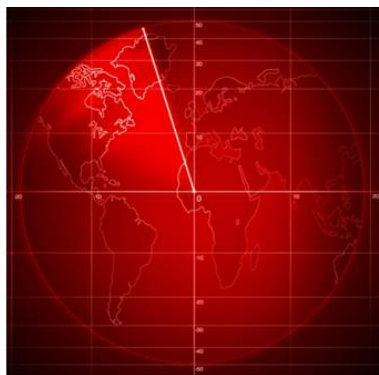




GOVERNMENT OPERATIONS CENTRE

CENTRE DES OPÉRATIONS DU GOUVERNEMENT



Canadian All-Hazards Symbology

DATE: JULY 02, 2015
RDIMS No.: 1272768



Government
of Canada

Gouvernement
du Canada

Canada

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Change Log

Date	Change	Changed by

Background

The Canadian All-Hazards Symbology was created to meet the geomatics requirements of the Government Operations Centre. It provides a comprehensive set of symbols for emergency management operations. Its predecessors are the Canadian Disaster Database (CDD) symbology and the Emergency Mapping Symbology (EMS).

In 2007, Public Safety contracted the development of symbology for use with the CDD interactive web map. The design style followed that of the US Federal Geographic Data Committee Homeland Security Working Group (FGDC HSWG) symbology. The CDD symbols had been utilized by the GOC Geomatics group in many of its mapping products over the years. Over time, an expanded set was required by GOC Geomatics to incorporate more events and increase consistency throughout their mapping products.

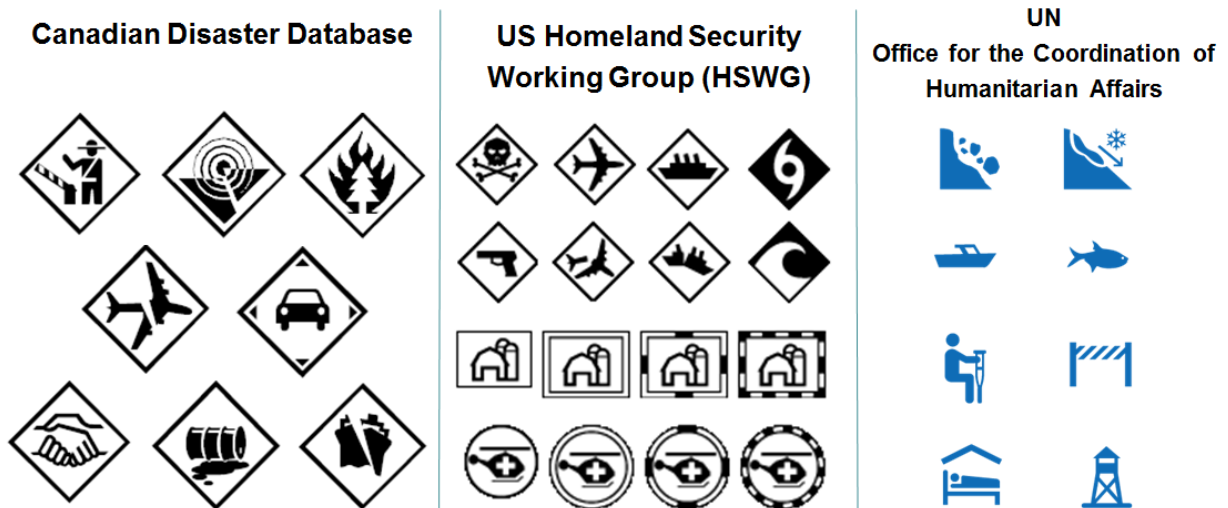
In 2010, GeoConnections contracted the development of a set of symbology called the Emergency Mapping Symbology (EMS) for the emergency management community. The EMS set involved a large taxonomy covering a total of 249 events, infrastructures and operations.

In 2012, a set of symbology was drafted by GOC Geomatics that incorporated the taxonomy developed under the EMS project with a design style inspired by the US HSWG symbols. The taxonomy was expanded after consultation with Government of Canada Emergency Operations Centres Working Group. The actual computerized development of the symbology was completed in early 2015.

Symbol Design & Format

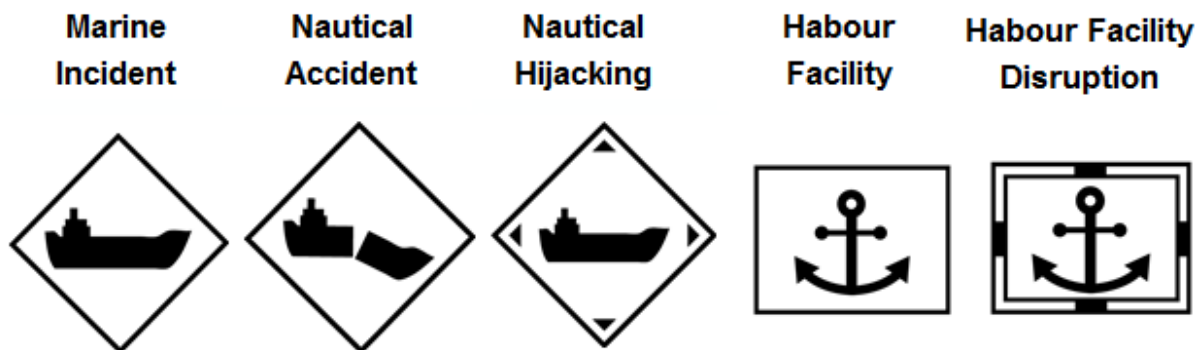
The CAHS design style followed the example of other symbology sets, including the CDD, the US HSWG symbology, and the United Nations Office for the Coordination of Humanitarian Affairs symbology (figure 1).

Figure 1: Examples from preceding emergency management symbology sets



Following the example of the HSWG, CAHS incorporated the use of different frames – diamond for incident, rectangle for infrastructures, and circle for operations. A frame with dashes represents a disruption to an incident or infrastructure (figure 2). When the CAHS set is distributed, these frames will be provided for users to combine with any symbol.

Figure 2: An example of CAHS design style and its usage of frames



The EMS was the most recent Canadian symbology set that preceded the CAHS. The design style used for EMS involved very bright colours, involving gradient fills and a colour scheme to indicate the domain for each symbol. The intended purpose of this style was to facilitate legibility on different web maps. The CAHS design differs from the EMS as it was created for a different purpose. The CAHS was prepared for primarily for desktop mapping, while still enabling effective web use. It was designed to stand out well on vector-based maps, as well as maps with raster backgrounds, such as topography or satellite imagery.

The CAHS symbols were designed in vector format using Adobe Illustrator. They are distributed in vector form as a true-type font, and also in raster form (PNG with 400 pixels dimension). One of the primary advantages of symbols in vector over raster is their ability to be customized by the end-user based on their requirements.

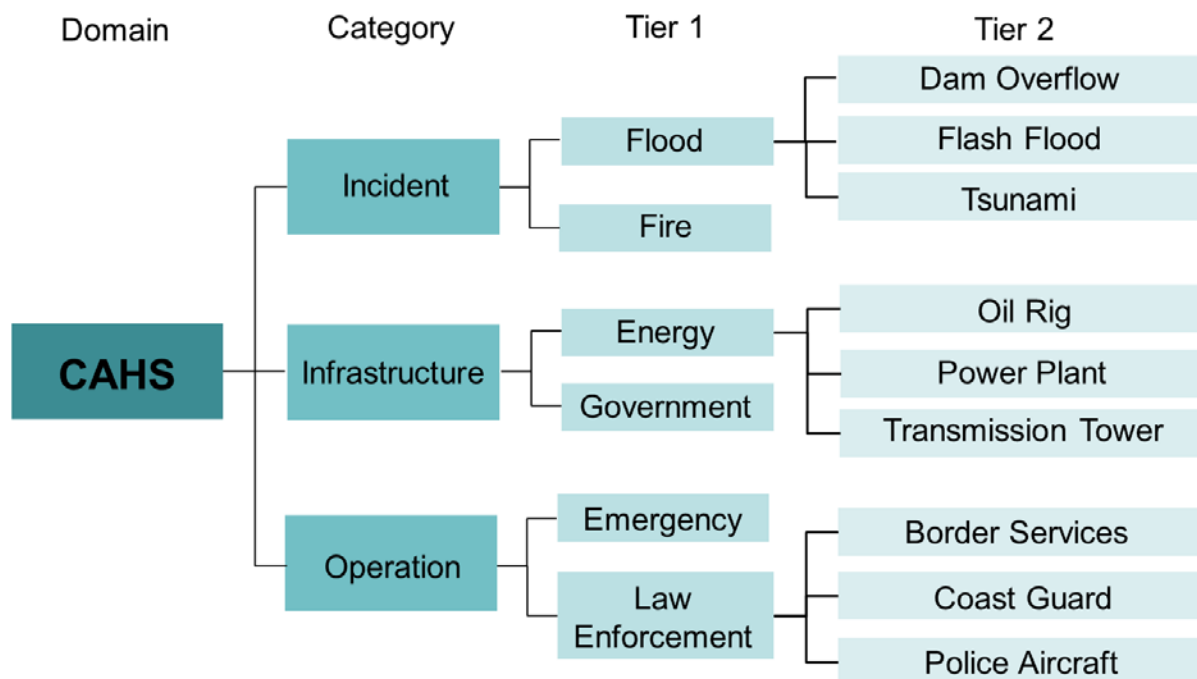
A few useful features of the CAHS symbols are:

- Monochrome design, allowing the symbol to stand out well on most basemaps
- Solidly filled as much as possible to prevent bleed-through from the underlying map
- Scalable due to original vector format
- Customizable due to vector format, allowing colours to be chosen for foreground, background and frames
- Matching set of vector and raster symbols allows standardization between desktop and web platforms

Taxonomy & Definitions

Following the precedent of the EMS, the CAHS uses a tiered structure of symbols. The EMS had an extensive taxonomy with approximately 250 incidents, infrastructures and operations combined. Each individual incident, infrastructure or operation was called an entity. After consultation with Government of Canada operations centres, the CAHS used that taxonomy and expanded it to accommodate additional requirements. It consists of three categories and each category is broken down to tiers and sub-tiers (figure 3).

Figure 3: CAHS taxonomy structure



As with the EMS taxonomy, the CAHS taxonomy was represented with a dot notation, as in *domain.category.tier1.tier2*. For example, the full file name of the entity “dam overflow” would be: *cahs.incident.flood.damOverflow*.

