

## Media backgrounder: EMS Incident Review key facts and issues

<p><b>What happened and when:</b></p> <p><i>(See executive summary, pg. 2 of report)</i></p>	<p><b>2 p.m. on Sunday, June 5, 2022</b></p> <p>An 83-year-old woman, Betty Ann Williams, was injured in a dog attack in the alley behind her Calgary home that resulted in her death.</p>	
<p><b>The Health Quality Council of Alberta’s (HQCA) role in this event:</b></p> <p><i>(Project overview, pg. 9)</i></p>	<p>Alberta Health Services (AHS) requested the HQCA conduct an independent quality assurance review of the Emergency Medical Services (EMS) response time to this event.</p> <p>Our focus was on system-related factors that contributed to the EMS response time.</p>	
<p><b>What we did:</b></p> <p><i>(Methods, pg. 12)</i></p>	<ul style="list-style-type: none"> <li>• 58 interviews with people connected to the event</li> <li>• Tours of the two call centres involved (Calgary 911 and the AHS Southern Communications Centre (EMS))</li> <li>• Review of best and leading practices in EMS dispatch</li> <li>• Interviews with independent EMS dispatch experts and 911 call evaluators</li> <li>• Review of documents provided by involved agencies</li> <li>• Analysis of AHS EMS data for the 14 days before and 14 days after this event, and of Sundays from March 27 to Aug. 8</li> </ul>	
<p><b>Key agencies involved:</b></p> <p><i>(Overview of Calgary’s Public Safety Answering Points, pg. 14)</i></p>	<p><b>Calgary 911 (C911)</b> – Answered the neighbour’s 911 call and assigned police as the lead agency to assess scene safety. Took information from the neighbour about location of the dogs and need for an ambulance, ended the call then phoned AHS EMS for medical response; dispatched a bylaw officer for scene safety to ensure the dogs were contained.</p> <p><b>AHS EMS</b> (Southern Communication Centre) – Used a manual card set for animal attacks to code the information provided by the C911 police call taker as bravo (serious, not life threatening), and entered the event in the dispatch system’s pending list (as no ambulances were available); later upgraded the event as life threatening and assigned an ambulance</p>	
<p><b>Key times in sequence of events:</b></p> <p><i>(Sequence of events, pg. 23.)</i></p>	<p><b>14:01:59<sup>1</sup></b></p>	<p>Neighbour calls 911; C911 call taker, based on the information provided, assigns police as the lead agency, then transfers call to a C911 police call taker to assess for scene safety concerns</p>
	<p><b>14:07:29</b></p>	<p>C911 police call taker phones EMS to request ambulance</p>

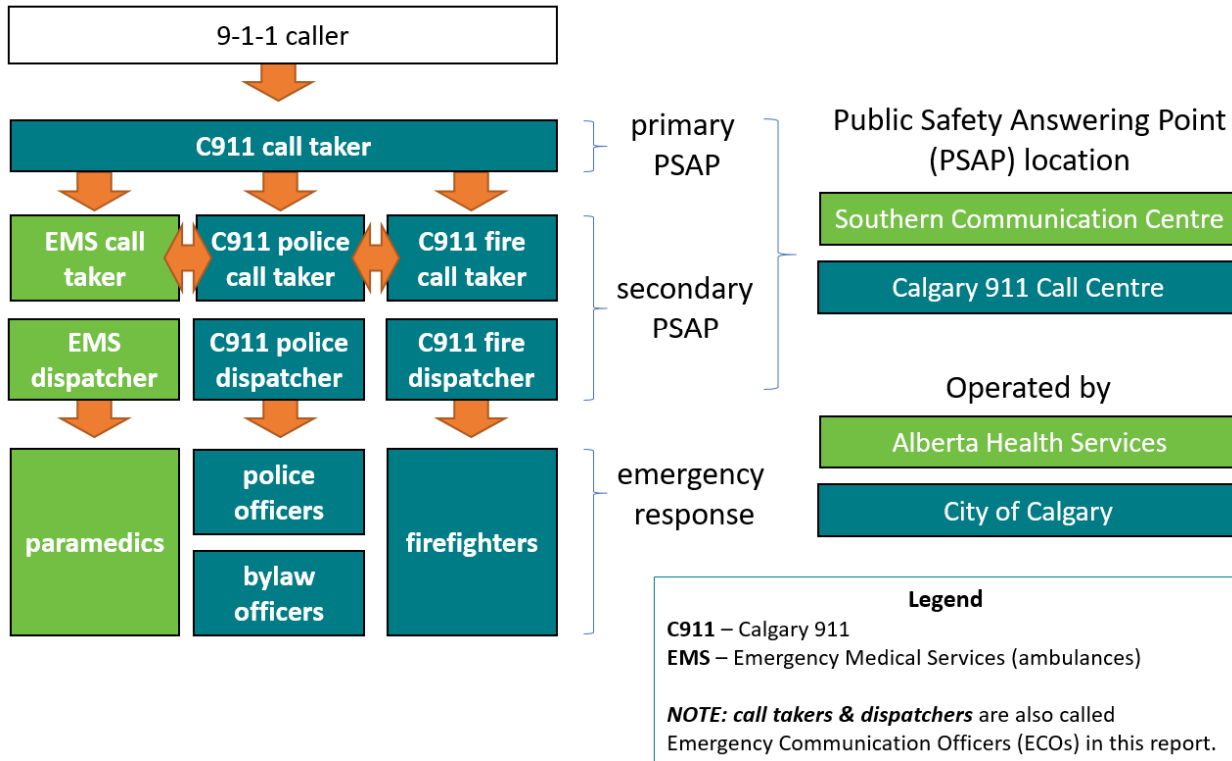
<sup>1</sup> 2:01:59 p.m. on the 12-hour clock

