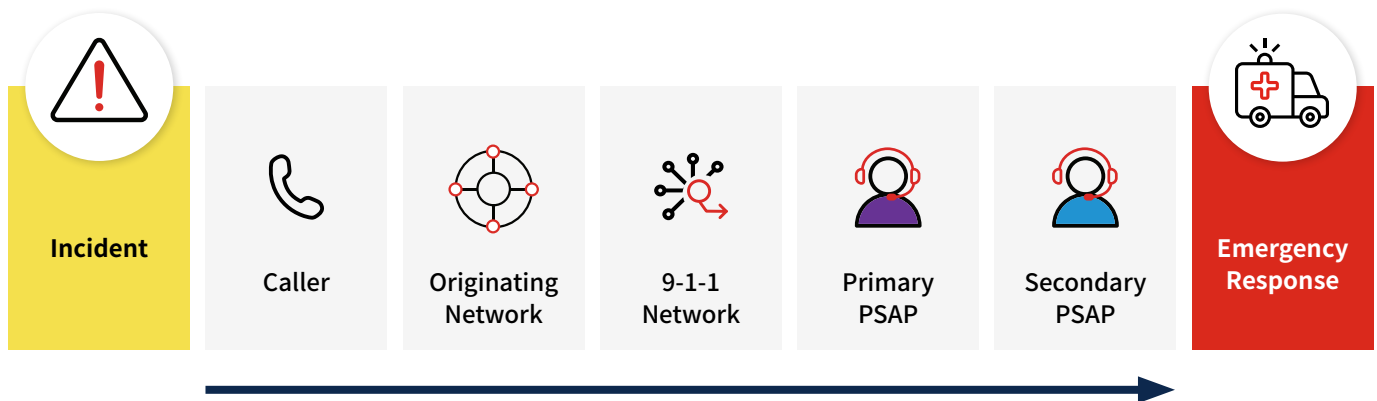# 9-1-1 IN CANADA

When someone calls 9-1-1 in Canada, the call must traverse an ecosystem of solutions, service providers, and technologies to get the call from the caller to the 9-1-1 call taker. The caller uses a device to place the call. That device, in turn, is connected to a wired or wireless originating network. The originating network then passes the call to the 9-1-1 service provider, which in Canada means TELUS for British Columbia and Alberta, SaskTel for Saskatchewan, and Bell for Manitoba and all provinces east. Lastly, the 9-1-1 service provider routes the call to the primary safety answering point (PSAP), where the call taker answers the call, and a dispatcher will request that police and/or fire and/or ambulance resources attend to the emergency.

| Incident | Caller | Originating Network | 9-1-1 Network | Primary PSAP | Secondary PSAP | Emergency Response |

Canada is transitioning from Enhanced or E9-1-1 to Next Generation or NG9-1-1. Avaya contributes to the CRTC Emergency Services Working Group (ESWG) that is planning and coordinating this evolution.
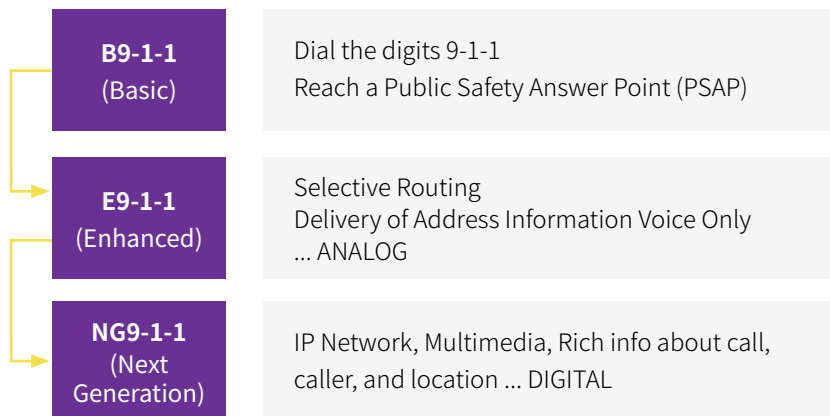
Avaya and 9-1-1

Avaya provides solutions to assist with processing 9-1-1 calls at two points within this ecosystem. Avaya supports the call centers that answer the 9-1-1 calls and the business or enterprise communication systems that may originate the 9-1-1 call.

Enterprise 9-1-1

- Manage info to be sent to 9-1-1
- Route calls to 9-1-1
- Onsite notifications
- Support workflow to prepare for arrival of emergency responders and event management

Public Safety 9-1-1 Public Safety Answering Point (PSAP)

- Receive 9-1-1 calls
- Determine nature of the emergency [Police - Medical - Fire]
- Triage of transfer
- Obtain a dispatchable address
- Dispatch emergency responders

Public Safety 9-1-1

Public safety agencies that operate the PSAPs utilize contact center solutions that receive and transfer calls via the specialized 9-1-1 network, route calls to specific call takers, and integrate those calls with the PSAPs call recording solutions and computer-aided dispatch (CAD) systems.

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B9-1-1 (Basic)	Dial the digits 9-1-1 Reach a Public Safety Answer Point (PSAP)
E9-1-1 (Enhanced)	Selective Routing Delivery of Address Information Voice Only … ANALOG
NG9-1-1 (Next Generation)	IP Network, Multimedia, Rich info about call, caller, and location … DIGITAL

Avaya enterprise 9-1-1 solutions trigger a command and control dashboard and notifications to alert key personnel that someone has called 9-1-1.