As of March 2015, the CAHS is comprised of 185 incidents, 106 infrastructures and 57 operations with a total of **348** entities. Please refer to the *CAHS Definitions Catalogue* in *Annex A* for the complete record of taxonomy structure, entities, definitions and symbols.

New Entities

The CAHS may be expanded upon request by federal emergency management partners and consideration by the organization responsible for CAHS maintenance.

Guidelines for Use

The CAHS symbols should be used to represent point data. It is not ideal to replicate the same symbol to form a line. Instead, a symbol can be put on various points along a line to indicate what the line represents.

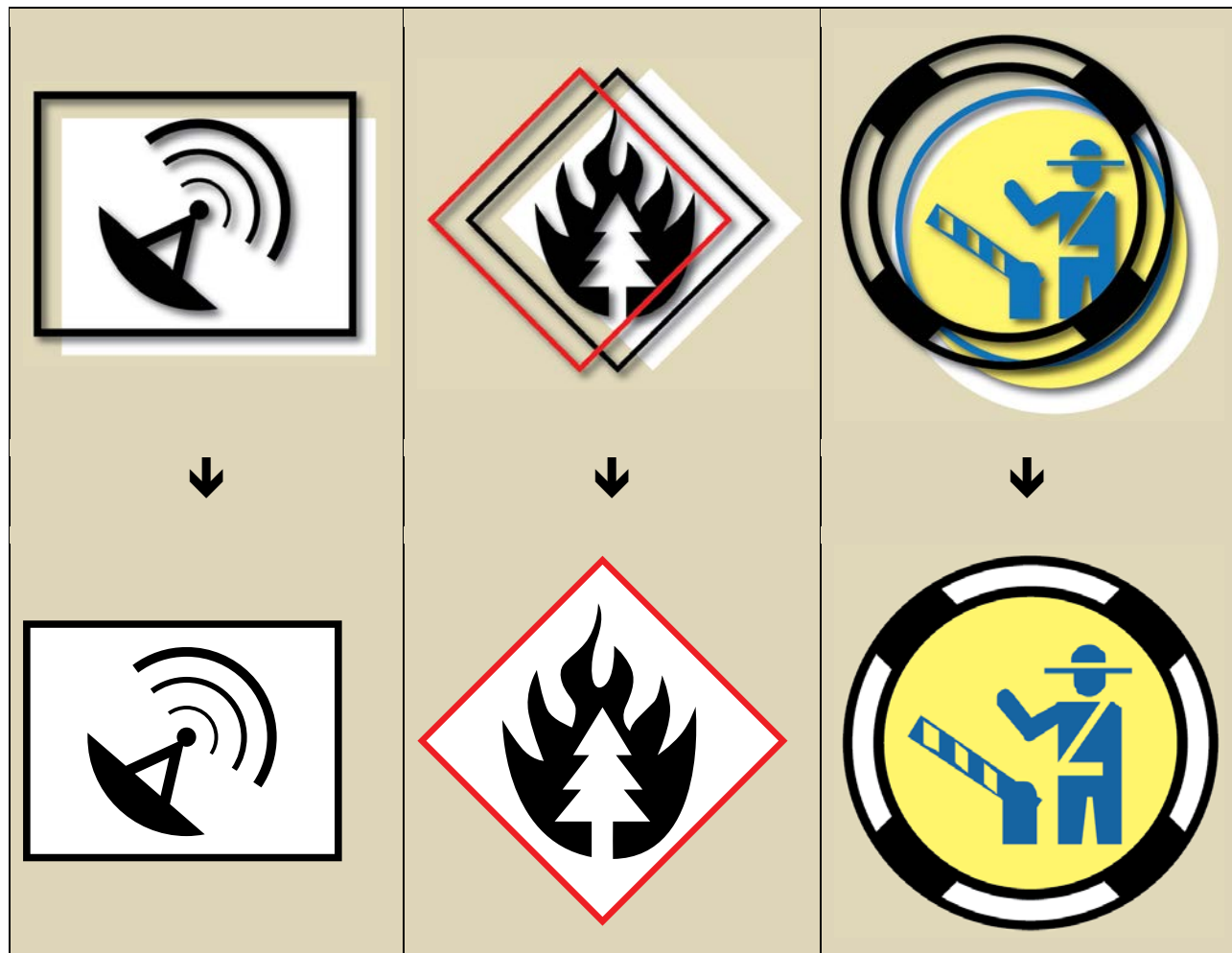
The vector symbols are provided in three true-type font files, one for each category. The fonts will allow easy desktop mapping use. To facilitate the incorporation of the symbols into ESRI desktop mapping software, an ESRI Style file has been created which references all three fonts and includes all 348 symbols. It includes the full name of the incident, infrastructure or operation, allowing a rapid text search.

Online use of the CAHS can be achieved with the use of the raster version of the symbols. The filenames used are shown in the table in Annex A. The PNG files were created with white backgrounds for the symbols with the space outside the frame set to transparent. The PNG images are created with a high enough resolution to allow for most uses. If the user requires larger images, the original vector symbols can be used to generate them. The vectors can also be used to generate coloured versions of the raster symbols.

Customizing CAHS Symbols

A symbol can be customized according to its function or status. This is the advantage of the vector format of the symbology. Different elements of the symbols can be highlighted with colour based on user requirements. Figure 4 shows three symbols stacked with a background shape that functions as a fill. The appearance of the frame can be changed by stacking a separate frame element with a different colour than the original symbol. All of these elements are provided to facilitate this customization.

Figure 4: Symbol stacking



An ESRI style file has been created that contains all symbols with a corresponding background fill set to white by default. Once the true-type font is installed, the Style file will allow rapid use of the symbols in ESRI desktop mapping software, such as ArcGIS.

Raster versions of the CAHS have been created in two formats, normal and disrupted. The files have been made in PNG format with the bounding box of the graphic set to transparent. The foreground is set to black and the background is set to white. The end

user can use the raster or vector versions to develop different variations of raster symbols as required.

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FURTHER INFORMATION: For further information, please contact:

Government Operations Centre
Public Safety Canada
Address: 269 Laurier Avenue, Ottawa, Ontario, Canada

Acknowledgement

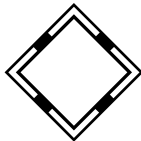


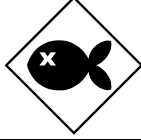

This work was undertaken by the Geomatics section of the Government Operations Centre. Considerable influence on the design style was taken from the Homeland Security Working Group Emergency Symbology developed by the United States Department of Homeland Security and the Canadian Disaster Database symbology. Design inspiration was also drawn from the United Nations Office for the Coordination of Humanitarian Affairs symbology. Novel designs were also developed by the Government Operations Centre. Some vector symbols, based on Government Operations Centre designs, have been created by Amita under contract by Government Operations Centre.








The taxonomy used followed the example set out by the Emergency Mapping Symbology created by Natural Resources Canada. The expansion of the list of entities was conducted after consultation with partners from the Federal Operations Centres Working Group and as required by the Government Operations Centre.








Definitions accompanying the symbols were taken primarily from Government of Canada departmental websites, including but not limited to, Public Safety Canada, Canadian Food Inspection Agency, Environment Canada and Health Canada. Other definitions came from the World Health Organization and the Brisbane City Council.




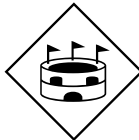


Software used for the development of the symbology includes Adobe Illustrator and Fontographer. ESRI Style file created with ESRI ArcGIS.





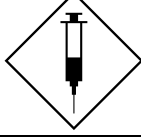


Annex A - Taxonomy, Symbols and Definitions

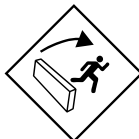






Hazard Group	Hazard Sub-group	Type	File.Name	Image	Definition
Incident	Disruption	Disruption	cahs.incident.disruption		When used in combination with any of the Incident tier symbols, signifies a disturbance that compromises the availability, delivery and/or integrity of services of that symbol's type.
	Air Quality	Air Quality	cahs.incident.airQuality		An elevated particulate count in the atmosphere which adversely affects visibility or health.
	Animal Health	Animal Health	cahs.incident.animalHealth		An incident affecting the health of wild or domesticated animal populations.
		Animal Die Off	cahs.incident.animalHealth.animalDieOff		An abnormally high rate of animal mortality affecting wild or domesticated animal populations.
		Animal Disease	cahs.incident.animalHealth.animalDisease		A diagnosed disease affecting the health of wild or domesticated animal populations.








Incident	Animal Health	Animal Feed	cahs.incident.animalHealth.animalFeed		An issue affecting animal feed or supply.
		Animal Quarantine	cahs.incident.animalHealth.animalQuarantine		Official confinement of regulated livestock for observation and research or for further inspection, testing and/or treatment.
	Aviation	Aviation	cahs.incident.aviation		An incident involving aircraft resulting in damage, bodily injury, death, or the disruption of transportation service.
		Aircraft Crash	cahs.incident.aviation.aircraftCrash		A sudden, unexpected event involving aircraft resulting in fuselage damage, bodily injury, death and/or the disruption of transportation service; prompting emergency landing procedures or uncontrolled impact with the ground.
		Aircraft Hijacking	cahs.incident.aviation.aircraftHijacking		The unexpected, unlawful and forceful seizure of control aboard an aircraft by an individual or group of individuals resulting in passenger and crew endangerment, injury or death, and/or the redirection of flight destination.
		Airport Closure	cahs.incident.aviation.airportClosure		A closure of an airport or helicopter landing site.
		Airspace Closure	cahs.incident.aviation.airspaceClosure		A closure of a jurisdiction's airspace to air traffic.


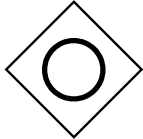




Incident	Aviation	Notice to Airmen	cahs.incident.aviation.noticeToAirmen		A Notice to Airmen (NOTAM) is created and transmitted by a government agency under guidelines specified by Annex 15: Aeronautical Information Services of the Convention on International Civil Aviation. A NOTAM is filed with an aviation authority to alert aircraft pilots of any hazards en route or at a specific location.
		Rocket Launch	cahs.incident.aviation.rocketLaunch		The launching of a rocket which does not leave earth's atmosphere.
		Space Debris	cahs.incident.aviation.spaceDebris		Are objects in orbit around Earth that were created by humans but no longer serve any useful purpose; as used here they have reentered earth's orbit and crashed into Earth's surface.
		Space Launch	cahs.incident.aviation.spaceLaunch		The act of releasing a self-propelled vehicle into Earth's upper atmosphere (with intent to reach a sustained orbit).
	Civil	Civil	cahs.incident.civil		Human activities resulting in the disrupting of services or requiring varying levels of support, law enforcement or attention.
		Civil Demonstration	cahs.incident.civil.civilDemonstration		A public display of group feelings toward a person or cause.
		Civil Displaced Population	cahs.incident.civil.civilDisplacedPopulation		Persons or groups of people who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, violations of human rights, or natural or human-made disasters.