	14:08:34	C911 police dispatcher dispatches bylaw officer
	<b>14:10:09</b>	EMS assigns event as bravo priority and adds the event to the 'pending' list (as no ambulances available)
	14:10:19	Bylaw officer arrives on scene, and tells C911 police dispatcher an ambulance is required immediately
	14:10:45 to 14:23:18	Numerous attempts made by bylaw officer and C911 police dispatcher to tell EMS the patient is severely injured
	<b>14:26:57</b>	EMS changed event from bravo (not life threatening) to delta (life threatening) based on information from bylaw officer
	14:28:03	An ambulance is assigned
	14:31:38	CFD arrives, is directed to the alley by bylaw
	14:38:08	EMS arrives at front door
	<b>14:40:42</b>	EMS assesses patient in alley; requests backup EMS two minutes later
	14:40:44	CPS arrives
	14:48:47	Backup EMS arrives
	<b>14:59:55</b>	EMS arrives with patient at the Foothills Medical Centre
<b>EMS response time: (pg. 28)</b>		
From the time when EMS entered the event in its computer-aided dispatch (CAD):	30 minutes and 22 seconds	
From the time 911 was called:	36 minutes and 9 seconds	
If, based on modelling, event had been initially coded life threatening:	14 minutes and 26 seconds (would have reduced response time by 15 minutes and 56 seconds)	
<b>EMS target response times for life-threatening events:</b>	<ul style="list-style-type: none"> <li>• Eight minutes or less (for five out of every 10 calls; median target)</li> <li>• 12 minutes or less (nine out of every 10 calls; 90<sup>th</sup> percentile response-time target)</li> </ul>	
<b>Ambulance availability at 2 p.m. on June 5:</b>  (pg. 46)	<ul style="list-style-type: none"> <li>• Southern Communications Centre (EMS) was short staffed</li> <li>• Only 31 of 38 (82%) ambulances assigned to Calgary were staffed</li> <li>• EMS was in red alert (i.e., no ambulances available to respond to events)</li> <li>• There were 20 events on the pending list at the SCC (i.e., 20 events in a queue waiting for an ambulance to become available)</li> <li>• 18 ambulances were in Calgary emergency departments (EDs) plus two ambulances transporting patients to Calgary EDs</li> </ul>	
<b>Compared with 14 days before and 14 days after June 5:</b>	Response time on June 5 was <i>longer than</i> would be expected based on the data.	
<b>Compared with Sundays between March 27 and Aug. 8:</b>	Response time on Sunday, June 5 was <i>consistent with</i> response times on other Sundays based on the data.	

## Partner agencies for 911 calls

In Calgary, the phone number used to report an emergency is 911. It is answered by a call taker at Calgary 911 (C911), who evaluates the call and determines which emergency service will be assigned the lead agency to respond: police, fire, or ambulance. The figure below shows the relationship between the partner agencies.

