**Considerations for Dialysis Centers Before and During a Water Advisory**

###### Can we dialyze patients during a Boil Water Advisory (BWA)?

Depending on the water treatment system used, it may or may not be safe to dialyze patients during a BWA:

* If the water treatment components in use are sufficient to remove or destroy bacteria, Reverse Osmosis (RO) will protect the product water from having microbial contamination.
* Deionization (DI) unit does not remove or destroy bacteria, so if DI is being used as the main water treatment (rather than RO), you will need a submicron or endotoxin/ultrafilter downstream of the DI unit.
* If an ultraviolet (UV) irradiator is used, the dialysis filter should be located after the UV irradiator.

Close monitoring of the resistivity of the product water will be needed to detect any decrease in quality. Also consider weekly microbial assessment of the product water during the BWA.

Keep in close contact with the municipal water supplier because they may choose to “shock” treat (hyperchlorinate) their distribution system to bring it back into compliance with the acceptable standards for drinking water. If the city “shocks” their water system, you may see chlorine/chloramine break through. Review your testing procedures with staff and alert them to be vigilant for potential break through so that patients will be protected from exposure to chlorine/chloramine.

###### Additional Considerations

* All employees with diarrheal illness should be regulated by standard rules of exclusion from work.
* Monitor patients closely for signs and symptoms of gastrointestinal illness.

If your water system is treating water chemically beyond normal levels, advise dialysis units to:

* Sample water for chemical analysis to ensure compliance with AAMI standards.
* Conduct chlorine/chloramine tests to ensure compliance with AAMI standards.
* Monitor water system gauges once per shift.

###### Can we dialyze patients during a Do Not Drink water advisory?

To determine whether you are able to dialyze patients during a Do Not Drink water advisory, you will need to contact your state toxicologist. The toxicologist will be able to determine whether you may continue to dialyze patients based on your water treatment methods and the specifics of the contaminant or chemical that is responsible for the Do Not Drink advisory.

Your toxicologist will need to first know what water treatment method you use:

* Reverse Osmosis (RO)
* Deionization (DI)
  + If using DI, do you have a submicron or endotoxin/ultrafilter downstream of the DI unit?
* Ultraviolet (UV) irradiator
  + If using UV, is the filter located after the UV irradiator?

Once the toxicologist has an understanding of your treatment methods and the characteristics of the contaminant or chemical in question (e.g., whether it would foul or damage the filter membrane, etc.), they will be able to provide you will further dialysis guidance and recommendations.

In some cases, it might also be necessary to contact manufacturing experts to understand how the contaminant or chemical may affect the dialysis.

###### Additional Considerations

If the water used for dialysis contains cyanotoxins, dialysis centers may need to provide additional water treatment to remove the cyanotoxins, such as granular activated carbon filtration, membrane filtration, or others depending on the type of cyanotoxins present in the water.

For more information please consult EPA’s [**Recommendations for Public Water Systems to Manage Cyanotoxins in Drinking Water**](https://www.epa.gov/sites/production/files/2015-06/documents/cyanotoxin-management-drinking-water.pdf).