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
• 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
• 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)
• 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