

Swimming Pools and Spas
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Questions and Answers

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Below you will find the summary of the questions and answers (Q & A) from the live Webinar Series. For clarity and brevity, the live session of Q & A was trimmed from the original recording. Please keep in mind that this document is meant as a job aide. It does not create or confer any right for or on any person and does not operate to bind federal, state, or local food safety regulatory agencies. If you have questions concerning interpretation or application of various portions, please reach out to your District Supervisor for assistance. A current District Map is posted at the top of the page where you found the recording and Q & A document.

Q: Our lodging book states pH should be 7.2 to 7.8. Did this change?

- No, that did not change. Please go with what is written in the lodging code.

Q: At what chlorine level on the high end should a pool be shut down? Should it be 10 or 5 or anything above 3?

- We believe that chlorine levels over 10 ppm may be unsafe, but the State Lodging rules don't have a maximum.
- There is not a maximum chlorine level listed in the lodging code, but we strongly suggest the facility close the pool if it is above 10 ppm.
- Use your powers of persuasion to help the establishment recognize the dangers of keeping the pool open when it has a high chlorine level.

Q: Regarding Bromine in pool water, the MO lodging code states the following: "When chlorine is the disinfectant, a free chlorine residual of at least one part per million (1.0 ppm) shall be maintained throughout the pool. When bromine is the disinfectant, a minimum residual between three and five (3-5) ppm shall be maintained throughout the spa"

Can Bromine be above 5 ppm or is this the maximum?

- 3-5 ppm is minimum for Bromine, higher levels are not addressed in the Lodging Code.

Q: If a pool does not have an automatic chlorinator at a hotel - can they be failed on the annual lodging inspection? If so, would it be under section F5 on the lodging inspection form?

- Yes, they would fail the inspection. Automatic chlorinators are required. Yes, the violation would be marked under section F5.

Q: Do you see high levels of Cyanuric Acid as grounds for pool closure? If so, at what level do you see as warranting such closure? I understand cyanuric acid as an indicator of the effectiveness of the disinfectant (Cl)...but I've not been able to find a quantitative correlation between the two. For example, if cyanuric acid is 100ppm, then total Cl effectiveness is reduced by .5ppm from whatever it tests at. With no clear indicator of how effective or ineffective the disinfectant is, I don't see that this parameter is a reliable indicator for determining pool closure. Yes, it certainly warrants a conversation about how it's an indicator of the effectiveness of chlorine, but I don't see it as strong grounds for closure...no?

- I agree that high levels of Cyanuric Acid (CA) are not grounds for pool closure. This is because our Lodging guidelines don't provide parameters for Cyanuric Acid, thus we do not know what acceptable and unacceptable levels are. A conversation about CA levels is fine, but regarding closures, please stick with what's written in our guidelines. Chlorine and Bromine are the only disinfectants specifically mentioned with measurable parameters on page 25 section 3C. pH parameters are mentioned on page 25 section 3E. Please work with your supervisor and your DHSS District Supervisor for assistance if you believe a pool closure is warranted.

Q: How do you check the air quality in an indoor pool area?

- Our Lodging Guidelines state on page 26 section 4D, that "indoor pool areas and chemical storage rooms shall be vented directly to the exterior or vented to a room that is vented directly to the exterior." Outside of this, there is no mention of air quality in the indoor pool area.

Some useful links for reference:

<https://www.cdc.gov/cryptosporidium/about/index.html>

www.cdc.gov/healthyswimming

<https://www.cdc.gov/model-aquatic-health-code/php/about/index.html>