As we continue to develop new cases and refine their application in the classroom, we would welcome feedback on these cases and testimonials about how you have used them. Any corrections to this set of cases will also be gratefully received. Please get in touch with us via the program’s email: publichealth@schulich.uwo.ca.

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Photos on front cover are graduates from MPH Class of 2016.

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On July 2, 2017, I will have been an Ontario medical officer of health for thirty years. For the past 26 ½ years, I have been the Commissioner & Medical Officer of Health for the Regional Municipality of Durham (Region of Durham). During this time, I have seen and experienced many different real world problems but one principle has remained constant throughout...the ability to make team-based decisions is important for public health leaders, past, present and future. In the paragraphs that follow, I will share with you a few stories to illustrate this point. Let me start, however, by telling you a bit about the Durham Region Health Department, the organization I have had the privilege to lead throughout my tenure with the Region. We provide a basket of mainly provincially-prescribed public health and paramedic programs and services to Durham’s 670,000 or so residents who live in one of eight local municipalities. Our staff includes medical and dental professionals; public health nurses, inspectors and nutritionists; tobacco enforcement officers; epidemiologists; paramedics; and, administrative staff. These 750 staff are assigned to one of five divisions: Administration, Environmental Health, Oral Health, Paramedic Services, and Public Health Nursing and Nutrition. In addition, there is a seven-person Epidemiology and Evaluation Unit. The Directors of these divisions comprise my leadership team and we make decisions by consensus, as do the many multi-disciplinary teams we have established over the years to address issues, complete tasks and/or share information.

My first story concerns paramedic services. The 1990s were not kind to the broader public sector, including the Health Department. Indeed, flat-lined provincial funding led to attrition and a major downsizing of our staff. In addition, home care programs were removed from board of health oversight, leading to far fewer staff and a narrower focus. That said, towards the end of the 90s, the funding and administration of land ambulance services were “downloaded” to certain cities, counties and regions including the Region of Durham. My boss, the Chief Administrative Officer, handed me this file to manage. At the time, there were six land ambulance services in the Region – one operated by the Ministry of Health, another run by the Ajax & Pickering Hospital, and four privately operated; municipally-based land ambulance services were a rarity. We assembled a multi-disciplinary team to develop and execute a multi-year roadmap to establish a Region-wide land ambulance service. The following tasks were carried out:

- Hiring a consultant to study high-performing land ambulance services, in partnership with the Regions of Halton and York, who provided us with advice and recommendations;
- Consulting key stakeholders, including existing ambulance operators, local hospitals, lower-tier municipalities, and the public about the future state of local land ambulance services;
- Preparing a report, based on the above, with recommendations for Regional Council’s approval; and,
- Implementing the recommendations, including hiring the founding Chief/Director.
Working together, our team successfully launched the first new municipal land ambulance service, Durham Region EMS, on January 1, 2000. This service, now Region of Durham Paramedic Services, has been such a great success story, and has led to all land ambulance services in Ontario being municipally operated.

My second story is about tobacco control. Early in the 2000s, lower-tier municipalities could pass by-laws restricting or prohibiting smoking in public places and workplaces. However, the no smoking by-laws in the Region of Durham at the time were weak, inconsistent and none prohibited smoking in these places. Fortunately, lower-tier municipalities could upload this power to upper-tier municipalities according to a formula in the Tobacco Control Act. A letter from an adolescent requesting smoke-free restaurants in Durham Region created an opportunity for staff to seek approval from Regional Council to ask our lower-tier municipalities to upload this power to the Region and then to consult the public on the proposed by-law. We assembled a new multi-disciplinary team, including a political champion, our Chair of Council’s Health & Social Services Committee, to develop and execute a multi-year plan, which included the following tasks:

- Seeking support from all eight lower-tier municipal councils to upload the power to enact a Region-wide smoke-free by-law;
- Once the power was uploaded in conformity with the Act, consulting key stakeholders and the public as to the content of the new by-law, including using an electronic consultation and public hearings in all eight municipalities;
- Drafting the by-law;
- Preparing a report, based on the above, with recommendations for Regional Council’s approval; and,
- Implementing the by-law.

