

Oregon Office of State Fire Marshal

2013 CR2K Annual Summary



Prevention Preparedness Response

MISSION, VISION, VALUES



Mission

Protecting citizens, their property, and the environment from fire and hazardous materials.

Vision

Premier Public Safety Services.

Values

Professionalism

We are a highly skilled and competent workforce.

Credibility

We demonstrate trust and accountability through our actions.

Collaboration

We partner with others to achieve our mission.

Leadership

We are dedicated to an environment for success.

Dedication

We believe our mission is worthy of our efforts.

Statutory Authority

Oregon Revised Statutes:
Chapters 336, 453, 470,
476, 478, 479, 480

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EXECUTIVE SUMMARY

This summary is being provided in accordance with, and to the parties listed in ORS 453.342 and OAR 837-085-0390. It is a summary of the information reported to the Oregon Office of State Fire Marshal (OSFM) regarding the storage of hazardous substances at fixed facilities and incidents involving hazardous substances that occurred during 2013.

Section I - The Oregon Community Right to Know and Protection Act, ORS 453.307 to 372 passed by the Oregon legislature in 1985, mandates the Oregon Office of State Fire Marshal to survey employers in Oregon that have the potential to store hazardous substances at their fixed facilities. This is accomplished with the Hazardous Substance Information Survey (HSIS). The data in Section I was obtained from the HSIS. Some of the information collected on the HSIS is as follows: names of hazardous substances, quantities stored at the site, total amount that enters or leaves the site, hazards associated with the substances, and where they are stored at the site.

A hazardous substance is defined in OAR 837-085-0040 (30) as:

- (a) Any substance designated as hazardous by the Director of the Department of Consumer and Business Services or by the Office of State Fire Marshal; or
- (b) Any substance required to have a Material Safety Data Sheet (MSDS) pursuant to Oregon Occupational Safety and Health Division's OAR 437, division 2 (29 CFR 1910.1200), subdivision Z, and which appears on the list of Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment by the American Conference of Governmental Industrial Hygienist (ACGIH); or
- (c) Any substance required to have an MSDS pursuant to Oregon Occupational Safety and Health Division's OAR 437, division 2 (29 CFR 1910.1200), subdivision Z, **except:**
 - (A) Substances exempted by designation of the Office of State Fire Marshal; or
 - (B) Substances which are solids and do not react or dissolve and are stored in unprotected areas; or
 - (C) Substances exempted by the rules of OAR chapter 837, division 085; or
 - (D) Gases intended and used for human or animal ingestion or inhalation either directly or added to a product, if the gas is present at the site where ingestion or inhalation occurs; and the gas is not being used in a manufacturing process; and the gas is not a cryogenic; and the gas is not being stored at the site in a quantity that exceeds 1,000 cubic feet.
- (d) Any substance for which a manufacturer is required to develop an MSDS, that presents a physical or health hazard to emergency response personnel or the public under normal conditions of use or during an emergency situation; or
- (e) Any waste substance that presents a physical or health hazard to emergency response personnel or the public under normal conditions of use or during an emergency situation; or

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- (f) Any radioactive waste or radioactive material as defined in ORS 469.300(19), and radioactive substance as defined in 453.005.

The reportable quantity thresholds for most substances are:

500 pounds of a solid
500 gallons of a liquid
500 cubic feet of a vaporous gas
500 gallons of a liquefied or cryogenic gas

For highly toxic substances or explosives the thresholds are:

5 gallons of a liquid
10 pounds of a solid
20 cubic feet of a gas

Extremely Hazardous Substances designated by the Environmental Protection Agency are reportable at the specific threshold planning quantity established for each substance. Radioactive substances are reportable at any quantity that is not a sealed source pursuant to OAR 837-085-0070 (2) (a).

The reportable quantity thresholds for gasoline and diesel in underground tanks at retail gasoline service stations are 75,000 gallons and 100,000 gallons respectively.

Section II - The data in Section II includes all hazardous substance incidents reported with an incident date in 2013, and that were reported prior to April 1, 2014. The data was obtained from Oregon Fire Bridge™, Oregon's online fire and hazardous substance incident reporting system. Oregon Fire Bridge™ is a real-time reporting system that is web-based and is compliant with the National Fire Incident Reporting System (NFIRS). The NFIRS was developed by the U.S. Fire Administration and is a uniform system of incident reporting that uses a common set of definitions and associated numerical codes.

OAR 837-085-0380 requires that hazardous substance incidents responded to by local responding agencies and/or OSFM Regional Hazardous Material Response Teams be reported to the Office of State Fire Marshal. It also defines what hazardous substance spills must be reported, and which ones are exempt from reporting.

