Community drinking water quality and treatment: Is there a place for advanced technologies?

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Community water systems face several unique challenges in the provision of safe drinking water that set them apart from larger urban centres, not the least of which being their chronic lack of financial resources for infrastructure investment, as well as limited access to skilled workers and adequate technical information and suitable technologies. Through a multidisciplinary impact-focused approach, RES'EAU-WaterNET, an NSERC strategic research network, is aiming to address these challenges by developing and evaluating robust, cost-effective and efficacious technologies applicable to community settings. The technologies will be capable of addressing primary contaminants (pathogens and disinfection by-products [DBPs]) along with other emerging contaminants (e.g., algal toxins, taste and odour compounds, pesticides and micro-pollutants). This presentation intends to highlight key activities of the Network and discuss some of the technological solutions being evaluated for community water systems.