Incident	Civil	Civil Emergency	cahs.incident.civil.civilEmergency		An emergency that disrupts normal civilian activities.
		Civil Rioting	cahs.incident.civil.civilRioting		A public disturbance involving the commission of, or the threat or threats to commit, an act or acts of violence by one or more persons part of an assemblage of three or more persons having, individually or collectively, the ability of immediate execution of such threat or threats, where the performance of the threatened act or acts of violence would constitute a clear and present danger of, or would result in, damage or injury to the property of any other person or to the person of any other individual.
		Dignitary Visit	cahs.incident.civil.dignitaryVisit		A visit by an important or influential person, or one of high rank or position.
		Public Event	cahs.incident.civil.publicEvent		An event where a large gathering of people is expected.
	Civil	Volunteer Request	cahs.incident.civil.volunteerRequest		The specific location for which support for volunteers has been requested. The location refers to the location of the emergency event or an associated muster station for volunteers.
	Crime	Crime	cahs.incident.crime		An unlawful pursuit or action in which an individual participates.








Incident	Crime	Suspicious Package	cahs.incident.crime.suspiciousPackage		Any package, delivered or found, whose contents are unverified and which may cause disease, injury or death.
		Bomb Explosion	cahs.incident.crime.bombExplosion		A violent outburst resulting from detonation of a chemical or nuclear explosive or from the loss of a high pressure vessel's integrity.
		Bomb Threat	cahs.incident.crime.bombThreat		A warning of the possible presence of a bomb or expression of the intention to detonate a bomb.
		Dangerous Person	cahs.incident.crime.dangerousPerson		A person considered dangerous or threatening to others.
		Drugs	cahs.incident.crime.drugs		A crime committed involving illicit drugs.
		Home Crime	cahs.incident.crime.homeCrime		A crime committed in a residential property.
	Crime	Illegal Immigrant	cahs.incident.crime.illegalImmigrant		The movement of people across national borders in a way that violates the immigration laws of the destination country

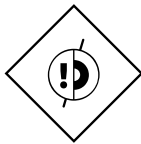




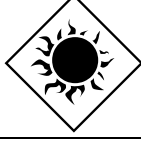

Incident	Crime	Illegal Migration	cahs.incident.crime.illegalMigration		The movement of a large group of people, usually crossing national borders, in a way that violates the immigration laws of the destination country.
		Industrial Crime	cahs.incident.crime.industrialCrime		A crime committed in an industrial property.
		Looting	cahs.incident.crime.looting		Burglary committed within an affected area during an emergency.
		Poisoning	cahs.incident.crime.poisoning		Use of a poisonous substance to injure or kill.
		Prisoner Escape	cahs.incident.crime.prisonerEscape		The event of an inmate escaping from federal/provincial/territorial custody, be it correctional institutions, police/peace officer custody or other escorts between facilities.
		Retail Crime	cahs.incident.crime.retailCrime		A crime committed in a commercial or retail property.
	Crime	Shooting	cahs.incident.crime.shooting		Use of a firearm to kill or injure or to damage property.







Incident	Crime	Stowaway	cahs.incident.crime.stow away		A person who secretly boards a vehicle, such as an aircraft, bus, ship or train, to travel without paying and without being detected.
		Terrorism	cahs.incident.crime.terror ism		The systematic use of terror especially as a means of coercion.
		Vehicle Crime	cahs.incident.crime.vehic leCrime		A crime committed in or against a vehicle.
	Cyber Incident	Cyber Incident	cahs.incident.cyberIncide nt		The unintentional or unauthorized access, use, manipulation, interruption or destruction (via electronic means) of electronic information and/or the electronic and physical infrastructure used to process, communicate and/or store that information.
	Cyclonic Event	Cyclonic Event	cahs.incident.cyclonicEv ent		The occurrence of a low pressure system with a cyclonic circulation. It is also called a depression, and is generally associated with poor or stormy weather. The point of lowest atmospheric pressure marks the centre of the cyclone.
		Hurricane	cahs.incident.cyclonicEv ent.hurricane		Hurricanes are tropical cyclones with maximum sustained surface winds of at least 64 knots (118 km/h). Hurricanes are known as typhoons in the western Pacific, very severe cyclonic storms in the North Indian Ocean, and severe tropical cyclones in Australia. There are five classes of hurricane intensity as outlined by the Saffir-Simpson Scale which is based on severity of wind speeds.
		Post Tropical Depression	cahs.incident.cyclonicEv ent.postTropicalDepressi on		A cyclonic event that used to be tropical but has since lost most of its tropical characteristics. These is still notable since storms with a tropical pedigree seldom lose all of their tropical characteristics, such as intense rainfalls and high wind gusts.








Incident	Cyclonic Event	Post Tropical Storm	cahs.incident.cyclonicEvent.postTropicalStorm		A storm system that used to be tropical but has since lost most of its tropical characteristics. Since the remnant system may or may not be an extratropical cyclone (a term set aside for a specific breed of cyclone), the term post-tropical is a good way of continuing the use of the storm name. This is important because storms with a tropical pedigree seldom lose all of their tropical characteristics, such as intense rainfalls and high wind gusts.
		Tropical Depression	cahs.incident.cyclonicEvent.tropicalDepression		A tropical cyclone with maximum sustained surface winds of 20 to 34 knots (37 to 62 km/h). It does not typically have the organization or the spiral shape of the more powerful storms. When a tropical cyclone reaches this stage it is given a number so that it can be better recognized.
		Tropical Storm	cahs.incident.cyclonicEvent.tropicalStorm		A tropical cyclone with maximum sustained surface winds of 34 to 64 knots (63 to 117 km/h). When a tropical cyclone reaches this stage it is given a name so that it can be better recognized.
	Dangerous Animal	Dangerous Animal	cahs.incident.dangerousAnimal		A dangerous or threatening animal, wild or domesticated.
	Death of Federal Representative	Death of Federal Representative	cahs.incident.deathOfFederalRepresentative		The unforeseen death of a representative of the Government of Canada, while performing her/his duties or where the representative is a publicly recognized figure and her/his passing is likely to command major media attention.
	Fire	Fire	cahs.incident.fire		The destructive act of something burning; caused either by electrical or technological malfunction, lightning, arson, human error or human negligence.

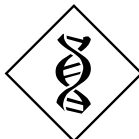
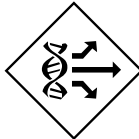
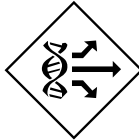

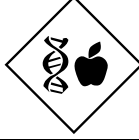
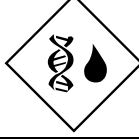

Incident	Fire	Forest Fire	cahs.incident.fire.forestFire		An uncontrolled fire in a forested area.
		Hot Spot	cahs.incident.fire.hotSpot		An area of intensified fire activity and increased heat or a particularly active part of a fire.
		Industrial Fire	cahs.incident.fire.industrialFire		An uncontrolled fire in an industrial building or complex.
		Smoke	cahs.incident.fire.smoke		The visible products of combustion rising above the fire.
		Urban fire	cahs.incident.fire.urbanFire		An uncontrolled fire in an urban area affecting residential or commercial properties.
		Wild Fire	cahs.incident.fire.wildFire		An uncontrolled fire in a non-urban area.
	Fire	Wildland Urban Interface Fire	cahs.incident.fire.wildlandUrbanInterfaceFire		Forest fires that burn in the area where homes or other structures meet with or are dispersed within wildland vegetation.

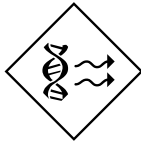
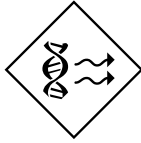





Incident	Flood	Flood	cahs.incident.flood		A relatively high stream flow that overtops the stream banks in any part of its course, covering land that is not normally under water or when water overflows the natural or artificial confines of a stream or other body of water, or accumulates by drainage over low-lying areas.
		Dam Overflow	cahs.incident.flood.dam Overflow		An overflowing or failure of a dam or reservoir.
		Flash Flood	cahs.incident.flood.flash Flood		A rapid flooding of geomorphic low-lying areas - washes, rivers, dry lakes and basins.
		High Water	cahs.incident.flood.high Water		The location of high tide on a coastal area or the highest stage of a river.
		Overland Flow Flood	cahs.incident.flood.overl andFlowFlood		Water that runs across the land after rain, either before it enters a creek or stream, after a creek or stream breaks its banks, or after rising to the surface naturally from underground.
		Storm Surge	cahs.incident.flood.storm Surge		The difference between the actual water level under influence of a meteorological disturbance (storm tide) and the level which would have been attained in the absence of the meteorological disturbance (i.e. astronomical tide).
	Flood	Tsunami	cahs.incident.flood.tsuna mi		A great sea wave produced by an earthquake, underwater landslide, volcanic eruption or other massive displacement of water, characterized by high speed of propagation, long wavelength, long period, and low observable amplitude on the open ocean.