OAR 837-085-0380

- (1) Emergency service personnel responding to an incident of threatened or actual injury to a human, wildlife, domestic animal, or in which damage to the environment, or any property loss occurs resulting from a chemical substance or waste incident must make a written report of the incident to the Office of State Fire Marshal.
- (3) The following incidents are exempt from the reporting requirements of section (1) of this rule:
- (a) Motor fuels which are spilled in quantities of less than 42 gallons from a vehicle, unless it enters a waterway; or is determined to endanger the public safety or immediate or surrounding environment, including groundwater; or

EXECUTIVE SUMMARY

- (b) Sewage overflows; or
- (c) Structure fires or other emergencies where hazardous substances are involved as exposures, if the quantities exposed are less than 42 gallons. This means that a Hazardous Materials Incident Report would not be required for a structure fire or other emergency if consumer quantities of hazardous substances did not directly relate to the cause of the emergency or to injuries or death. If these consumer quantities caused the incident or contributed to an injury or death, a written Oregon State Fire Marshal Hazardous Materials Incident Report would be required. As with any fire, a State Fire Marshal Fire Report is required.

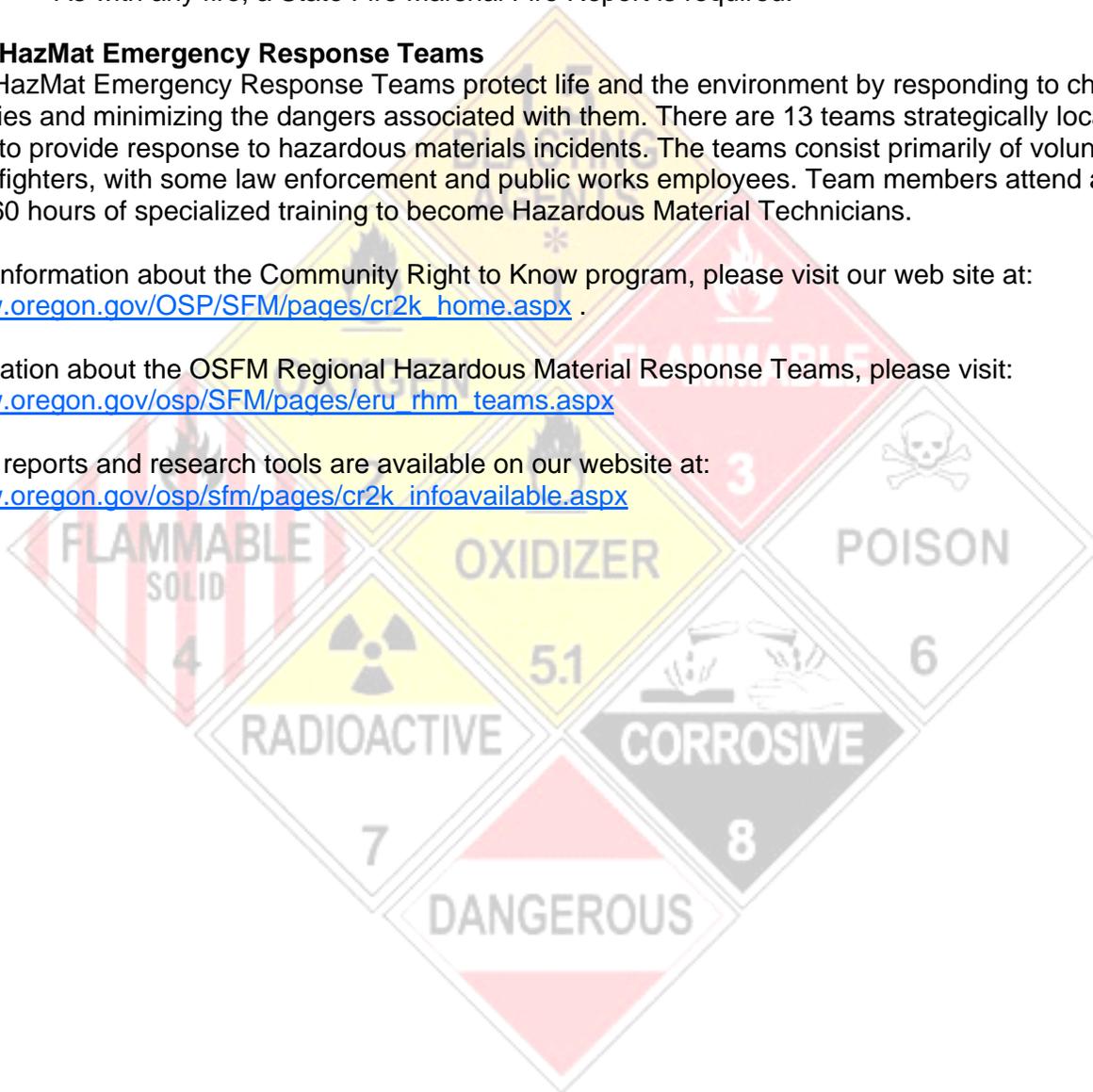
Regional HazMat Emergency Response Teams

Regional HazMat Emergency Response Teams protect life and the environment by responding to chemical emergencies and minimizing the dangers associated with them. There are 13 teams strategically located statewide to provide response to hazardous materials incidents. The teams consist primarily of volunteer and career firefighters, with some law enforcement and public works employees. Team members attend a minimum of 160 hours of specialized training to become Hazardous Material Technicians.

