A. Statement of Position
Environmental and public health laboratories need support from the U.S. Environmental Protection Agency (EPA) and state drinking water programs to develop analytical methods and monitoring programs for emerging environmental contaminants in drinking water. APHL recommends that its federal partners work with principal state laboratories to implement expanded monitoring programs to safeguard the health of all Americans.

B. Implementation
1. APHL will monitor relevant drinking-water issues and engage with EPA and CDC in a continued effort to safeguard public health.
2. APHL will provide comment(s) to the EPA regarding the implementation of goals outlined in the EPA Drinking Water Strategy as associated with monitoring emerging contaminants of public health concern.
3. APHL will work with partner organizations (i.e. the Council of State and Territorial Epidemiologists (CSTE), ECOS, ASTHO & ASDWA) to ensure that all stakeholders are informed of the concerns surrounding unregulated contaminants in drinking water.

C. Background/Data Supporting Position
Recent press reports raised awareness about drinking water that meets regulatory standards yet may not be healthy to consume. The public expects that the water from our taps not only meets regulatory standards, but is also healthy to drink. In most cases, this is true, but in a small (but growing) number of cases, that assumption may be false. Since 2004, at least 62 million Americans have been exposed to drinking water that did not meet at least one-health based guideline (established by the EPA, the United States Geological Survey and in a small number of instances the California Office of Environmental Health Hazard Assessment). APHL members worry about the nation’s ability to reliably test and monitor water for contaminants that affect public health, but which are not regulated by the Safe Drinking Water Act (SDWA). From the universe of thousands of chemicals known to be in drinking water, only 91 are regulated by EPA. Moreover, regulators have not added to the list of those regulated by the Safe Drinking Water Act since 2000. Just detecting a contaminant does not mean the water is unhealthy, especially given our increased ability to detect chemicals at lower and lower concentrations. In fact, U.S. EPA’s Unregulated Contaminant Monitoring Rule (UCMR) and the Contaminant Candidate List (CCL) are good examples of the increased focus put on emerging contaminants in drinking water.
drinking water. Unfortunately, UCMR is required only for select public water systems, and there is a gap between the current regulations and the science as shown by these examples indicating public health concerns despite regulatory attention:

- Several studies documented the presence and persistence of emerging contaminants (i.e. pharmaceutical compounds, personal care products, and endocrine disrupters) in drinking water supplies. Nevertheless, most of these contaminants remain unmonitored and unregulated with no established drinking water standard or health advisory²-⁴.

- Concerns about perchlorate (which has been associated with neurotoxic outcomes) have been developing since 1992.⁵ As recently as 2009, CDC released data showing perchlorate in every person tested, while a separate study established a correlation between urinary perchlorate and thyroid hormone levels in certain populations.⁶ Recently the EPA announced that they are moving forward with proposing a formal rule for regulation of perchlorate and toxic chemicals in drinking water.⁷

- Laboratory tests have shown that the tap water in Maywood, California (often brown and bitter) contains levels of mercury, lead, manganese and other chemicals associated with various adverse health effects. Because the water met the SDWA standards, the private water utility has taken limited steps to improve the water quality.⁸

- Findings of documented human and animal, genotoxic and toxicokinetic studies on hexavalent chromium all indicate that hexavalent chromium is also a potential, oral route, human carcinogen, and thereby, may result in an elevated carcinogenic risk when consumed in contaminated drinking water.⁹

To protect public health effectively, regulators need sound toxicological and related science to determine appropriate action levels for emerging contaminants of concern. In addition, there needs to be willingness by regulators to change action levels when the science supports a modification. Although states and laboratories will face increased financial and political costs associated with greater testing, additional, non-voluntary regulation and monitoring of drinking water resources is important to ensure the quality of public health.i

As one of the most developed nations in the world, it is up to the United States to take the lead in ensuring that its citizens have safe drinking water flowing whenever they open their taps.

* This position statement focuses on chemicals in tap water from regulated water utilities only. Concerns also exist about well water, bottled water, and from biological contaminants, but are beyond the scope of this statement.

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i Additional funding and political/legislative assistance from state and federal resources will be critical in accomplishing the goal of monitoring drinking water resources for a wider spectrum of contaminants.
D. References