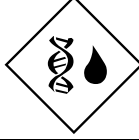
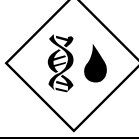

Incident	Geophysical	Geophysical	cahs.incident.geophysical l		An event or incident resulting from a geophysical process.
		Avalanche	cahs.incident.geophysical l.avalanche		A large mass of snow, ice, soil, or rock, or mixtures of these materials, falling, sliding, or flowing very rapidly under the force of gravity.
		Earthquake	cahs.incident.geophysical l.earthquake		A sudden release of energy in the Earth's crust that creates seismic waves.
		Lahar	cahs.incident.geophysical l.lahar		A type of mudflow or landslide composed of pyroclastic material and water that flows down from a volcano, typically along a river valley.
		Landslide	cahs.incident.geophysical l.landslide		A general term for a wide variety of processes and landforms involving the down slope movement under the force of gravity of masses of soil and rock material.
		Magnetic Storm	cahs.incident.geophysical l.magneticStorm		A temporary disturbance of the Earth's magnetosphere caused by a disturbance in space weather. Associated with solar coronal mass ejections (CME), coronal holes, or solar flares, a geomagnetic storm is caused by a solar wind shock wave which typically strikes the Earth's magnetic field 24 to 36 hours after the event.
		Geophysical	Meteorite	cahs.incident.geophysical l.meteorite	






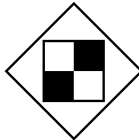

Incident	Geophysical	Pyroclastic Flow	cahs.incident.geophysical.pyroclasticFlow		A common and devastating result of certain explosive volcanic eruptions. The flows are fast-moving currents of hot gas and rock (collectively known as tephra), which travel away from the volcano at speeds generally as great as 700 km/h (450 mi/h).
		Pyroclastic Surge	cahs.incident.geophysical.pyroclasticSurge		A fluidized mass of turbulent gas and rock fragments which is ejected during some volcanic eruptions. It is similar to a pyroclastic flow but contains a much higher proportion of gas to rock, which makes it more turbulent and allows it to rise over ridges and hills rather than always travel downhill as pyroclastic flows do. Pyroclastic surges are much faster moving than pyroclastic flows, and can reach speeds of 1050 km/h.
		Sinkhole	cahs.incident.geophysical.sinkhole		A natural depression or hole in the earth's surface caused by "Karst Process".
	Geophysical	Volcanic Ash cloud	cahs.incident.geophysical.volcanicAshCloud		A cloud of volcanic ash consists of small tephra, which are bits of pulverized rock and glass created by volcanic eruptions,[1] less than 2 millimetres (0.079 in) in diameter.
		Volcanic Event	cahs.incident.geophysical.volcanicEvent		The ejection of volcanic materials (lava, pyroclasts, and volcanic gases) from a vent or fissure in the Earth's crust.
		Hazardous Material	Hazardous Material	cahs.incident.hazardousMaterial	








Incident	Hazardous Material	Biological Hazard	cahs.incident.hazardousMaterial.biologicalHazard		Uncontrolled or potentially dangerous presence of a poisonous substance that is a specific product of the metabolic activities of a living organism and is usually very unstable and can easily be transferred between organisms.
		Chemical Hazard	cahs.incident.hazardousMaterial.chemicalHazard		Uncontrolled or potentially dangerous presence of a chemical substance where contamination could result in psychological disorientation, serious injury, incapacitation or death.
		Explosive Hazard	cahs.incident.hazardousMaterial.explosiveHazard		Uncontrolled or potentially dangerous presence of any substance or article, including a device, which is designed to function by explosion (i.e., an extremely rapid release of gas and heat) or which, by chemical reaction within itself, is able to function in a similar manner even if not designed to function by explosion.
		Falling Object Hazard	cahs.incident.hazardousMaterial.fallingObjectHazard		A situation where an unstable object poses a threat to persons or property below.
		Poisonous Gas Hazard	cahs.incident.hazardousMaterial.poisonousGasHazard		Uncontrolled or potentially dangerous presence of a gas which affords a hazard to human health.
	Hazardous Material	Radiological Hazard	cahs.incident.hazardousMaterial.radiologicalHazard		Uncontrolled or potentially dangerous presence of any material of sufficient concentration or activity to damage the environment or human health.
	Health	Health	cahs.incident.health		An incident affecting human health.








Incident	Health	Pandemic Influenza	cahs.incident.health.pandemicInfluenza		Influenza pandemics occur when a new strain of the influenza virus is transmitted to humans from another animal species.
		Communicable Disease	cahs.incident.health.communicableDisease		A disease in which the agent or toxic product can be transmitted, either directly or indirectly, from plant, animal, vector or inanimate environment to a host
		Drug Resistant Communicable Disease	cahs.incident.health.CommunicableDisease.drugResistant		A developed strain of a communicable pathogen that is able to withstand the effects of an antimicrobial agent
		Foodborne Disease	cahs.incident.health.foodborneDisease		A disease attributable to the contamination of food by infectious or toxic agents.
		Drug Resistant Foodborne Disease	cahs.incident.health.FoodborneDisease.drugResistant		A developed strain of a foodborne disease that is able to withstand the effects of medical treatment.
		Waterborne Disease	cahs.incident.health.waterborneDisease		A disease attributable to the contamination of water by infectious or toxic agents.
	Health	Drug Resistant Waterborne Disease	cahs.incident.health.WaterborneDisease.drugResistant		A developed strain of a waterborne disease that is able to withstand the effects of medical treatment.


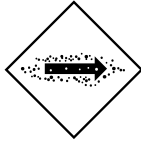





Incident	Health	Airborne Disease	cahs.incident.health.airborneDisease		A disease attributable to the transmission of infectious or toxic agents suspended in air.
		Drug Resistant Airborne Disease	cahs.incident.health.AirborneDisease.drugResistant		A developed strain of an airborne disease that is able to withstand the effects of medical treatment.
		Zoonotic Disease	cahs.incident.health.zoonoticDisease		A disease transmissible under natural conditions from vertebrate animals to humans.
		Drug Resistant Zoonotic Disease	cahs.incident.health.ZoonoticDisease.drugResistant		A developed strain of a zoonotic disease that is able to withstand the effects of medical treatment.
		Parasitic Disease	cahs.incident.health.parasiticDisease		A disease caused or transmitted by a parasite to either humans or animals.
		Drug Resistant Parasitic Disease	cahs.incident.health.ParasiticDisease.drugResistant		A developed strain of a parasitic disease that is able to withstand the effects of medical treatment.
	Health	Chronic Disease	cahs.incident.health.chronicDisease		A long-lasting or permanent disease, sometimes defined as one that lasts for at least 3 months.



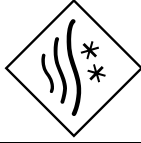
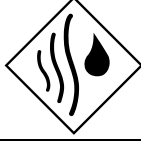



Incident	Health	Human-to-Human Transmission	cahs.incident.health.humanToHumanTransmission		Transmission of an infectious agent that occurs through contact with another human.
		Vector-Borne Transmission	cahs.incident.health.vectorBorneTransmission		Transmission of an infectious agent through a carrier organism (vector; e.g. insects).
		Vaccination Initiative	cahs.incident.health.vaccinationInitiative		The promotion or execution of an initiative for the use of vaccines, usually for specific diseases.
		Food Contamination	cahs.incident.health.foodContamination		The process of transferring a hazardous material or a chemical, biological, or nuclear agent from its source to people or animals, through the medium of food.
		Water Contamination	cahs.incident.health.waterContamination		The process of transferring a hazardous material or a chemical, biological, or nuclear agent from its source to people, animals, or the environment, through the medium of water.
		Boiled Water Advisory	cahs.incident.health.boiledWaterAdvisory		Boil water advisories and boil water orders are public announcements advising the public that they should boil their tap water before drinking. A preventative measure issued to protect public health from waterborne infectious agents that could be or are known to be present in drinking water.
	Health	Infestation	cahs.incident.health.infestation		The state of being invaded or overrun by pests (insects, spiders, etc.)








Incident	Health	Health Incident Alert	cahs.incident.health.Alert		Broadcast and published warnings, by public or private agencies, meant to warn the public of potential health hazards that are impending, recently pandemic, or otherwise time-sensitive in nature.
		Study/Research	cahs.incident.health.study		An incident involving, or a location housing the facilities and resources dedicated to the study of disease prevention, disease treatment, or health in general.
		Novel Disease / Strain	cahs.incident.health.novelDisease		A disease that has not been previously encountered and therefore may exhibit previously undocumented traits when compared to similar strains.
		Public Health Measure	cahs.incident.health.publicHealthMeasure		All organized measures (whether public or private) to prevent disease, promote health, and prolong life among the population as a whole. Its activities aim to provide conditions in which people can be healthy and focus on entire populations, not on individual patients or diseases. Thus, public health is concerned with the total system and not only the eradication of a particular disease.
		Adverse Reaction	cahs.incident.health.adverseReaction		A noxious and unintended response to a marketed health product that occurs at any dose used or tested for the diagnosis, treatment or prevention of a disease or the modification of an organic function.
	Health	Quarantine	cahs.incident.health.quarantine		The detention, enforced by international law, of persons coming by sea, land or air, or of ships coming from ports where infectious disease is either present or suspected.
	Ice	Ice	cahs.incident.ice		An event involving surficial or marine ice.








Incident	Ice	Ice Pressure	cahs.incident.ice.icePressure		Is an ice formation typically found on large frozen lakes or sea ice during the winter. In the most basic sense, a pressure ridge is a long crack in the ice that occurs because of repeated heating and cooling on the surface of the lake.
		Iceberg	cahs.incident.ice.iceberg		A large piece of ice from freshwater that has broken off from a snow-formed glacier or ice shelf and is floating in open water.
		Rapid Closing of Coastal Leads	cahs.incident.ice.rapidClosingOfCoastalLeads		Incident where the forecast combination of winds and ocean currents will result in the movement of pack ice rapidly closing any open waterways, known as leads, along the affected coastal sections.
		Ice Jam	cahs.incident.ice.iceJam		An accumulation of broken river ice or sea ice not moving due to some physical restriction.
	Ice	Special Ice	cahs.incident.ice.specialIce		All other non-specified ice conditions that may warrant a warning being issued will be covered in a Special Ice Warning. Special Ice Warnings are relevant to all marine interests and can be issued for all marine areas that have an ice forecast.
	Marine	Marine	cahs.incident.marine		An incident involving a boat, ship or navigable waterway.
		Marine Security	cahs.incident.marine.marineSecurity		An incident of unspecified type affecting the security of marine operations or infrastructures.