For more information about the Community Right to Know program, please visit our web site at: http://www.oregon.gov/OSP/SFM/pages/cr2k_home.aspx.

For information about the OSFM Regional Hazardous Material Response Teams, please visit: http://www.oregon.gov/osp/SFM/pages/eru_rhm_teams.aspx

Additional reports and research tools are available on our website at: http://www.oregon.gov/osp/sfm/pages/cr2k_infoavailable.aspx



SECTION I

2013 HAZARDOUS SUBSTANCE STORAGE IN OREGON

REPORTING FREQUENCY BY NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) CODES

This table lists the ten specific industry classifications with the most facilities sent a survey in 2013.

| NAICS Code | NAICS Description | Facilities |
|------------|---|------------|
| 517212 | CELLULAR & OTHER WIRELESS TELECOMMUNICATION | 1,729 |
| 921190 | OTHER GENERAL GOV SUPPORT | 1,040 |
| 611110 | ELEMENTARY & SECONDARY SCHOOLS | 452 |
| 517110 | WIRED TELECOMMUNICATIONS CARRIERS | 431 |
| 811111 | GENERAL AUTOMOTIVE REPAIR | 318 |
| 447190 | OTHER GASOLINE STATIONS | 313 |
| 447110 | GASOLINE STATIONS WITH CONVENIENCE STORES | 304 |
| 441310 | AUTOMOTIVE PARTS & ACCESSORIES STORES | 246 |
| 424710 | PETROLEUM BULK STATIONS & TERMINALS | 196 |
| 441110 | NEW CAR DEALERS | 176 |

2013 HAZARDOUS SUBSTANCE STORAGE IN OREGON

COMPLIANCE RATE FOR RETURNING THE HAZARDOUS SUBSTANCE INFORMATION SURVEY - BY COUNTY

This table shows the rate of return of Hazardous Substance Information Surveys.

| County | Surveys Sent | Surveys Received | Compliance Rate |
|--------------|---------------|------------------|-----------------|
| BAKER | 149 | 145 | 97.3% |
| BENTON | 348 | 341 | 98.0% |
| CLACKAMAS | 1,317 | 1,260 | 95.7% |
| CLATSOP | 195 | 181 | 92.8% |
| COLUMBIA | 205 | 188 | 91.7% |
| COOS | 457 | 444 | 97.2% |
| CROOK | 133 | 128 | 96.2% |
| CURRY | 171 | 163 | 95.3% |
| DESCHUTES | 728 | 702 | 96.4% |
| DOUGLAS | 677 | 664 | 98.1% |
| GILLIAM | 49 | 49 | 100.0% |
| GRANT | 101 | 97 | 96.0% |
| HARNEY | 97 | 93 | 95.9% |
| HOOD RIVER | 134 | 131 | 97.8% |
| JACKSON | 798 | 776 | 97.2% |
| JEFFERSON | 137 | 127 | 92.7% |
| JOSEPHINE | 322 | 315 | 97.8% |
| KLAMATH | 482 | 466 | 96.7% |
| LAKE | 115 | 113 | 98.3% |
| LANE | 1,502 | 1,460 | 97.2% |
| LINCOLN | 335 | 327 | 97.6% |
| LINN | 678 | 659 | 97.2% |
| MALHEUR | 253 | 236 | 93.3% |
| MARION | 1,249 | 1,219 | 97.6% |
| MORROW | 127 | 118 | 92.9% |
| MULTNOMAH | 2,215 | 2,087 | 94.2% |
| POLK | 240 | 235 | 97.9% |
| SHERMAN | 53 | 47 | 88.7% |
| TILLAMOOK | 216 | 210 | 97.2% |
| UMATILLA | 463 | 440 | 95.0% |
| UNION | 177 | 170 | 96.0% |
| WALLOWA | 91 | 90 | 98.9% |
| WASCO | 200 | 189 | 94.5% |
| WASHINGTON | 1,469 | 1,392 | 94.8% |
| WHEELER | 30 | 30 | 100.0% |
| YAMHILL | 438 | 427 | 97.5% |
| TOTAL | 16,351 | 15,719 | 96.1% |

2013 HAZARDOUS SUBSTANCE STORAGE IN OREGON

HAZARD CLASS REPORTING FREQUENCY

Facilities reporting substances on the survey must also report the hazard class associated with the substance. Hazard classes used for reporting are mainly United States Department of Transportation (USDOT) hazard class codes, along with several custom codes used only by the Oregon Community Right to Know Program. A substance can be assigned up to three hazard classification codes.

