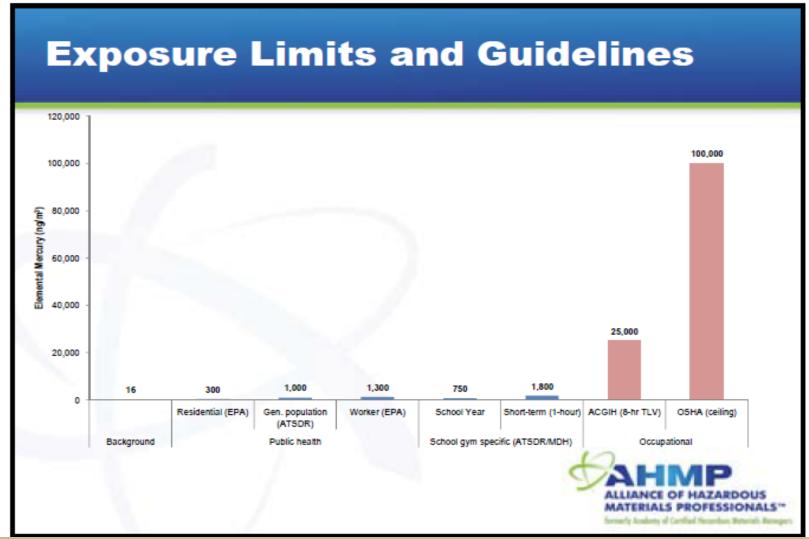


# Considerations for monitoring

- Hot days in gyms
- Poor ventilation
- Cleaning of gym floors with abrasive cleaners
- Damage to flooring
- Fire damage
- Planned removal









## Levels elevated?

New Jersey Education Association (NJEA), New Jersey Environment Council (WEC), and Healthy Schools Now (HSN) Coalition suggested exceedance level:

- 60 nanograms of mercury vapor per cubic meter of air (ng/m3)
- Provide ventilation to reduce exposure



## Still elevated?

- Removal necessary
  - Containment of removal area
  - Entrances sealed
  - HVAC-systems isolated and shut-down
  - Negative pressure exhaust systems
  - Segregated work zones
  - Pedestrian access restricted
  - Costs for removal can be significant



## Need help?

- Complete questionnaire
- Hillmann employee will contact you to provide:
  - Direct Read air monitoring for mercury
  - Sampling of gym floor, if requested
  - Air monitoring during floor removal