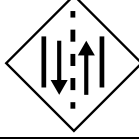

Incident	Marine	Nautical Hijacking	cahs.incident.marine.nauticalHijacking		The unexpected, unlawful and forceful seizure of control aboard a boat or ship by an individual or group of individuals resulting in passenger and crew endangerment, injury or death, and/or the redirection of destination.
		Nautical Accident	cahs.incident.marine.nauticalAccident		A sudden, unexpected event involving a boat or ship resulting in vessel submerging, damage, bodily injury, death and/or the disruption of transportation service.
		Port Closure	cahs.incident.marine.portClosure		A closure of facilities for loading and unloading ships and other vessels.
	Marine	Special Marine	cahs.incident.marine.specialMarine		An unspecified marine incident which affects marine operations or infrastructure.
	Meteorological	Meteorological	cahs.incident.meteorological		Any disturbed state of earth's atmosphere, especially affecting its surface, and strongly implying severe weather. It may be marked by strong wind, thunder and lightning (a thunderstorm), heavy precipitation, such as ice (ice storm), or wind transporting some substance through the atmosphere (as in a dust storm, snowstorm, hailstorm, etc).
		Blizzard	cahs.incident.meteorological.blizzard		A severe storm condition characterized by low temperatures, strong winds, and heavy snow. By definition, the difference between blizzard and a snowstorm is the strength of the wind.
		Blowing Snow	cahs.incident.meteorological.blowingSnow		Snow lifted from the surface by the wind, at a height of 8 feet (2 meters) or more, that will reduce visibility. Blowing snow can come from falling snow or snow that already accumulated on the ground but is picked up and blown about by strong winds.








Incident	Meteorological	Drought	cahs.incident.meteorological.drought		A prolonged period of abnormally dry weather that depletes water resources.
		Dust Storm	cahs.incident.meteorological.dustStorm		A meteorological phenomenon common in arid and semi-arid regions. Dust storms arise when a gust front blows loose sand and dust from a dry surface. Particles are transported by saltation and suspension, causing soil erosion from one place and deposition in another.
		Fog	cahs.incident.meteorological.fog		Suspension of very small, usually microscopic water droplets in the air, generally reducing the horizontal visibility at the Earth's surface to less than 1 km.
		Freezing Drizzle	cahs.incident.meteorological.freezingDrizzle		Is drizzle that freezes on contact with the ground or an object at or near the surface.
		Freezing Rain	cahs.incident.meteorological.freezingRain		Is the name given to rain that falls when surface temperatures are below freezing. The raindrops become supercooled while passing through a sub-freezing layer of air, many hundred feet (or meters), just above the surface, and then freeze upon impact with any object they encounter.
		Freezing Spray	cahs.incident.meteorological.freezingSpray		An accumulation of freezing water droplets on a vessel at a rate of less than 2 centimeters (cm) per hour caused by some appropriate combination of cold water, wind, cold air temperature, and vessel movement.
	Meteorological	Hail	cahs.incident.meteorological.hail		A form of solid precipitation which consists of balls or irregular lumps of ice, that are individually called hail stones. Hail stones on Earth consist mostly of water ice and measure between 5 and 150 millimeters in diameter, with the larger stones coming from severe thunderstorms.








Incident	Meteorological	Rain Fall	cahs.incident.meteorological.rainFall		Liquid precipitation, as opposed to other kinds of precipitation such as snow, hail and sleet.
		Snow Fall	cahs.incident.meteorological.snowFall		Precipitation within the Earth's atmosphere in the form of crystalline water ice, consisting of a multitude of snowflakes that fall from clouds.
		Snow Squall	cahs.incident.meteorological.snowSquall		A sudden moderately heavy snow fall with blowing snow and strong, gusty surface winds. It is often referred to as a whiteout and is similar to a blizzard but is localized in time or in space and snow accumulations may or may not be significant.
		Squall	cahs.incident.meteorological.squall		Atmospheric phenomenon characterizes by an abrupt and large increase of wind speed with a duration of the order of minutes which diminishes suddenly. It is often accompanied by showers or thundershowers.
		Thunderstorm	cahs.incident.meteorological.thunderstorm		A form of weather characterized by the presence of lightning and thunder. The cloud type associated with the thunderstorm is the cumulonimbus. Thunderstorms are usually accompanied by strong winds, heavy rain and sometimes snow, hail, or no precipitation at all.
		Tornado	cahs.incident.meteorological.tornado		A violent, dangerous, rotating column of air which is in contact with both the surface of the earth and a cumulonimbus cloud or, in rare cases, the base of a cumulus cloud. The most intense of all atmospheric phenomena, tornadoes come in many shapes and sizes but are typically in the form of a visible condensation funnel, whose narrow end touches the earth and is often encircled by a cloud of debris and dust.
	Meteorological	Waterspout	cahs.incident.meteorological.waterspout		A phenomenon consisting of an often violent whirlwind revealed by the presence of a cloud column or inverted cloud cone (funnel cloud), protruding from the base of a cumulonimbus, and of a bush composed of water droplets raised from the surface of the sea. Its behaviour is characterized by a tendency to dissipate upon reaching shore.



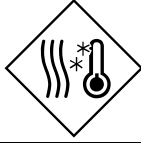
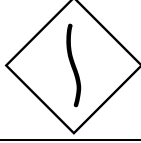
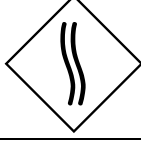
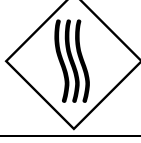

Incident	Meteorological	Wind storm	cahs.incident.meteorological.windStorm		Event of sustained winds of speeds that pose a significant threat to public safety and property.
		Winter Storm	cahs.incident.meteorological.winterStorm		An event in which the dominant varieties of precipitation are forms that only occur at cold temperatures, such as snow or sleet, or a rainstorm where ground temperatures are cold enough to allow ice to form.
	Missing Person	Missing Person	cahs.incident.missingPerson		A missing or un-located person.
		Amber Alert	cahs.incident.missingPerson.amberAlert		A child abduction bulletin or notice.
		Missing Vulnerable Person	cahs.incident.missingPerson.missingVulnerablePerson		A missing, vulnerable person who might be in danger because of a medical condition.
		Silver Alert	cahs.incident.missingPerson.silverAlert		A public notification system to broadcast information about missing persons - especially seniors with Alzheimer's Disease, dementia or other mental disabilities - in order to aid in their return.
	Plant Health	Plant Health	cahs.incident.plantHealth		An incident affecting wild or cultivated vegetation.


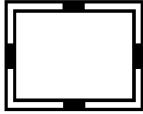




Incident	Plant Health	Infectious Plant Disease	cahs.incident.plantHealth .infectiousPlantDisease		A known disease affecting wild or cultivated vegetation.
		Plant Quarantine	cahs.incident.plantHealth .plantQuarantine		Official confinement of regulated articles for observation and research or for further inspection, testing and/or treatment.
	Public Service	Public Service	cahs.incident.publicService		An incident or event involving public services or facilities.
		Emergency Support Facility	cahs.incident.publicService.emergencySupportFacility		An incident or event involving publicly available support facilities.
		Emergency Support Service	cahs.incident.publicService.emergencySupportService		An incident or event involving publicly available support services.
	Public Service	School Closure	cahs.incident.publicService.schoolClosure		A closure of a school.
		School Lockdown	cahs.incident.publicService.schoolLockdown		A lockdown of a school.

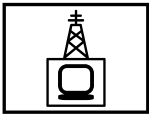

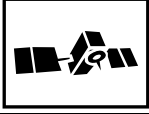

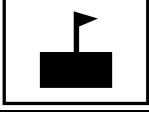
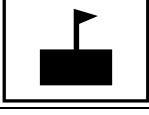
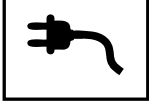
Incident	Public Service	Transit	cahs.incident.publicService.transit		An incident or event involving public transit.
	Railway	Railway	cahs.incident.railway		An incident involving trains and/or the railway and their associated structures.
		Train Accident	cahs.incident.railway.trainAccident		A sudden, unexpected event involving a train resulting in derailment, damage, bodily injury, death and/or the disruption of transportation service.
		Train Hijacking	cahs.incident.railway.trainHijacking		The unexpected, unlawful and forceful seizure of control aboard a train by an individual or group of individuals resulting in passenger and crew endangerment, injury or death, and/or the redirection of destination.
	Rescue	Rescue	cahs.incident.rescue		An incident that requires an organized rescue effort.
	Roadway	Roadway	cahs.incident.roadway		An event involving vehicles along transportation infrastructure (roadways) resulting in damage, bodily injury, death, or the disruption of transportation service.
		Bridge Closure	cahs.incident.roadway.bridgeClosure		A closure of a bridge due to natural or man-made causes.

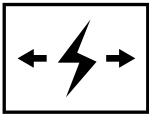






Incident	Roadway	Hazardous Road Conditions	cahs.incident.roadway.hazardousRoadConditions		A natural or man-made event that causes roadways to become hazardous.
		International Roadway Boundary	cahs.incident.roadway.internationalRoadwayBoundary		A roadway that crosses national borders, usually coincident with Border Services facilities.
		International Roadway Boundary Closure	cahs.incident.roadway.internationalRoadwayBoundaryClosure		The closure of an international roadway due to natural or man-made causes. Enforced by authorities from one or both nations.
		Motor Vehicle Accident	cahs.incident.roadway.motorVehicleAccident		A sudden, unexpected event involving a vehicle resulting in damage, bodily injury, death and/or the disruption of transportation service.
		Motor Vehicle Hijacking	cahs.incident.roadway.motorVehicleHijacking		The unexpected, unlawful and forceful seizure of control aboard a vehicle by an individual or group of individuals resulting in passenger and crew endangerment, injury or death, and/or the redirection of destination.
		Roadway Closure	cahs.incident.roadway.roadwayClosure		A closure of a roadway due to natural or man-made causes.
	Roadway	Roadway Delay	cahs.incident.roadway.roadwayDelay		A delay causing the normal flow of traffic to be reduced.


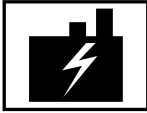



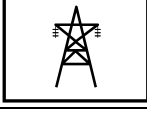

Incident	Roadway	Roadway Usage Condition	cahs.incident.roadway.roadwayUsageCondition		A significant change in the usage of a roadway brought about by a change in traffic flow, road conditions, or other causes.
		Traffic Report	cahs.incident.roadway.trafficReport		A report on the condition of traffic.
	Temperature	Temperature	cahs.incident.temperature		An event related to extremes in temperature.
		Arctic Outflow	cahs.incident.temperature.arcticOutflow		Frigid arctic air bursts out from the interior mainland, spilling out through the mountain gaps and rushing through fjords, to chill coastal areas with bitter gale-force winds.
		Cold Wave	cahs.incident.temperature.coldWave		A rapid fall in temperature within a 24 hour period requiring substantially increased protection to agriculture, industry, commerce, and social activities. The precise criterion for a cold wave is determined by the rate at which the temperature falls, and the minimum to which it falls. This minimum temperature is dependent on the geographical region and time of year.
		Flash Freeze	cahs.incident.temperature.flashFreeze		When significant ice is expected to form rapidly over much of a region because of a combination of weather conditions. Such conditions typically include temperatures which are expected to fall quickly from above 0°C to well below freezing while precipitation is occurring.
		Frost	cahs.incident.temperature.frost		The solid deposition of water vapor from saturated air. It is formed when solid surfaces are cooled to below the dew point of the adjacent air.