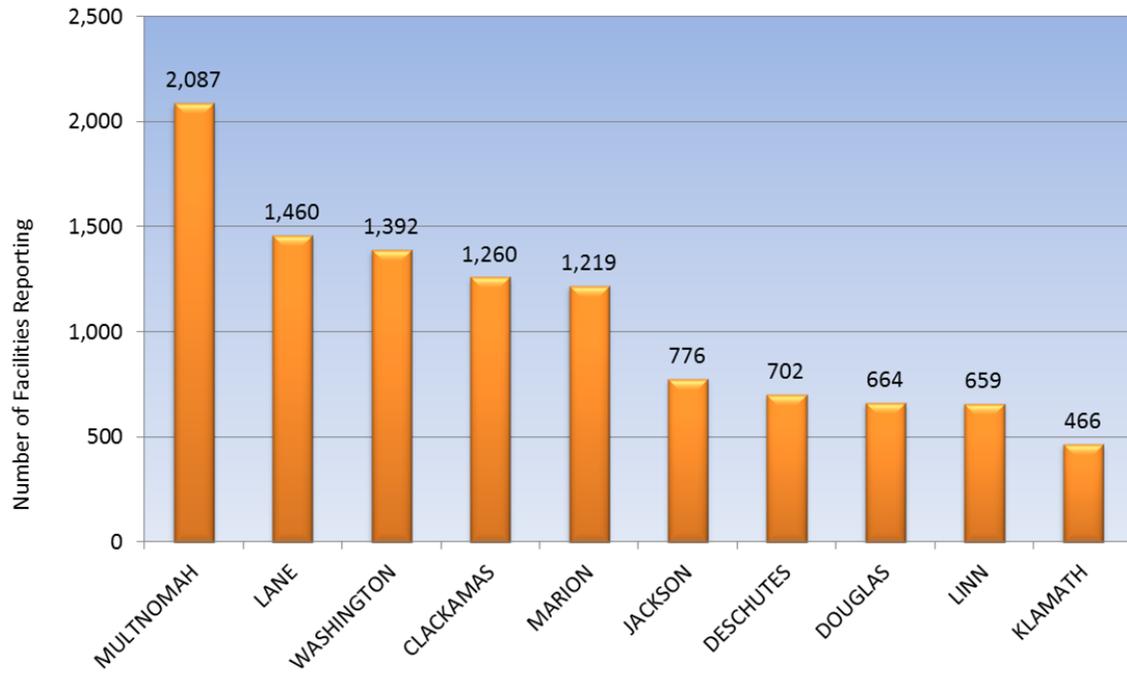
This table reflects how many substances were assigned each hazard class. In addition, the table shows how many times a substance with the hazard class was reported. For example, the table shows that 7,397 substances have been assigned a hazard class of 6.3 in the OSFM database. Facilities reported a Hazard Class 6.3 substance 17,569 times on the survey in 2013.

| Hazard Class Code | Hazard Class Description | Substances Assigned the Hazard Class | Number of Times Hazard Class Reported |
|-------------------|---|--------------------------------------|---------------------------------------|
| 6.3 | Acute Health Hazard | 7,397 | 17,569 |
| 3.0 | Flammable and Combustible Liquid | 3,214 | 9,464 |
| 4.5 | Combustible Material | 3,514 | 7,017 |
| 9.0 | Miscellaneous Hazardous Material | 4,612 | 6,679 |
| 2.2 | Non-flammable Gas | 557 | 4,221 |
| 2.1 | Flammable Gas | 263 | 3,775 |
| 8.0 | Corrosive Material | 2,057 | 3,109 |
| 5.1 | Oxidizers | 349 | 2,449 |
| 6.1 | Poisonous Material | 627 | 1,320 |
| 6.4 | Chronic Health Hazard | 686 | 1,118 |
| 4.4 | Reactive Material | 369 | 687 |
| 6.5 | Pesticide | 279 | 446 |
| 2.3 | Poisonous Gas | 67 | 438 |
| 7.0 | Radioactive Material | 200 | 414 |
| 4.1 | Flammable Solids | 137 | 234 |
| 1.3 | Explosives (with predominately a fire hazard) | 33 | 226 |
| 4.3 | Dangerous when Wet | 65 | 84 |
| 1.1 | Explosives (with a mass explosion hazard) | 37 | 55 |
| 1.4 | Explosives (with no significant blast hazard) | 10 | 55 |
| 4.2 | Spontaneously Combustible Material | 28 | 46 |
| 1.5 | Very Insensitive Explosives; Blasting Agents | 29 | 40 |
| 5.2 | Organic Peroxides | 25 | 25 |
| 1.2 | Explosives (with a projection hazard) | 5 | 9 |
| 6.2 | Infectious Substance (Etiologic agent) | 4 | 4 |