Again, working together, our team successfully developed and executed the plan and at the time of its passage in December 2002, the Smoke-Free By-law was the toughest in the Greater Toronto Area and prohibited smoking in all public places, including bars, restaurants, and workplaces, including hospitals and long-term care homes. It even banned smoking at the Great Blue Heron Charity Casino.

The third story focuses on SARS (Severe Acute Respiratory Syndrome), which touched down in east Toronto on February 23, 2003 when Ontario’s index case returned to Toronto after being exposed to an infected doctor in Hong Kong. Sadly, she succumbed on March 5. From there, the Toronto-based SARS outbreaks occurred in two waves – March to April and April to June 2003. Four of the six transmission chains originated in a hospital. In total, 44 people in Canada died, approximately 400 became ill, and 25,000 were placed in quarantine. Yet another multi-disciplinary team was assembled to lead our public health response in the Region from March to June, which included the following tasks:

- Creating and staffing a large call centre to respond to SARS-related telephone inquiries;
- Ensuring the isolation and quarantine of contacts of cases;
- Ensuring the provision of infection prevention and control related equipment and supplies to isolated and quarantined contacts in the community; and,
- Disseminating public health information to our community partners, including our community care access centre, first responders, hospitals and long-term care homes.
Together, our team rose to the occasion, amid much trial and tribulation, and successfully led an unprecedented public health response to a novel viral pathogen never seen in Ontario either before or since. That said, a critical review of the overall public health response led to many positive changes in Ontario’s public health system, through “Operation Health Protection,” including the creation of Public Health Ontario, the Provincial Infectious Diseases Advisory Committee, regional infection prevention and control networks and the expansion of the public health workforce. In addition, a similar review at the federal level led to the establishment of the Public Health Agency of Canada and the appointment of Canada’s first Chief Public Health Officer.

My fourth story concerns pandemic influenza. In late 2008, global public health officials determined that the type of influenza that was likely to circulate in the northern hemisphere was a pandemic H1N1 strain. It was expected that this strain would be more virulent, strike earlier than in past years and, being H1N1, adversely affect younger populations. Among the public health measures to be put in place were mass immunization and assessment centres to divert “milder” cases from hospital emergency rooms. Once again, a multi-disciplinary team was put in place to lead the following tasks:

- Locating and acquiring/renting sites for mass immunization;
- Storing and distributing the new influenza vaccine to vaccine delivery agents;
- Administering influenza vaccines at mass immunization sites;
- Establishing assessment centres;
- Managing institutional outbreaks of influenza and supporting local hospitals and long-term care homes;
- Implementing the new pandemic information system; and,
- Disseminating information to our community partners and the public.

By the time our response had ended, positive outcomes included the immunization of over 100,000 Durham residents and the dissemination of 10,000 doses of vaccines to local delivery agents.

Unfortunately, on December 16, 2009, towards the tail end of our response, a USB key containing the names, addresses and OHIP numbers of over 83,000 immunization clients was lost. This privacy breach was investigated by the Information and Privacy Commissioner (IPC) who issued a damning report and order, Personal Health Information Protection Act Order HO-007, in January 2010. Yet another team was struck to manage the breach, including responding to the order, which was due one month later. Our overall response included:

- Notifying affected clients of the breach (prior to the IPC investigation having been completed);
- Responding to inquiries from the media and the public;
- Removing all non-encrypted mobile media (i.e., CDs, USB keys, etc.);
- Preparing a comprehensive report as part of the IPC’s investigation;
- Developing a response to the order and submitting it to the IPC;
- Encrypting all PCs, laptops and purchasing encrypted USB keys;
- Developing and implementing a complete set of privacy and information security policies and procedures;
- Striking a Privacy & Security Committee;
- Hiring a Manager, Health Information, Privacy and Security; and,
- Defending the Region of Durham from a multi-million dollar class-action lawsuit.
We emerged from this tragedy much stronger and are now seen as privacy and security leaders within the public health community. As a result, we co-chaired a Ministry of Health and Long-Term Care Information Privacy Working Group, which produced a variety of products for use by the Ministry and public health units as they embarked on their own privacy and security journeys.