Incident	Temperature	Heat Wave	cahs.incident.temperature.heatWave		A prolonged period of excessively hot weather.
		High Heat and Humidity	cahs.incident.temperature.highHeatAndHumidity		A prolonged period of excessively hot weather, which is accompanied by high humidity.
		Wind Chill	cahs.incident.temperature.windChill		The apparent temperature felt on exposed skin due to wind. The degree of this phenomenon depends on both air temperature and wind speed. The wind chill temperature (often popularly called the wind chill factor) is always lower than the air temperature for values where the wind chill formula is valid.
	Wind	Wind	cahs.incident.wind		An event related to dangerous and damaging winds.
		Strong Wind	cahs.incident.wind.strongWind		Wind with a speed between 39 – 61 km/h (21 - 33 knots). Beaufort scale wind force 6 or 7. The term is typically used in a marine context.
		Gale Wind	cahs.incident.wind.galeWind		Wind with a speed between 62 – 88 km/h (34 - 47 knots). Beaufort scale wind force 8 or 9. The term is typically used in a marine context.
		Storm Force Wind	cahs.incident.wind.stormForceWind		Wind with a wind speed between 89 – 117 km/h (48 - 63 knots). Beaufort scale wind force 10 or 11. The term is typically used in a marine context.






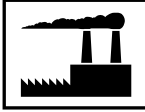

Incident	Wind	Hurricane Force Wind	cahs.incident.wind.hurricaneForceWind		Wind with a speed of 118 km/h (64 knots) or greater. Beaufort scale wind force 12. The term is typically used in a marine context.
Incident	Total Count:	185			
Infrastructure	Disruption	Disruption	cahs.infrastructure.disruption		A disturbance that compromises the availability, delivery and/or integrity of services of an Infrastructure Facility or Service.
	Communications and IT	Communications and IT	cahs.infrastructure.communicationsAndIt		The electronic systems used in transmitting messages, as by telegraph, cable, telephone, radio, television or computer.
		Communications Facility	cahs.infrastructure.communicationsAndIt.communicationsFacility		Any facility housing telecommunications equipment, studios, control rooms, or personnel.
		Communications Tower	cahs.infrastructure.communicationsAndIt.communicationsTower		A structure typically higher than its diameter and high relative to its surroundings to which telecommunications antennae are affixed.
		Satellite Ground Station	cahs.infrastructure.communicationsAndIt.satelliteGroundStation		A facility used to telecommunicate with satellites—chiefly communications satellites. Other earth stations communicate with manned space stations or unmanned space probes.

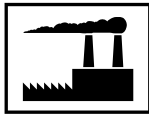




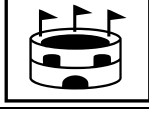

Infrastructure	Communications and IT	TV and Radio Broadcast Facility	cahs.infrastructure.communicationsAndIt.tvAndRadioBroadcastFacility		A facility housing equipment used to transmit commercial radio or television.
		Post Office	cahs.infrastructure.communicationsAndIt.postOffice		A facility authorized by a postal system for the posting, receipt, sorting, handling, transmission or delivery of mail.
		Satellite	cahs.infrastructure.communicationsAndIt.satellite		A spacecraft, usually unmanned, or other objects that are or were in orbit around the planet. Typically differentiated from spacecraft and space debris by being unmanned and useful for specific public or private interests respectively.
	Education Infrastructure	Education Infrastructure	cahs.infrastructure.education		A building or collection of buildings or places that provides knowledge.
		School	cahs.infrastructure.education.school		A building or collection of buildings comprising a primary, middle or high school.
		College / University	cahs.infrastructure.education.collegeUniversity		A building or collection of buildings that comprise a college or university.
	Energy	Energy Infrastructure	cahs.infrastructure.energy		Includes infrastructure to support electrical power, natural gas, oil production and utility transmission systems.








Infrastructure	Energy	Energy Distribution Control Centre	cahs.infrastructure.energy.energyDistributionControlCentre		An industrial plant or facility monitoring electrical grid activity.
		Gas Processing Plant	cahs.infrastructure.energy.gasProcessingPlant		An industrial plant equipped with special equipment used to process natural gas.
		Gas Storage	cahs.infrastructure.energy.gasStorage		A building or place that provides and distributes natural gas.
		Nuclear Power Plant	cahs.infrastructure.energy.nuclearPowerPlant		A power plant producing electricity from controlled (i.e., non-explosive) nuclear reactions.
		Nuclear Research	cahs.infrastructure.energy.nuclearResearch		The location where research into nuclear energy is conducted and is likely to contain radioactive materials.
		Oil Well	cahs.infrastructure.energy.oilWell		A general term for any boring through the earth's surface that is designed to find and produce petroleum oil hydrocarbons.
	Energy	Oil Rig	cahs.infrastructure.energy.oilRig		Equipment and any associated facilities and structures used for the production of oil or gas located at a production site, on or off shore.

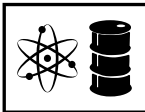
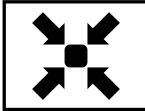
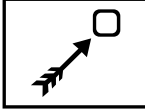




Infrastructure	Energy	Petroleum Storage	cahs.infrastructure.energy.petroleumStorage		A building or place that provides and distributes petroleum gas.
		Power Plant	cahs.infrastructure.energy.powerPlant		Also referred to as a generating station, power plant, or powerhouse, is an industrial facility for the generation of electric power.
		Pumping Station	cahs.infrastructure.energy.pumpingStation		Facilities including pumps and equipment for pumping fluids from one place to another.
		Refinery	cahs.infrastructure.energy.refinery		A production facility composed of a group of chemical engineering unit processes and unit operations refining crude oil into commercial products such as gasoline.
		Substation	cahs.infrastructure.energy.substation		A subsidiary station of an electricity generation, transmission and distribution system where voltage is transformed from high to low or the reverse using transformers.
		Transmission Tower	cahs.infrastructure.energy.transmissionTower		A transmission tower serving as a component of an electrical transmission line.
	Finance	Finance Infrastructure	cahs.infrastructure.finance		The management of money and other assets and their protection.






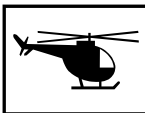
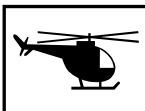
Infrastructure	Finance	Financial Institution	cahs.infrastructure.finance.financialInstitution		An institution that provides financial services for its clients or members.
	Food	Food Infrastructure	cahs.infrastructure.food		Production and retail services of foodstuffs.
		Beverage Facility	cahs.infrastructure.food.beverageFacility		A facility dedicated to the storage and distribution of beverages.
		Food Processing Plant	cahs.infrastructure.food.foodProcessingPlant		A facility dedicated to the processing, combination, and/or packaging of foodstuffs and/or beverages.
		Slaughter House	cahs.infrastructure.food.slaughterHouse		Registered facility that slaughters and usually butchers animals as part of the food production industry.
		Product Recall	cahs.infrastructure.food.productRecall		A request for the return of a product, usually due to a confirmed, suspected or possible safety concern.
		Food	Food Supply Chain	cahs.infrastructure.food.foodSupplyChain	



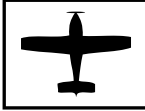




Infrastructure	General Utility	General Utility	cahs.infrastructure.generalUtility		An infrastructure component owned or operated by a public or private utility. Specific water, electric, and gas utilities, and similar organizations.
	Government	Government Infrastructure	cahs.infrastructure.government		The location where executive, legislative and-or judicial activities take place in the service of the government.
		Courthouse	cahs.infrastructure.government.courthouse		A building that is home to a local court of law and often the regional county government as well, although this is not the case in some larger cities.
		Critical Contractor Facility	cahs.infrastructure.government.criticalContractorFacility		A building or collection of buildings used by non-government organizations that are of regional or national significance.
		Government Facility	cahs.infrastructure.government.governmentFacility		A building or collection of buildings used to carry out government activities.
	Manufacturing	Manufacturing Infrastructure	cahs.infrastructure.manufacturing		An industrial site used for the commercial production and selling of manufactured goods.
		Chemical Facility	cahs.infrastructure.manufacturing.chemicalFacility		An industrial site where chemical substances and-or compounds are produced.

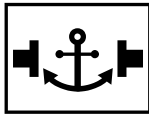

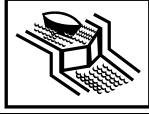
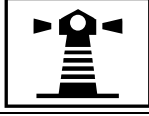



Infrastructure	Manufacturing	Manufacturing Facility	cahs.infrastructure.manufacturing.manufacturingFacility		An industrial site where commercial goods are produced.
	Military	Military Infrastructure	cahs.infrastructure.military		Property directly owned and operated by and/or for the military that shelters military equipment and personnel, and facilitates training and operations.
		Base	cahs.infrastructure.military.base		The largest type of military facility, directly owned and operated by and/or for the military or one of its branches that shelters military equipment and personnel, and facilitates training and operations.
		Station	cahs.infrastructure.military.station		Similar to a military base, but typically smaller in size and with less overall responsibility.
		Site	cahs.infrastructure.military.site		The smallest of the three military infrastructures: military base, military station, and military site. Typically established for a very specific purpose.
	Public Site	Public Site	cahs.infrastructure.publicSite		Unrestricted buildings or sites open to the public.
		Public Venue	cahs.infrastructure.publicSite.publicVenue		An unrestricted place or places and events for a large gathering of people.