2013 HAZARDOUS SUBSTANCE STORAGE IN OREGON

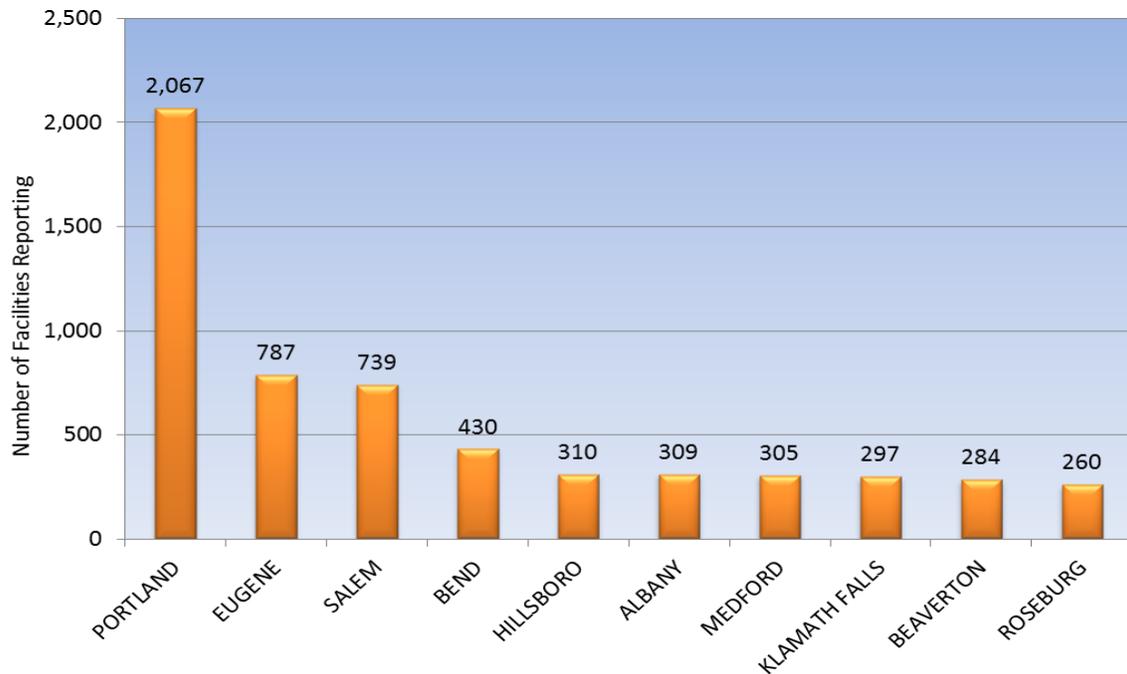
COUNTIES WITH THE MOST FACILITIES REPORTING

This chart shows the ten counties with the most facilities reporting.



CITIES WITH THE MOST FACILITIES REPORTING

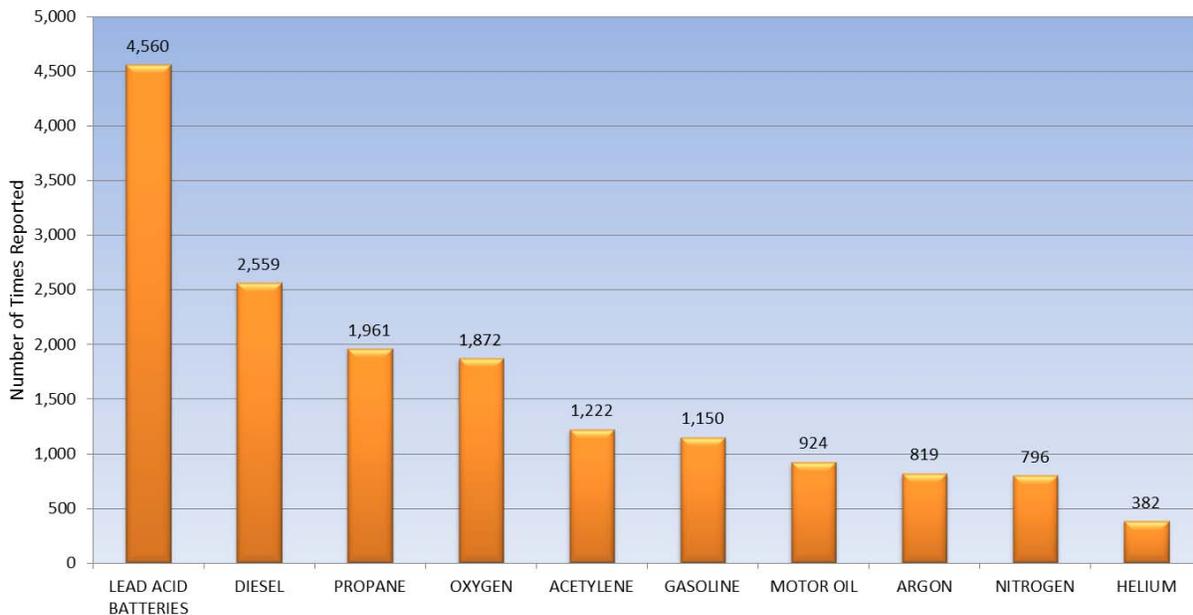
This chart shows the ten cities with the most facilities reporting.



