KENTUCKY YMCA YOUTH ASSOCIATION **KENTUCKY YOUTH ASSEMBLY** **Commonwealth Bill**	**Blue | CW 21** **Referred to Committee: Senate 5**
Authors: Will Hardy, Andrew Sauls, Tyler Holliday	**Action on the Bill**
School: Henderson Co. HS	House: ____ ☐ Passed ____ ☐ Defeated Senate: ____ ☐ Passed ____ ☐ Defeated
City: Henderson	

An act to require county and municipal water utilities within the state of Kentucky to replace chloramine with chlorine as the primary disinfectant in water.

Be it enacted by the Youth Assembly of the Commonwealth of Kentucky

Section 1: Water utilities replaced chlorine and chloramine as the primary disinfectant in water distribution systems. Research has since determined that chloramine produces similar amounts of trihalomethanes as compared to chlorine as well as many other byproducts not produced by chlorine, such as: nitrosamine, a carcinogen; chloropicrin, which is used as herbicide and insecticide; cyanogen chloride, a toxic blood agent which is similar to a gas used in a chemical bomb; haloacetic acids, which have known health defects; and haloacetonitriles, toxic nitrogenous compounds.

Section 2: Chloramine has also been known to react with copper and lead in water pipes, leading to the leeching of these toxic substances into the water supply. This effect of chloramine caused a lead contamination crisis in Washington, D.C. and was believed to cause the Flint, Michigan water crisis.

Section 3: There are three types of chloramines: monochloramine, dichloramine, and trichloramine. Though all three are respiratory irritants, only monochloramine is allowed to be in water systems. Dichloramine and trichloramine have not been extensively studied but are known to form and cause even more severe health defects.

Section 4: Chloramine is a derivative of chlorine that also contains ammonia. Therefore, using chlorine would discontinue the need of ammonia and, thus, reduce the overall cost of water disinfection.

Section 5: This bill will go into effect immediately upon passing.