My fifth and last story is about solid waste management. The Region is responsible for the disposal of solid waste. For many years, Durham’s garbage was transported to Michigan and New York State for burial in landfill sites there. When Michigan closed its borders to the transport of solid waste, the Region had to implement an integrated waste management solution. In addition to diverting waste through recycling, the Region decided to construct a waste incinerator to reduce the volume of its solid waste. It chose this route because building a new local landfill site was simply not an option in the eyes of local residents, owing to Toronto shipping its garbage to the Brock West Landfill Site in Pickering for burial for many years until its closure. The Region of Durham, together with its partner the Region of York, needed to conduct an environment assessment and secure the approval of the Minister of the Environment before proceeding with waste incineration. Another multi-disciplinary team was brought together to steer our participation in this project, which included:

- Conducting a literature review regarding the human health effects, if any, of living near waste incinerators;
- Reviewing a generic human health risk assessment;
- Reviewing an international best practices scan as regards environmental surveillance of waste incinerators;
- Arranging a peer review of the site-specific human health risk assessment;
- Providing public health advice to Regional Council on the environmental assessment and the establishment of a site-specific environmental surveillance program; and,
- Providing public health advice to Regional Council on the modelled dispersion of PM 2.5 emissions from the incinerator.

The Regions of Durham and York accepted all of our advice and as a result, in part, the Minister approved the project with conditions. The waste incinerator, the Durham York Energy Centre, was constructed and after a few bumps along the way, began commercial operations in 2016.

What do all these stories have in common? Certainly these real world problems are unique:

- The amalgamation of six land ambulance services to form Durham Region EMS/Region of Durham Paramedic Services.
- The uploading of tobacco control powers and enactment of the Durham Smoke-Free By-law.
- The public health response to SARS caused by a novel respiratory pathogen.
- The public health response to pandemic influenza.
- The management of a serious privacy breach.
- The construction of Ontario’s newest waste incinerator in many decades.

Quite simply, the foregoing successful outcomes simply would not have been possible without assembling multi-disciplinary teams who worked together to develop and implement project plans. What are the advantages/benefits of team decision-making and execution? I can think of a few, in no particular order of importance:
Cultivating Future Public Health Leaders Through Teamwork

• Working in teams involves members bringing their complementary assets, knowledge and skills to the table and being equitably responsible for the work at hand.
• Information about the project is shared among the team members, thus benefiting both their disciplines and divisions.
• Team members can offer a variety of options and collectively weigh the pros and cons before coming up with the best solutions, which are usually more accurate, feasible, practical and possibly innovative.
• Team members adopt the shared goals of the project; by taking collective responsibility for their achievement, they are collectively more enthusiastic and more likely to assist one another to achieve the goals.
• By being part of an effective team, members are more likely to share knowledge, skills and responsibilities and take risks, where appropriate, through mutual support and reassurance.
• Teams can often face more complicated and difficult issues than individual members.
• Teams can complete projects more quickly than individual members through, for example, the more effective allocation of human resources.
• As was the case in responding to our privacy breach, new measures can be more effectively implemented throughout an organization through shared understanding and ownership of the issue and the decision and the involvement of all.
• In general, working in teams builds trust and improves morale and motivation.

Upon reflection, taken together, all of the foregoing were evident and in play in the teams that we assembled. However, developing future public health leaders does not start and end with team decision-making and execution. We develop our future leaders by giving them opportunities to participate in leadership events (e.g., active participation in professional associations, serving on/leading internal and external planning tables, etc.) commensurate with their knowledge and skills. These are supported, for example, by/through coaching and mentoring; performance management, with a heavy emphasis on addressing key Regional, public health and professional competencies and by supporting corresponding learning and development plans; supporting evidence informed decision making; staff engagement; and, staff recognition.

In conclusion, to all aspiring public health leaders who happen to read this piece, roll up your sleeves, be part of a team that tackles real world problems, and seize leadership opportunities as they arise…the future is yours!