2013 HAZARDOUS SUBSTANCE STORAGE IN OREGON

MOST FREQUENTLY REPORTED SUBSTANCES

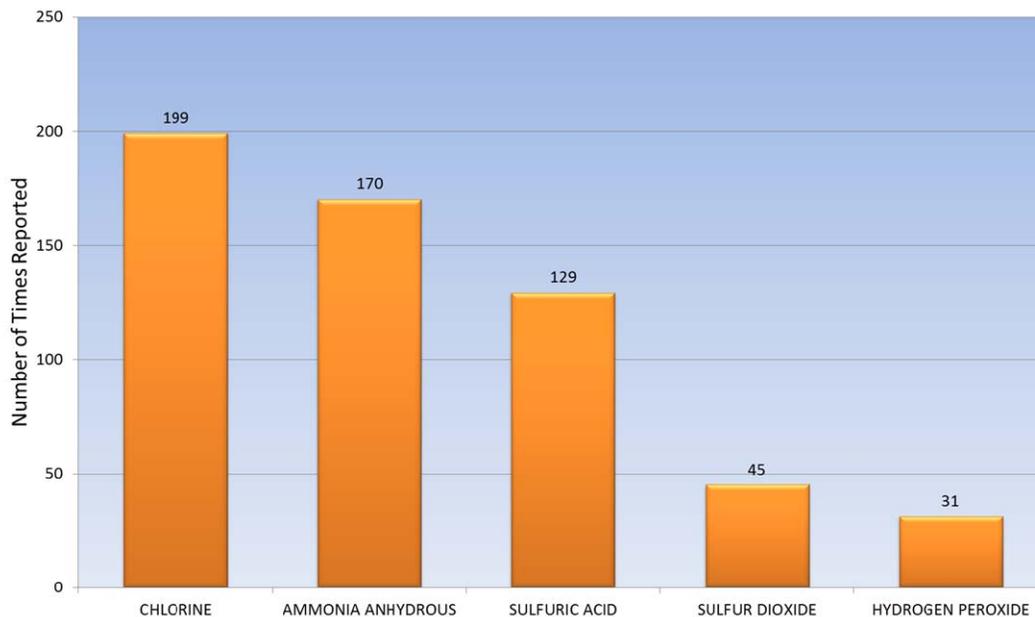
This chart shows the ten substances most frequently reported. In many cases, substances reported using various names have been combined under one name in this chart. For example, Diesel Fuel, Diesel Low Sulfur, Diesel Red etc., were combined and summarized as Diesel.



MOST FREQUENTLY REPORTED EXTREMELY HAZARDOUS SUBSTANCES (EHS)

This chart shows the five Extremely Hazardous Substances most frequently reported.

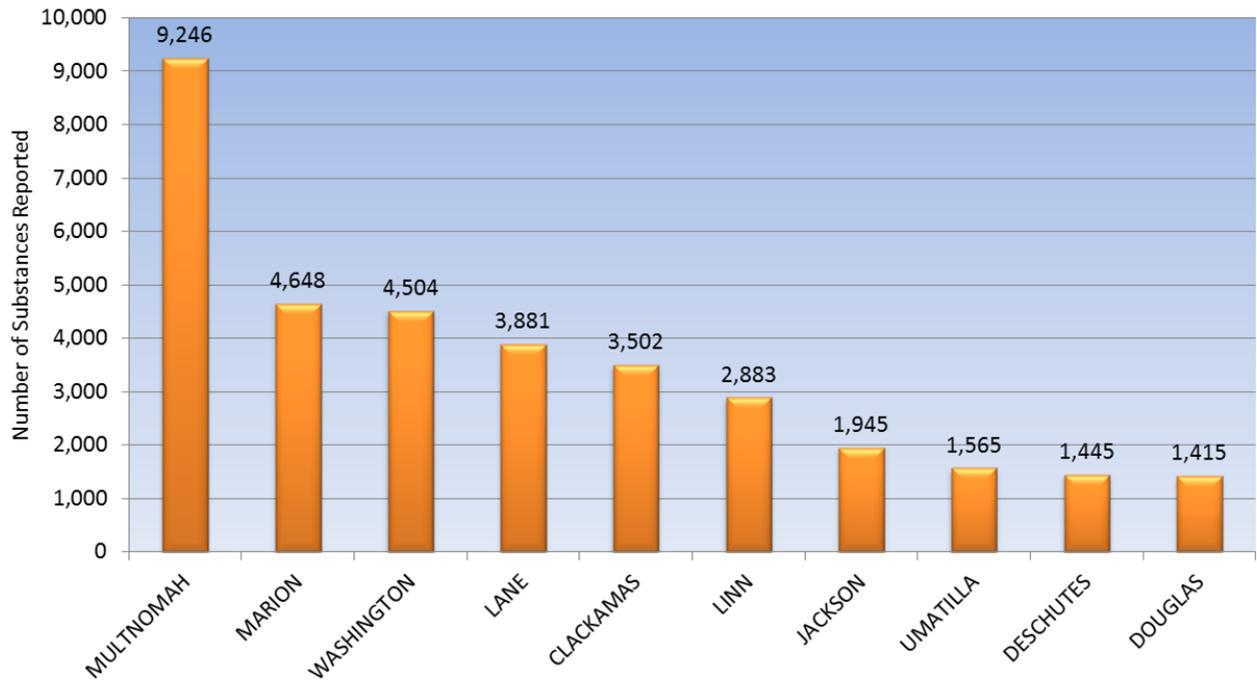
Note: Hydrogen peroxide is an EHS when the hydrogen peroxide concentration is greater than 52%.



