

Toronto EMS and SARS



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Toronto EMS



- 850 paramedics
- 41 stations in four quadrants
- 90-97 paramedic units on day shift
- 140,000 emergency transports yearly
- 40,000 non-emergency transfers yearly

Toronto EMS - 2



- Paramedics are the entry point to the health care system for many patients
- Four Toronto paramedics contracted SARS
- Toronto EMS maintained service throughout both SARS outbreaks
 - activated HDOC
 - organized distribution of PPE
 - controlled interfacility transfers

Lessons Learned



- Command & Control
- Communication
- Personnel
- PPE
- Logistics
- Transfers

Command & Control - 1



- Need for centralized command and control of incidents like SARS outbreak
- Provincial Operations Centre (POC) worked well
- Cooperation between all players
- Federal, Provincial, Municipal ministries, emergency and health services represented

Command & Control - 2



- EMS must be at the decision-making table
- Paramedics were the front line in the battle to contain SARS - need consistent protocols
- Paramedics encounter patients in uncontrolled environments, often without warning of patient's condition

Command & Control - 3



- SARS Scientific Committee did a great job researching and developing protocols and directives for medics
- Future need - consistent screening tools at hospitals
 - Paramedics passed screenings at some hospitals and not others on the same shift

Command & Control - 4



- Toronto EMS Health Care Divisional Operations Centre (HDOC)
 - EMS
 - Police
 - Fire
 - Public Health?
 - Hospitals?
 - Unions
 - Neighbouring services (GTA EMS, FS, PS)

Command & Control - 5



- Need better local notification of outbreaks
- EMS needs to hear about outbreaks as soon as Public Health and hospitals
- Paramedics have a role in reporting outbreaks from the frontline

Communication -1

- Common Message, Common Speaker
- Need to allow internal communication without external approvals
- Daily media briefings worked
 - Who writes the message
 - Who delivers it
 - Reality of SARS vs. public fear

Communication - 2

- Who is the scientific authority?
- Health Canada
- Provincial MOH
- Public Health
- CDC
- WHO
- Roles need clarification

Communication - 3

- Talk to the troops
- Be open and accessible
- Use technology for internal communication
 - E-mail
 - Phone them
 - They phone you (1-800 numbers)
 - One on one from management
 - Posting in stations

Personnel - 1

- Immunization
- Sick vs. SICK
- Sick vs. WSIB
- Plan for loss of staff
 - Quarantine
 - Family responsibilities
 - Other employers?

Personnel - 2



- Ensure staff get paid while on quarantine
- If people suffer financial loss, they won't stay isolated
- EAP is critical
- Don't forget the families

Medical Support Unit -1

- Public Health overwhelmed >20,000 calls
- EMS, Fire and Police developed “internal Public Health”
- Notification, contact tracing, medical referrals, daily chart review

Medical Support Unit - 2



- Needed direct line to Public Health
- Daily review of current information
- Staffed by Toronto EMS and Fire Services
 - Community Medicine Program RN
 - Base hospital MD
 - Modified duty paramedics
 - Support staff

Quarantine

- Home vs. Working
- Who decides?
 - We live in different jurisdictions
 - Confusion over different rules in different regions
- Support
 - Masks, food, prescriptions, family support

Working Quarantine

- During SARS 2, over 400 paramedics on working quarantine
- N95 mask all the time at work
 - exception if > 3 metres from others in station
- Full PPE for all patient contact
- Full isolation at home
- Very stressful on paramedics & families

Personal Protective Equipment

- IT WORKS!!!
- Four Toronto EMS paramedics were hospitalized with SARS
- Paramedics got sick before mandatory use of PPE
- After full PPE, no more SARS in medics
- PPE is not designed for EMS environment

Logistics

- Centralized control worked - no hoarding or price gouging
- Need to work out methods to stockpile, share and deliver during crises
- Standardization and sizing are factors
- Disposal of potentially contaminated PPE

Transfers - 1

- SARS spread by interfacility transfers
- All private transfer operators placed under control of Toronto EMS on March 29
- Evacuation of hospitals to SARS facilities planned but not needed

Transfers - 2

- We must control who we move
- Who moves the SICK ones?



PTAC

- Provincial Transfer Authorization Centre still operational
- Processes over 1200 requests daily
- All interfacility movements must be medically cleared
- Some still trying to “beat the system”
- Recommend continuation of PTAC

The “New Normal”

- Really not “New”
- We have to become more vigilant
- Infection control a priority
 - PPE on all suspicious patients
 - More questioning of callers
- Protect the medics
- Protect the public

Conclusions - 1

- It did happen here
- Have a plan; test it; keep it current
- Build relationships before we need them
- Protect the staff
- When it happens, **COMMUNICATE!**
- Don't end it until it's over

Conclusions - 2

- Implement standardized medical protocols and screening tools
- Need better global monitoring and reporting of communicable diseases
 - Other Canadian EMS systems have full time Infection Control practitioners
 - We need them here
- Work with manufacturers for paramedic - specific PPE

Conclusions - 3

- Adequate supplies must be available
 - Would we have had N95 masks if SARS were in Chicago?
- We must be able to identify all staff exposures.
 - TEMS developed a tool, but other EMS systems must do the same.

Conclusions - 4

- Ongoing training in safe PPE use and fit testing must be provided.
- PPE and new required equipment are expensive
- Who pays?

Finally



- Heroism is doing ordinary thing in extraordinary circumstances
- The paramedics and health care workers of Toronto epitomize heroism