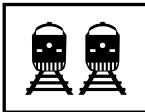



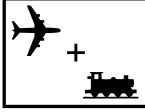
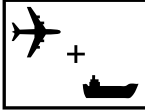
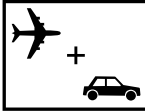
Infrastructure	Public Site	Religious Institution	cahs.infrastructure.public Site.religiousInstitution		Any place of worship where religious services are held or prayers said by congregation loyal to a belief.
		Shopping Mall	cahs.infrastructure.public Site.shoppingMall		One or more buildings forming a complex of shops representing merchandisers, with interconnecting walkways enabling visitors to easily walk from unit to unit, along with a parking area – a modern, indoor version of the traditional marketplace.
		Tourist Attraction	cahs.infrastructure.public Site.touristAttraction		A place of interest where tourists visit, typically for its inherent or exhibited cultural value, historical significance, natural or built beauty, or amusement opportunities.
	Safety	Safety Infrastructure	cahs.infrastructure.safety		A facility or structure used to provide safety to workers or the general public.
		Contaminated Site	cahs.infrastructure.safety .contaminatedSite		A location that has been contaminated by hazardous waste and poses a risk to human health and-or the environment.
		Emergency Route	cahs.infrastructure.safety .emergencyRoute		A network of pre-identified municipal and provincial roads that can best move emergency services and supplies to where they are needed in the event of a major disaster or other emergency.
		Hazardous Materials Facility	cahs.infrastructure.safety .hazardousMaterialsFacility		A facility where hazardous chemicals and-or substances are produced and stored under regulated conditions.

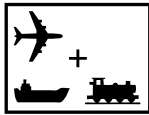
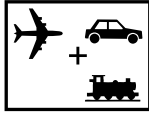

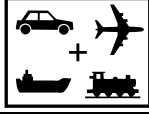
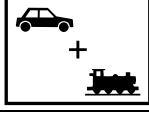
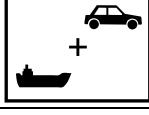
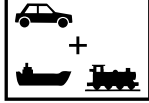
Infrastructure	Safety	Nuclear Waste Facility	cahs.infrastructure.safety.nuclearWasteFacility		A facility where nuclear waste materials are stored.
	Significant Site	Significant Site	cahs.infrastructure.significantSite		A site or location of significant cultural, historical or environmental importance.
		Indigenous Site	cahs.infrastructure.significantSite.indigenousSite		A site of cultural importance to the descendants of the original inhabitants of North America.
		Landmark	cahs.infrastructure.significantSite.landmark		A geographic feature, building, monument or anything easily recognizable that can be used as an aid in navigation.
		National Symbol	cahs.infrastructure.significantSite.nationalSymbol		A symbol of any entity considering itself and manifesting itself to the world as a national community.
		Significant Fauna	cahs.infrastructure.significantSite.significantFauna		The location of threatened, endangered or otherwise significant fauna.
		Significant Site	Significant Flora	cahs.infrastructure.significantSite.significantFlora	

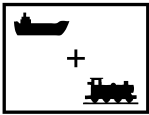

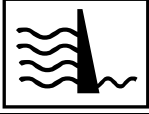
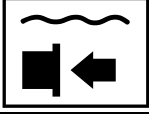

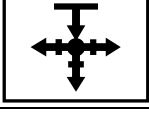

Infrastructure	Special Care	Special Care Infrastructure	cahs.infrastructure.specia lCare		A facility used for people who have specific needs, such as those associated with children, the elderly or those with disabilities. Examples include (but are not limited to) child day care facilities, geriatric long term care facilities, and group homes for people with disabilities.
		Adult Day Care	cahs.infrastructure.specia lCare.adultDayCare		A non-residential facility that provides supervision and assisted living services to adults, typically during the daylight hours.
		Child Day Care	cahs.infrastructure.specia lCare.childDayCare		A service involving care for other people's children.
		Elder Care	cahs.infrastructure.specia lCare.elderCare		A nursing home or a residential assisted living facility in which full-time care is provided for chronically ill, disabled, and elderly.
	Transportation	Transportation Infrastructure	cahs.infrastructure.transp ortation		Infrastructure, means of transport, and equipment necessary for the movement of passengers and-or goods.
		Heliport	cahs.infrastructure.transp ortation.heliport		A site within a landing zone that contains one or more points for helicopters to land. The site may or may not be temporary and may or may not include buildings and other infrastructure elements.
		Heliport Facility	cahs.infrastructure.transp ortation.heliportFacility		A small airport suitable only for use by helicopters. It typically includes buildings and equipment specific to operating a heliport, including a shelter or terminal for passengers and/or goods to be transported.




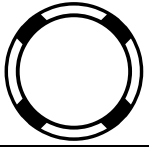
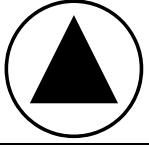

Infrastructure	Transportation	Air Navigation Aid	cahs.infrastructure.transp ortation.airNavigationAid		A facility operated by appropriate authority to promote the safe, orderly and expeditious flow of air traffic.
		Aircraft Surface Area	cahs.infrastructure.transp ortation.aircraftSurfaceArea		An area of land or other hard surface, excluding water, that is used or intended to be used for the landing and takeoff of aircraft, and includes its buildings and facilities, if any. An airport is considered to belong to this class.
		Small Aircraft Landing Area	cahs.infrastructure.transp ortation.smallAircraftLandingArea		An area of land or water that is used or intended for the landing and takeoff of small aircraft.
		Border Services	cahs.infrastructure.transp ortation.borderServices		The intersection of national borders with roadways and all other transportation routes which is the jurisdiction of a nation's border patrol and customs officers. This may include activities in airports and ports.
		Bridge	cahs.infrastructure.transp ortation.bridge		A structure built over a gap to connect and maintain transportation flow between either sides of the gap.
		Bus Station	cahs.infrastructure.transp ortation.busStation		A terminal that serves bus passengers.
	Transportation	Ferry Terminal	cahs.infrastructure.transp ortation.ferryTerminal		The location of a vehicle-carrying and commuter boat line terminus.





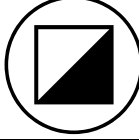


Infrastructure	Transportation	Jetty Facility	cahs.infrastructure.transp ortation.jettyFacility		A facility involving any of a variety of structures used in river, dock, and maritime works which are generally carried out in pairs from river banks, or in continuation of river channels at their outlets into deep water; or out into docks, and outside their entrances; or for forming basins along the sea-coast for ports in tideless seas.
		Harbour Facility	cahs.infrastructure.transp ortation.harbourFacility		A facility where ships, boats, and barges can seek shelter from stormy weather, or access services required to operate or maintain vessels.
		Lock	cahs.infrastructure.transp ortation.lock		An enclosed part of a canal or river equipped with gates for raising or lowering the level of water so that boats and other vessels may pass.
		Nautical Navigational Aid	cahs.infrastructure.transp ortation.nauticalNavigati onalAid		Any sort of marker which aids in marine navigation. Common types of such aids include lighthouses, buoys, fog signals, and day beacons.
		Navigable Waterway	cahs.infrastructure.transp ortation.navigableWater way		Any navigable body of water including rivers, lakes, seas, oceans, and canals.
		Port	cahs.infrastructure.transp ortation.port		A location on a waterway with facilities for loading and unloading ships and other vessels.
		Railway Facility	cahs.infrastructure.transp ortation.railwayFacility		A depot where tracked transport vehicles or trains load and-or unload passengers or goods.
	Transportation				








Infrastructure	Transportation	Railway Yard	cahs.infrastructure.transp ortation.railwayYard		A complex series of railroad tracks for storing, sorting, or loading/unloading, railroad cars and/or locomotives.
		Ship Anchorage	cahs.infrastructure.transp ortation.shipAnchorage		A location suitable for securely anchoring ships and other vessels.
		Small Craft Facility	cahs.infrastructure.transp ortation.smallCraftFacilit y		A facility where smaller, usually personal watercraft, can access services required to operate or maintain vessels.
		Tunnel	cahs.infrastructure.transp ortation.tunnel		An underground passageway used to connect and maintain transportation flow between a physical or human-built obstruction.
		Transit Station Air/Rail	cahs.infrastructure.transp ortation.transitionAirRail		The colocation of transportation types: Air, Rail.
		Transit Station Air/Water	cahs.infrastructure.transp ortation.transitionAirWat er		The colocation of transportation types: Air, Water.
	Transportation	Transit Station Air/Road	cahs.infrastructure.transp ortation.transitionAirRoa d		The colocation of transportation types: Air, Road.





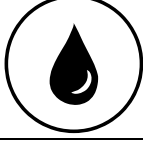


Infrastructure	Transportation	Transit Station Air/Water/Rail	cahs.infrastructure.transp ortation.transitionAirWat erRail		The colocation of transportation types: Air, Water, Rail.
		Transit Station Road/Air/Rail	cahs.infrastructure.transp ortation.transitionRoadAi rRail		The colocation of transportation types: Air, Road, Rail.
		Transit Station Road/Air/Water	cahs.infrastructure.transp ortation.transitionRoadAi rWater		The colocation of transportation types: Air, Water, Road.
		Transit Station Road/Air/Water /Rail	cahs.infrastructure.transp ortation.transitionRoadAi rWaterRail		The colocation of transportation types: Air, Water, Road, Rail.
		Transit Station Road/Rail	cahs.infrastructure.transp ortation.transitionRoadR ail		The colocation of transportation types: Road, Rail.
		Transit Station Road/Water	cahs.infrastructure.transp ortation.transitionRoadW ater		The colocation of transportation types: Water, Road.
	Transportation	Transit Station Road/Water/Rai l	cahs.infrastructure.transp ortation.transitionRoadW aterRail		The colocation of transportation types: Water, Road, Rail.






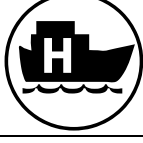

Infrastructure	Transportation	Transit Station Water/Rail	cahs.infrastructure.transp ortation.transitionWaterR ail		The colocation of transportation types: Water, Rail.
	Water	Water Infrastructure	cahs.infrastructure.water		The storage, disinfection, filtration and provision of drinking water to the consumer/community by means of pipelines, pumps, water towers, wells and other appurtenances.
		Dam	cahs.infrastructure.water. dam		A barrier that impounds water or underground streams. Dams generally serve the primary purpose of retaining water, while other structures such as floodgates or levees (also known as dikes) are used to manage or prevent water flow into specific land regions.
		Public Water Supply Intake	cahs.infrastructure.water. publicWaterSupplyIntak e		The location where public drinking water is drawn from.
		Sewage Treatment Facility	cahs.infrastructure.water. sewageTreatmentFacility		A facility to remove contaminants from wastewater and household sewage, both runoff (effluents) and domestic. It includes physical, chemical, and biological processes to remove physical, chemical and biological contaminants.
		Water Distribution Facility	cahs.infrastructure.water. waterDistributionFacility		A facility dedicated to the monitoring and operations of the public water distribution network.
	Water	Water Storage – Reservoir	cahs.infrastructure.water. waterStorageReservoir		An artificial lake used to store water. Reservoirs are often created by building a reinforced dam, usually out of concrete, earth, rock, or a mixture across a river or stream.





