



## Risk Assessment; A New Perspective: Things Are Not Always What They Seem!

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by Blue.lce.Artwork















#### Scenario

- Elderly male, SOB history of heart
- Patient in obvious respiratory distress
- O2 sat 72%, BP 200/110, R 30 shallow
- Sinus tach, crackles throughout, obtunded
- Heart and BP meds
- Working diagnosis?





## Time Warp

- March 16 2003
- City of Toronto Paramedic
- 37 years old
- Married
- 3 children, 2 daughters (12yrs, 2 months), son (9yrs)
- Healthy and active





## Time Warp

- North Scarborough, 24 Station
- SARS epicenter
- Night shift, March 16 2003
- Word of unknown disease in the news
- Memo about 'Atypical Pneumonia'
- Unable to read memo
- Immediate call



#### Familiar?

- Call for elderly male, SOB history of heart
- Patient in obvious respiratory distress
- O2 sat 72%, BP 200/110, R 36 shallow
- Sinus tach, crackles throughout, obtunded
- Heart and BP meds
- History of fever and antibiotics
- Family relates detailed exposure history







#### Treatment Plan

- Non-rebreather mask, 100% O2
- Monitor
- Transport
- Concern it was 'atypical pneumonia'
- N95 mask as soon as possible
- Not intubated, no IV
- Hospital, Supervisor notified





## The Next Day

- At work for final night shift
- News reports new 'atypical pneumonia' patient on life support in hospital
- Concern escalates for partner and I
- Consult with hospital staff, told no worry/risk
- Quarantine, isolation and/or mandatory PPE not required
- Continue to work shift





#### **Disease Onset**

- March 18 2003
- Watching hockey at home
- Myalgia develops
- Fever over 38 degrees C
- Go to hospital for assessment
- Chest X ray, blood work, then sent home
- Influenza? Antibiotics and Antiviral



#### It Gets Worse

- Fever to 40 C, unable to relieve
- Dizzy, week, unable to stand, diarrhea
- Hospital sends me home a second time (without quarantine)
- Symptoms worsen, SOB, return to hospital
- Lung infiltrates
- Admitted March 23, transferred to ICU
- Diagnosis, probable SARS, now confirmed with blood work to prove it





#### **Intensive Care Unit**

- 12 days in ICU
- Limited recall of first 5 days
- Struggling to breathe, many treatments by RT
- Thought I was going to die
- Had I had infected family and caregivers?
- Steroids improved breathing, not intubated
- Fever breaks after 10 days





#### Road to Recovery

- Condition improving
- Moved to SARS unit
- Chest clearing, O2 sats improving
- Missing significant family events
- Delays due to rule changes and arm problem
- April 10 released home after 19 days
- 7 days home isolation





#### Home Isolation

- Easy compared to hospitalization
- See family from a distance
- Home cooking
- Sounds of home
- My own bed and bathroom
- Feeling a little better day by day
- Ends April 17 @1400, daughter @1401





## Physical Effects

- 30lb weight loss (muscle mass)
- 40lb weight gain (not muscle)
- Hair falling out, altered taste, insomnia
- Enduring SOB (cold, hot, exertion)
- Fatigue, weakness, joint pain
- Short term memory problems
- Long term effects?







## Psychological Effects

- Depression, isolation, sadness, humiliation
- Fear of death, fear for family, fear of recurrence
- Fear of being Paramedic
- Afraid to be close with family
- Loss of control, Anger
- Post Traumatic Stress Disorder





## Family Effects

- 10 days of quarantine, no one infected
- Frustrated with inability to provide care/visit
- Fear of outcome
- Kids missed Daddy
- Endured angry outburst due to PTSD
- Did not want Dad to continue as Paramedic
- Marginalized by some family and friends





## The Paramedic Experience

- 6 Paramedics with SARS
- Others endured quarantine and isolation
- Fear of contracting SARS/transmitting to family
- Anger and loss of control
- Stigmatized by family, friends, society
- Some have left profession





## Life Changing Event

- Nothing for granted
- Gratitude, respect
- Try to take more time
- Road Paramedic to Supervisor
- Became Infection Control Practitioner
- Commitment to making change in EMS





## Why?

- Why weren't we trained to perform risk assessment for disease?
- Why weren't we trained to use PPE?
- Why was PPE not readily available?
- Was there a failure of IC practice?
- What are the lessons learned?



#### I wish I knew

- How to assess for the bugs I cannot see
- Not likely to have warning (dispatch or memo)
- How to determine early and quickly
- How to take steps to prevent transmission
- I could have easily prevented something I spent
   8.5 years of my life dealing with





#### Risk Assessment

- Essential step of routine practice
- Key to taking steps to protect patient, self
- No gas/no glass/no fire/no wire..... familiar?
- Assess for what you cannot see, hear or feel
- Screen while remaining >2 meters from patient
- There are many clues available
- Assess and act! Prevention is key





## Common Signs/Symptoms

SOB Cough

Fever Headache

Myalgia Weight Loss

Hemoptysis Jaundice

Diarrhea Rash

Neurological Recent Travel





#### A Few More Factors

- Degree of contact
- Degree of contamination
- Is procedure likely to generate splash or spray?
- Is a high risk procedure to be performed?
- Patient's level of co-operation
- Difficulty of procedure
- Environmental conditions