2013 HAZARDOUS SUBSTANCE STORAGE IN OREGON

COUNTIES REPORTING THE MOST SUBSTANCES

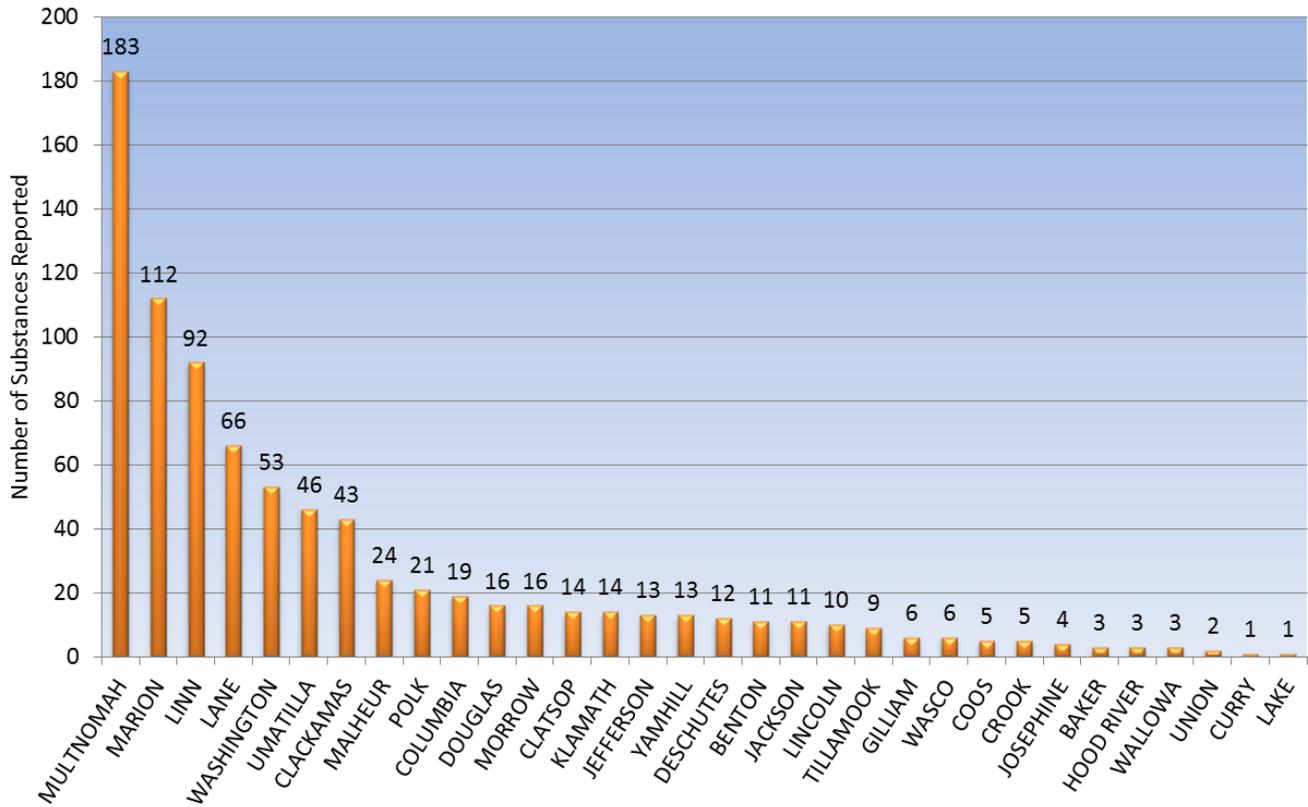
This chart shows the ten counties with the most substances reported.



