

AHS / EMS Flu Response Unit

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Acknowledgments

- Allan Goodwin
- EMS Management
- IP&C / Pandemic Planning teams
- Dr. Cheri Nijssen-Jordon
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- Brenda Fischer
- Front-line FRU paramedics and IAC staff

Allan Goodwin



Provincial EMS

- Population 3,632,500
 - Edmonton Metro - 950,000
 - Calgary Metro - 1,250,000
- Ground EMS services
 - 450 ground ambulances
 - 320,000+ responses
- Air Ambulance services
 - 12 fixed-wing air ambulance
 - 3 rotor-wing air ambulance (STARS)
 - 7,000+ responses



Provincial Estimates

Attack Rate	Clinically Ill	Requests for Service	Transports	Duration
25%	875,000	208,333	7,600	8 weeks

208,333 EMS calls in 8 weeks?!



EMS Response



Flu Response Unit

Respond to Influenza-Like-Illness calls to reduce the strain on essential services provided by EMS.



EMS Pandemic Plan

Activation Levels	Classification	Patient Volumes (Requests for Service)	Staffing (Illness, Redeployment)	Functional Capacity (Unit Availability)
Initiation Surge	100%-120% Level	↑10 to 20%	↓10 to 20%	↓10 to 20%
Selective prioritization	20% - 40% Service Gap	↑20 to 40%	↓20 to 30%	↓20 to 30%
System wide prioritization	40% - 60% >60% Service Gaps	↑40 %+	↓30%+	↓30%+

How was the FRU implemented?

TRAIN-THE-TRAINER ('just-in-time' training)

- OH&S / Hazard Assessment
- Communications
 - Dispatch Protocols, Card 36, devices used
- Vehicle Procurement (no 'extras' in fleet)
- Equipment / Supplies procurement
- Training
 - Infection Control (video)
 - Assessment Worksheets, CISM
- Administrative
 - Data collection & reporting system

Card 36 Pandemic Flu Determinants

KEY QUESTIONS:

- 1. Do you completely start (sudden appearance)?
- 2. Difficulty breathing? (Due to the viral factor spreading in the air)
- 3. INEFFECTIVE? Did you have any the symptoms prior to this?
- 4. Is the changing color?
- 5. (Yes) Check the color change:
 - Does it feel like a fever that is back or just temperature?
 - Does it have a more cough that recently started?
 - Does it have a more fever?
 - Does it have more cough?
 - Does it have more cough or difficulty breathing?
 - Does it have more cough?
 - Does it have more cough?
- 6. (Yes & no other the symptoms) Was there a sudden onset of any cough?

POST-SCREENING INSTRUCTIONS:

- IF regular (disruptive) I'm sending the pandemic (available) to help you now. Stay on the line and I'll tell you exactly what to do next.
- IF redness/fever (disruptive) I'm arranging care for you now. An ambulance or care van will come to check you when they are available. This might take several hours.
- IF asymptomatic and no disruption? Because of the extent of the flu epidemic, an ambulance cannot be sent to you. I will contact you for a care specialist who will advise you on what to do. (Updated medication requested and alert). Followed health care for what the doctor has determined for these situations.
- IF + DELTA, if there is a definition (if) available, send someone to get it now in case we need it later.

LEVELS / DETERMINANT DESCRIPTIONS:

LEVEL	DESCRIPTOR	LEVEL 1 (D)	LEVEL 2 (C)	LEVEL 3 (A)	LEVEL 4 (Ω)
D	1. INEFFECTIVE ONSET with the symptoms	36-D-1	36-D-2	36-D-3	36-D-4
C	2. DIFFICULTY BREATHING BETWEEN ONSETS with the symptoms	36-C-1	36-C-2	36-C-3	36-C-4
A	3. CHANGING COLOR with the symptoms	36-A-1	36-A-2	36-A-3	36-A-4
Ω	4. Abnormal breathing with single flu symptoms or Asthma	36-Ω-1	36-Ω-2	36-Ω-3	36-Ω-4
	5. Chest pain < 25 with multiple flu symptoms	36-Ω-1	36-Ω-2	36-Ω-3	36-Ω-4
	6. Chest pain < 25 with single flu symptoms	36-Ω-1	36-Ω-2	36-Ω-3	36-Ω-4
	7. Abnormal breathing with multiple flu symptoms	36-Ω-1	36-Ω-2	36-Ω-3	36-Ω-4
	8. No symptoms only cough, fever, chills or muscle, joint pain, diarrhea, rash, headache, etc.	36-Ω-1	36-Ω-2	36-Ω-3	36-Ω-4
	9. Chest pain < 25 with multiple flu symptoms	36-Ω-1	36-Ω-2	36-Ω-3	36-Ω-4

Universal Algorithm in Pandemic

- Application of PPE
- N-95, Isolation Gown, safety glasses, gloves, Microsan (personal 50ml and 400ml)
- Patient overview / Point-of-care assessment
- 2m Distancing
- I-L-I symptoms
- Assessment Equipment (SpO₂, BP, TempaDOT)
- Assessment Worksheet

Assessment Worksheets

- Red → Transport
- Yellow → Referral advice
- Green → Home self-care

FRU Worksheet

ADULT 17 (1/16) (H)

Worksheet # _____

1st Primary Assessment

STEP 1: Are symptoms consistent with the FRU definition?

STEP 2: Are there any medical risk factors?

STEP 3: Take vital signs (if able) and determine if appropriate for:

Level	Color	Criteria
Level 1	Red	Transport
Level 2	Yellow	Referral advice
Level 3	Green	Home self-care

Flu Response Unit (FRU)

399 (82.6%) patients had at least one ILI symptom

320 (66.3%) had at least one medical risk factor

238 (49.3%) patients had vital signs outside normal limits as defined by the FRU protocol



Flu-like Symptoms

“Did you call for the Flu or Something Else?”

“Flu”	263	(54%)
Something else	165	(34%)
Blank or both selected	55	(11%)
TOTAL	483	

RED = 48% of pts were transported to an ED
YELLOW = 45% were referred for further assessment
GREEN = 9% were left at home for self-care

Which pt. has the flu?



Lessons Learned

- Communication / Collaboration
- Critical review
- Utilize existing systems and processes
- Utilize day-to-day operational tools & equipment
- Role clarification

“Innovation distinguishes between a leader and a follower”