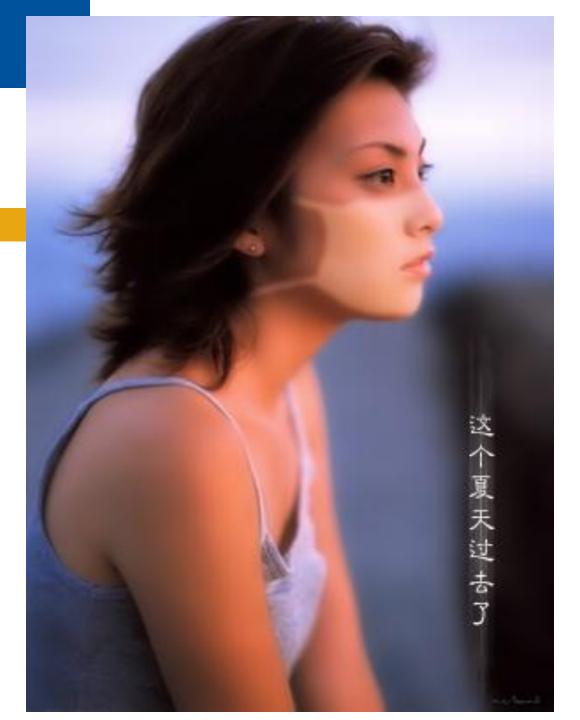




"The patient in the next bed is highly infectious. Thank God for these curtains."

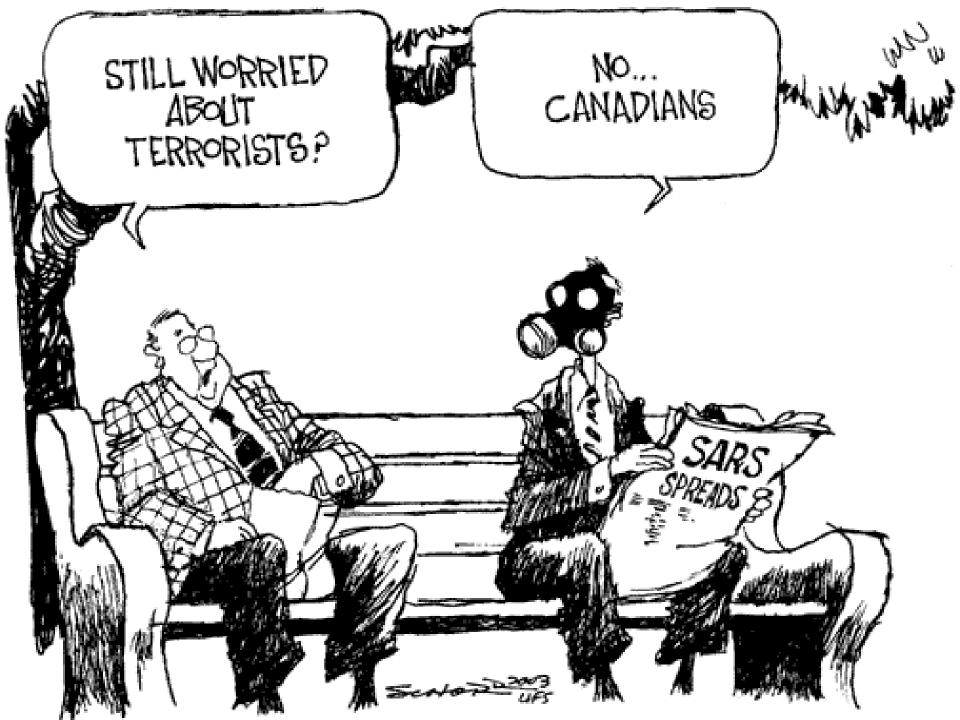


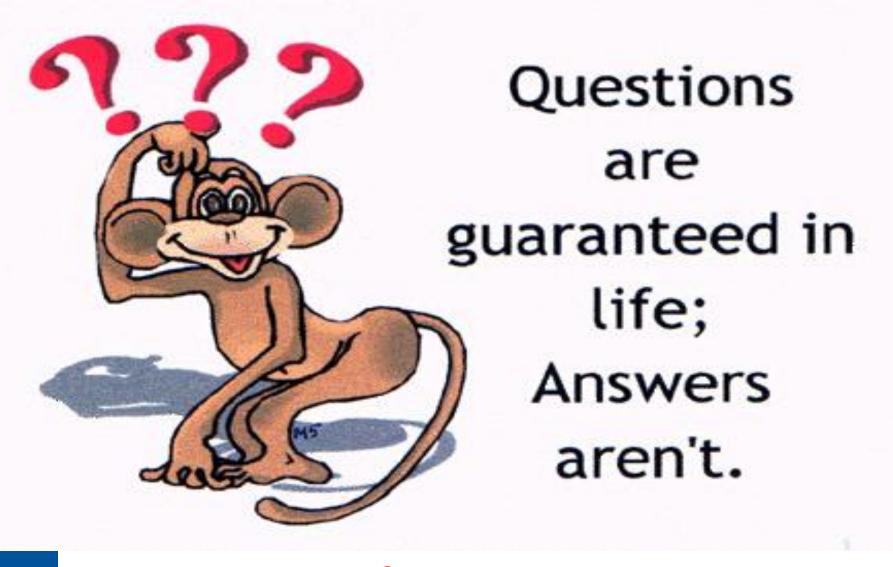
" You misread it...It doesn't say 'avoid Tonto'! "











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