### Calgary's emergency services response process



### Medical Priority Dispatch System: priorities and description

Level/priority	Description
Echo	Life threatening – cardiac or respiratory arrest
<b>Delta</b>	<b>Life threatening other than cardiac or respiratory arrest</b>
Charlie	Serious not life threatening – immediate
<b>Bravo</b>	<b>Serious not life threatening – urgent</b>
Alpha	Non serious or life threatening
Omega	Minor illness or injury

## Summary of issues, associated factors, and recommendations

*Please see the report for a complete list of factors contributing to the EMS response time.*

### ISSUE 1: Event was initially assigned a bravo priority level<sup>2</sup> (pages 29–41 in report)

The 911 call was transferred to a C911 police call taker to assess scene safety. The policy on assessing scene safety in dog attacks is unclear. If it had been determined in the initial 911 call that the dogs were contained, the call could have been transferred to EMS to assess injuries.

**Recommendation 1:** Revise Calgary 911 policy on assessing scene safety.

EMS dispatch did not speak directly to the 911 caller. The C911 police call taker took information from the 911 caller about the condition of the injured person, ended the call, then relayed that information to EMS. Co-evaluation (two agencies assessing a call together), which is best practice, is not regularly done in Calgary.

**Recommendations 2, 3:** Improve co-evaluation processes between agencies.

The C911 police call taker/dispatchers gave information to EMS in a way that didn't follow an established process or call standard. CPS officers were informed in 2021 of what information to provide about a patient, but no confirmation was obtained to indicate frontline officers (bylaw or CPS) are trained in this protocol.

**Recommendations 4, 5, 6:** Develop a standard way of communicating information between call takers. Train first responders and dispatchers on the information to collect/provide about patients.

EMS used a manual card set for dog bites/attacks to evaluate the call from C911 police call taker. Algorithms in the computerized version (ProQA) would have prompted the EMS call taker to ask additional questions and factored in assumptions about the patient's condition. The event would have likely been coded as a delta (higher priority) if ProQA had been used.

**Recommendations 7, 8:** Ensure all EMS desks where call taking does or might occur are fully set up to do this using ProQA, and backup processes are in place.

### ISSUE 2: Challenges providing updates on the patient's condition (pages 41–43)

The bylaw officer on the scene could not reach the C911 police dispatcher to provide timely updates on the patient's condition because the radio was tied up by an unrelated high-intensity police event. Bylaw officers are not trained in procedures for sharing emergency information on busy radio channels.

**Recommendation 9:** Create or update policies to enable bylaw officers to interrupt radio traffic.

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<sup>2</sup> Serious but not life threatening

The C911 police dispatcher had difficulty reaching EMS to provide information from the bylaw officer about the patient's condition. The EMS call centre was short staffed, impacting how calls were managed.

**Recommendation 10:** Review current use of phone lines between call centres and establish clear procedures for their operation.

### ISSUE 3: Demand for EMS exceeded available resources (pages 43–55)

Had the attack been initially coded as life-threatening (delta), an ambulance would have been dispatched and the estimated response time would have been 14 minutes and 56 seconds from the time of dispatch. This event was put on a pending list as it was coded as non life-threatening (bravo). There were fewer ambulances on the road that day than scheduled and none available at that time for less-serious events.

**Recommendations:**

**11:** Divert more 911 calls to other EMS call centres in Alberta when one centre is short staffed to create more capacity for answering local partner agency calls.

**12:** Using clinical expertise, establish a process for managing events on the pending list so the next most serious event is assigned the next available ambulance, and non-urgent events use alternative care pathways (e.g., Health Link).

**13:** Develop a process to inform callers when their calls are on the pending list (no ambulance assigned).

### ISSUE 4: EMS arrived at the front door of the patient's home and not the alley<sup>3</sup> (pages 55–56)

The EMS crew arrived at the front door of the patient's house because the information about the specific location of the event was not easily seen by the EMS crew on their mobile computer.

**Recommendation 14:** Establish a standard way to record location-specific information that is easily seen on ambulance mobile computers.

### ISSUE 5: The relationship between Calgary 911 and AHS EMS affects interoperability (pages 57–60)

Moving EMS dispatch to a separate location appears to have resulted in tension between the organizations. CPS introduced an extra notification list for EMS events when EMS consolidation occurred. Note that the consolidation of dispatch was not found to have contributed to the outcome of this incident, nor to response times.

**Recommendations:**

**15:** Establish a way for both groups to work together to develop policies, make decisions, and improve the emergency response system in Calgary.

**16:** CPS should reconsider the need for its additional notification list for EMS events.

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<sup>3</sup> The patient was in the alley where the attack occurred.