FAQs

Legionella:

- What is legionella?
    - Legionella is bacteria found naturally in the environment worldwide, especially in surface waters and to a lesser extent in groundwater. The bacteria may also grow in poorly maintained or infrequently used building water systems and represent a health risk if water vapor or droplets are inhaled (via by showers or humidifiers) in large concentrations.
    - Legionella bacteria thrive in stagnant water at temperatures between 77 °F (25 °C) and 113 °F (45 °C), but is quickly killed as temperatures rise above 140 °F (60 °C).
- How are people exposed to legionella?
    - Exposure to legionella occurs when water vapor or droplets containing the bacteria is inhaled from sources such as showers, humidifiers, cooling towers, and air conditioning systems. Public baths, waterfalls, whirlpools, and fountains may also cause exposure. Legionella is not contagious, but does require immediate medical attention if exposed. Since legionella is a respiratory ailment, drinking water that contains legionella does not present a health risk.
- Who is at increased risk?
    - People 50 years and older or individuals with certain risk factors have increased chances of becoming ill. These risk factors include:
        - Being a current or former smoker
        - Having chronic lung disease, such as emphysema or chronic obstructive pulmonary disease (COPD)
        - Have a weakened immune system from diseases like cancer, diabetes or kidney failure
        - Taking medication that weakens your immune system
- What are the symptoms?
    - Legionella can cause different forms of pneumonia. Possible symptoms include fever, dry cough, muscle aches, and shortness of breath. Persons with compromised immune systems including older persons and smokers are particularly at risk. Children are very rarely affected. If you experience pneumonia like symptoms, please see your health care provider no matter what you think the cause is.
- Why are buildings being tested?
    - This will be the beginning of the third year of a new annual requirement from the German government. This new requirement does not mean there is a new development or “spread” of a disease, but standards are in place that are aimed towards eliminating this bacteria from homes and businesses altogether. The presence of this bacteria itself is not a health crisis and people only become infected by inhaling droplets containing legionella bacteria at high concentrations. Exposure does not occur through contact with an infected person or by drinking water that may contain legionella.
- What buildings are sampled for legionella?

- As legionella can cause Legionnaires disease (LD) by inhaling vaporized water droplets, showers are the main source of concern and are tested. Within USAG Stuttgart, sampling is done typically in areas, such as; AFH, schools, gyms, CDCs, hotels, and clinics where a shower is located and has a boiler over 400L.
- For buildings selected, a Contractor who is certified will sample showers in the two units furthest away from the boiler and survey the boiler rooms to collect data for future installation of spigots.

- What actions are taken when a sample exceeds acceptable limits?
  - Up to 100 CFUs/ml of bacteria requires no action.
  - If Legionella sampling results are over 100 cfu/100ml, the Garrison must take the following actions:
    - Directorate of Public Works (DPW) will notify residents of any exceedances within their buildings
    - Thermally disinfect the entire building.
    - Install spigots before and after the water boiler.
    - Schedule the Contractor to conduct follow-up sampling with 7 days after the thermal disinfection is complete. The Contractor will sample before and after the boiler as well as the showers in two units within the building.
  - If Legionella sampling results are over 10,000 cfu/100ml, Garrison must take the following actions:
    - DPW will notify residents of any exceedances within their buildings
    - Immediately take all showers in the building out of service. The occupant can be use the bathtub.
    - Immediately complete all of the actions required if the result were 100 cfu/100ml.
    - Install filter to remove the legionella bacteria on all the shower units in the building and notify the occupants that they can use their bathroom
- What is the Army doing to ensure and minimize legionella exposure?
  - Hot water boilers in Army Family Housing buildings are equipped with automatic anti-legionella devices that raise the hot water temperature to over 140 °F (60°C) over night to prevent legionella growth.
  - DPW conducts annual legionella water testing in accordance with applicable laws and regulations. Samples are collected at showers within the units that are furthest away from the boilers and analyzed by an accredited laboratory. If elevated legionella bacteria is detected countermeasures are implemented without delay along with follow-up testing to validate the implemented countermeasures were effective.
- Where can I obtain legionella results in my building?
  - DPW Environmental Division maintains a testing database and can share testing results of your building upon request. During monitoring events, all residents receive detailed information about the testing campaign.
  - For more information on legionella in shower water, please visit https://www.epa.gov/ground-water-and-drinking-water/legionella, scan the QR Codes below or contact your DPW Environmental Division POC.