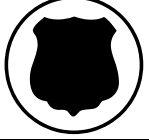


Infrastructure	Water	Water Storage – Tank	cahs.infrastructure.water.waterStorageTank		A liquid storage containers, these tanks are usually storing water for human consumption.
		Water Storage – Tower	cahs.infrastructure.water.waterStorageTower		Elevated liquid storage containers, these tanks or towers are usually storing water for human consumption.
		Water Treatment Facility	cahs.infrastructure.water.waterTreatmentFacility		A facility whose processes are used to make water more acceptable for a desired end-use. These can include use as drinking water, industrial processes, medical and many other uses.
Infrastructure	Total Count:	106			
Operations	Disruption	Disruption	cahs.operations.disruption		When used in combination with any of the Operations tier symbols, signifies a disturbance that compromises the availability, delivery and/or integrity of services of that symbol's type.
	Emergency	Emergency Operation	cahs.operations.emergency		Those actions taken during the emergency period to protect life and property, care for the people affected, and temporarily restore essential community services.
		Amphibious Excavator	cahs.operations.emergency.amphibiousExcavator		An amphibious excavator used to break up ice jams or dredge aquatic environments.








Operations	Emergency	Bus	cahs.operations.emergency.bus		A large motor vehicle, having a long body, equipped with seats or benches for passengers, usually operating as part of a scheduled service.
		Emergency Checkpoint	cahs.operations.emergency.emergencyCheckpoint		A point at which an inspection or investigation is performed.
		Emergency Evacuation Point	cahs.operations.emergency.emergencyEvacuationPoint		A designated place where displaced persons or victims of war or disaster are assembled and/or evacuated from.
		Emergency Food Distribution Centre	cahs.operations.emergency.emergencyFoodDistributionCentre		A place where food is distributed to displaced persons or victims of war or disaster.
		Emergency Incident Command Centre	cahs.operations.emergency.emergencyIncidentCommandCentre		The physical location from which an incident commander manages an incident.
		Emergency Operations Centre	cahs.operations.emergency.emergencyOperationsCentre		The physical location where an organization comes together during an emergency to coordinate response and recovery actions and resources and make management decisions.
	Emergency	Emergency Public Information Centre	cahs.operations.emergency.emergencyPublicInformationCentre		The physical location where the public can go to for information related to the active emergency.





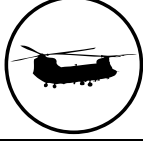


Operations	Emergency	Emergency Shelter	cahs.operations.emergency.emergencyShelter		A designated emergency / relief shelter.
		Emergency Staging Area	cahs.operations.emergency.emergencyStagingArea		A designated place where emergency management forces, equipment, and supplies are assembled prior to engagement in operations.
		Emergency team	cahs.operations.emergency.emergencyTeam		The location of an emergency management team.
		Emergency Water Distribution Centre	cahs.operations.emergency.emergencyWaterDistributionCentre		A place where potable water is distributed to displaced persons or victims of war or disaster.
		Ferry	cahs.operations.emergency.ferry		A form of transportation, usually a boat, but sometimes a ship, used to carry (or ferry) primarily passengers, and sometimes vehicles and cargo as well, across a body of water.
	Emergency	Sandbag	cahs.operations.emergency.sandbag		A location where sandbags are being filled or placed.
	Emergency Fire	Emergency Fire Operation	cahs.operations.emergencyFire		Operations activated when needed to put out hazardous fires that threaten civilian populations and property, to rescue people from car accidents, collapsed and burning buildings and other such situations.




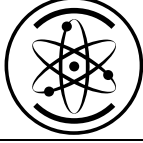

Operations	Emergency Fire	Fire Hydrant	cahs.operations.emergencyFire.fireHydrant		A discharge pipe with a valve and spout from which water may be drawn from a water main in sufficient volume and at sufficient pressure for firefighting purposes.
		Fire Station	cahs.operations.emergencyFire.fireStation		A facility housing fire-fighting equipment and/or personnel.
		Fire Suppression Operation	cahs.operations.emergencyFire.fireSuppression		A coordinated response to suppress and extinguish a destructive fire.
		Fire truck	cahs.operations.emergencyFire.fireTruck		A vehicle designed to assist in fighting fires by transporting firefighters to the scene and providing them with access to the fire, water or other equipment.
	Emergency Fire	Other Water Supply Location	cahs.operations.emergencyFire.otherWaterSupplyLocation		Any source of water other than a fire hydrant that is sufficient for the purpose of fire fighting.
	Emergency Medical Operation	Emergency Medical Operation	cahs.operations.emergencyMedical		Urgent and unexpected medical treatment and/or transport during serious situations which require demands of immediate action.
		Ambulance	cahs.operations.emergencyMedical.ambulance		A vehicle for taking sick or wounded people to and from a hospital.

Operations	Emergency Medical Operation	Blood Supply	cahs.operations.emergencyMedical.bloodSupply		A cache or bank of blood or blood components, gathered as a result of blood donation, stored and preserved for later use in blood transfusions.
		Decontamination Point	cahs.operations.emergencyMedical.decontaminationPoint		The location where the cleansing to remove contamination, or the possibility (or fear) of contamination, takes place.
		EMT Station Location	cahs.operations.emergencyMedical.emtStationLocation		The location of an emergency medical team.
		Health Facility	cahs.operations.emergencyMedical.healthFacility		A facility operated by a public institution which is dedicated to promotion of health and prevention of disease at the community, county, state, or national level.
		Hospital	cahs.operations.emergencyMedical.hospital		An institution where the sick or injured are given medical or surgical care.
		Hospital Ship	cahs.operations.emergencyMedical.hospitalShip		A ship where the sick or injured are given medical or surgical care.
		Emergency Medical Operation	Medical Evacuation Helicopter Station	cahs.operations.emergencyMedical.medicalEvacuationHelicopterStation	

Operations	Emergency Medical Operation	Medical Facilities Out Patient	cahs.operations.emergencyMedical.medicalFacilitiesOutPatient		A facility providing medical treatment to patients whose sickness or injury does not require hospitalization.
		Morgue	cahs.operations.emergencyMedical.morgue		A place where the bodies of persons found dead are kept until identified and claimed by relatives or released for burial
		Pharmacy	cahs.operations.emergencyMedical.pharmacy		A place where medicines are compounded or dispensed.
		Triage	cahs.operations.emergencyMedical.triage		A place where sorting and allocation of treatment to patients (especially victims of war or disaster) is performed according to a system of priorities designed to maximize the number of survivors.
	Law Enforcement	Law Enforcement Operation	cahs.operations.lawEnforcement		A coordinated operation of insuring obedience to the laws.
		Border Patrol	cahs.operations.lawEnforcement.borderPatrol		A national security agency that performs border control, i.e., enforces the security of the country's national borders.
		Border Services	cahs.operations.lawEnforcement.borderServices		Official locations, usually located along a nation's borders or inside major transportation hubs, where security screening can be performed for those crossing a national border and services are offered to assist with potential emmigration or immigration.

Operations	Law Enforcement	Coast Guard	cahs.operations.lawEnforcement.coastGuard		National organization responsible for the safety and security of the the nations seafarers, marine traffic, and waterways. Various services can include search and rescue, environmental monitoring, among others.	
		National Police Detachment	cahs.operations.lawEnforcement.nationalPoliceDetachment		A building operated by and accomodating national police and security officers. This may or may not be co-located with provincial or municipal police stations.	
		Police Vessel	cahs.operations.lawEnforcement.policeVessel		A ship or vessel used by police.	
		Police Car	cahs.operations.lawEnforcement.policeCar		A vehicle used by police, to assist with their duties in patrolling and responding to incidents.	
		Police Aircraft	cahs.operations.lawEnforcement.policeAircraft		Various aircraft used by police.	
		Police Station	cahs.operations.lawEnforcement.policeStation		A building which serves to accommodate police officers and other members of staff. These buildings often contain offices and accommodation for personnel and vehicles, along with locker rooms, temporary holding cells and interview/interrogation rooms.	
		Law Enforcement	Prison	cahs.operations.lawEnforcement.prison		A place in which people are physically confined by law enforcement authorities.

Operations	Military	Military Operation	cahs.operations.military		Coordinated military actions of a state in response to a developing situation. These actions are designed as a military plan to resolve the situation in the state's favour. Operations may be of combat or non-combat types, and are referred to by a code name for the purpose of security.
		Ground Vehicle	cahs.operations.military.groundVehicle		A military wheeled or tracked land based vehicle.
		Vessel	cahs.operations.military.vessel		A military ship or vessel.
		Aircraft	cahs.operations.military.aircraft		A military fixed wing aircraft.
		Helicopter	cahs.operations.military.helicopter		A military helicopter.
	Military	Unit	cahs.operations.military.unit		A homogeneous military organization, either combat, combat support or non-combat in capability, that includes service personnel predominantly from a single Arm of Service, or a Branch of Service, and its administrative and command functions are integrated (self-contained).
		Sensor Operation	Sensor Operation	cahs.operations.sensor	

Operations	Sensor Operation	Biological Sensor	cahs.operations.sensor.biologicalSensor		A device designed to respond to the presence of one or more biological substances and to transmit a resulting impulse.
		Chemical Sensor	cahs.operations.sensor.chemicalSensor		A device designed to respond to the presence of one or more chemicals and to transmit a resulting impulse.
		Intrusion Sensor	cahs.operations.sensor.intrusionSensor		A device designed to respond to physical penetration of, or attempts to physically penetrate, a protected area or spatial volume and to transmit a resulting impulse.
		Nuclear Sensor	cahs.operations.sensor.nuclearSensor		A device designed to respond to one or more decay product(s) of one or more radioactive nuclides, which are capable of a self-sustaining chain process of nuclear fission, and to transmit a resulting impulse.
	Sensor Operation	Radiological Sensor	cahs.operations.sensor.radiologicalSensor		A device designed to respond to one or more decay product(s) of one or more radioactive nuclides, can be naturally occurring or man-made, and to transmit a resulting impulse.
Operations	Total Count:	57			