Enterprise 9-1-1

The 9-1-1 call might originate from a cell phone, home phone, VoIP service, or business. Avaya provides 9-1-1 solutions used by small and medium businesses, large enterprises, hotels, universities, hospitals, and all levels of government. When someone places a 9-1-1 call from the communication system used by these entities, Avaya enterprise 9-1-1 solutions does its part to ensure that the call and appropriate information get routed to the correct PSAP. Avaya collaborated with the CRTC Emergency Services Working Group to establish a series of CRTC best practices for the configuration and operation of multi-line telephone systems (MLTS) in support of initiating 9-1-1 calls (see: Multi Line Telephone System (MLTS) Best Practices | CRTC; listen: Preparing for the new multi-line 9-1-1 best practices | Avaya)

Enterprise stakeholders who care about risk and employee/customer safety want to ensure emergency response to a 9-1-1 call is not denied or delayed because of ineffective call handling within the enterprise communication system or their facilities.

- First, callers should not need to concern themselves with how to reach 9-1-1, i.e., whether a dialing prefix should be used or not. That is why Avaya systems can be tuned to allow the dialing of specialized numbers such as 9-1-1, 9-8-8, and 8-1-1 within the dial plan and if necessary both with and without a dialing prefix to reach an outside line.

- Conveying accurate location information to the 9-1-1 system is critical to having the call routed to the correct PSAP and emergency responders dispatched to the event scene. That said, the flexibility of IP-based communication systems, including the wide use of working remotely or from home, creates challenges for maintaining an accurate view of the location associated with a user's extension or an endpoint. Avaya enterprise 9-1-1 solutions employ various techniques to ensure that the correct location is obtained and then communicated should someone call 9-1-1.

- Preparing for the arrival of emergency responders, such as opening or clearing doorways and hallways and preparing elevators, helps to expedite getting responders to where they need to be. Likewise, there may be things that designated employees can do to deal with or contain the event before the arrival of emergency responders. This is why Avaya enterprise 9-1-1 solutions trigger a command and control dashboard and notifications to alert key personnel that someone has called 9-1-1.

- As Canada evolves to NG9-1-1, in the future, Canadian PSAPs can take advantage of "additional information" to assist call takers or responders in dealing with the emergency. Avaya enterprise 9-1-1 solutions already make additional information available to U.S. PSAPs and is ready to share such information with Canadian PSAPs.

Information such as a hazardous materials list, floor plans, essential building, or occupant contact information can go a long way to increasing situational awareness, which can help accelerate responsiveness and drive the effectiveness of the response.

While the PSAP and Enterprise 9-1-1 solutions are separate and distinct systems, they contribute to a coordinated response to a 9-1-1 call made from an enterprise system.

Avaya informs, educates, and collaborates with other industry participants regarding technology that will impact the operation of the PSAPs.
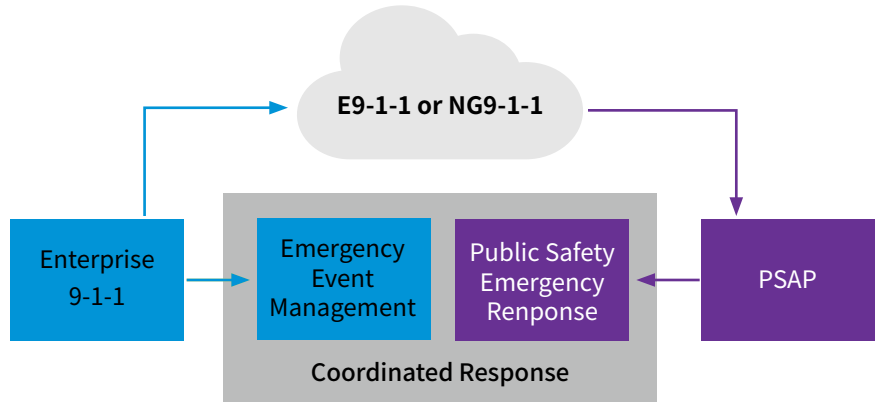
Evolution of 9-1-1

Avaya and our solution partners are active participants with CRTC Emergency Services Working Group (ESWG). ESWG is a cross-industry voluntary organization that reports into the CRTC that plans and coordinates the technology evolution of 9-1-1 services in Canada. ESWG has representation from wireline and wireless originating network providers, 9-1-1 service providers, pubic safety answering points (PSAPs), and select vendors. In that the delivery and servicing of 9-1-1 calls requires an end-to-end ecosystem that no single person or entity can fully grasp, Avaya informs, educates, and collaborates with other industry participants regarding technology that will impact the operation of the PSAPs.

About Avaya

Businesses are built by the experiences they provide, and every day, millions of those experiences are delivered by Avaya. Organizations trust Avaya to provide innovative solutions for some of their most important ambitions and challenges, giving them the freedom to engage their customers and employees in ways that deliver the greatest business benefits.

Avaya contact center and communications solutions power immersive, personalized, and unforgettable customer experiences that drive business momentum. With the freedom to choose their journey, there's no limit to the experiences Avaya customers can create.