2013 HAZARDOUS SUBSTANCE STORAGE IN OREGON

SUBSTANCES REPORTED IN QUANTITIES OVER 250,000 UNITS - BY COUNTY

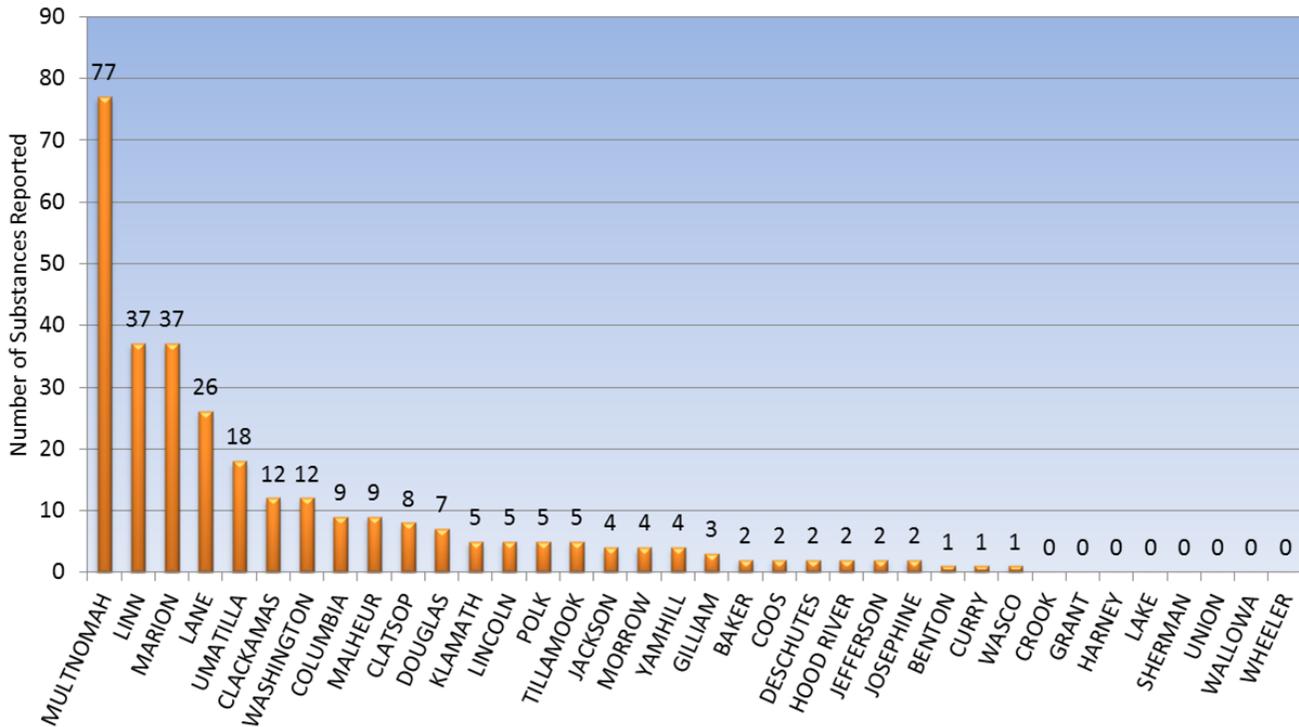
This chart shows the number of substances in each county that were reported in quantities exceeding 250,000 pounds, gallons, or cubic feet.



2013 HAZARDOUS SUBSTANCE STORAGE IN OREGON

SUBSTANCES REPORTED IN QUANTITIES EXCEEDING 1 MILLION UNITS - BY COUNTY

This chart shows the number of substances in each county that were reported in quantities exceeding 1,000,000 pounds, gallons, or cubic feet.



2013 HAZARDOUS SUBSTANCE STORAGE IN OREGON

SUBSTANCES REPORTED IN QUANTITIES EXCEEDING 1 MILLION UNITS

This chart shows the substances that were reported in quantities exceeding 1,000,000 pounds, gallons, or cubic feet, and the number of times reported.

| Chemical Name | Count | Chemical Name | Count |
|-----------------------------------|-------|-------------------------------------|-------|
| DIESEL FUEL | 22 | WHITE LIQUOR | 2 |
| UREA | 15 | ABS PLASTIC | 1 |
| GASOLINE | 13 | ABS RESIN | 1 |
| PORTLAND CEMENT | 10 | AG LIME | 1 |
| FERTILIZER 46-0-0 | 8 | ALCOHOL DENATURED FUEL GRADE | 1 |
| LEAD ACID BATTERIES | 8 | ALDER BARK | 1 |
| MONOAMMONIUM PHOSPHATE FERTILIZER | 6 | ALUMINUM INGOTS | 1 |
| FERTILIZER MURIATE OF POTASH | 5 | ALUMINUM OXIDE (MNY) | 1 |
| FERTILIZER UREA | 5 | ALUMINUM OXIDE (P20) | 1 |
| ASPHALT LIQUID | 4 | AMMONIUM NITRATE | 1 |
| ETHANOL | 4 | AMMONIUM PHOSPHATE DIBASIC | 1 |
| FERTILIZER 20-0-0-24 | 4 | AMMONIUM SULFATE | 1 |
| FERTILIZER AMMONIUM SULFATE | 4 | ASPEN ICE MELTER | 1 |
| JET A FUEL | 4 | ASPHALT | 1 |
| WOOD DUST | 4 | ASPHALT CEMENT | 1 |
| AMMONIA | 3 | BIODIESEL B5 | 1 |
| BLACK LIQUOR | 3 | CEMENT | 1 |
| FERTILIZER 0-0-60 | 3 | CEMENT KILN DUST | 1 |
| PEAT MOSS | 3 | CEMENT TYPE I-II | 1 |
| POTASSIUM CHLORIDE | 3 | CHEVRON NEUTRAL OIL | 1 |
| BUNKER C FUEL OIL | 2 | CHRISTY MINERALS CALCINED FLINT | 1 |
| COOKING OIL | 2 | CLAYS | 1 |
| DENATURED ETHANOL | 2 | COAL | 1 |
| FERTILIZER 0-0-62 | 2 | COAL TAR PITCH-LIQUID | 1 |
| FERTILIZER 10-34-0 | 2 | DIATOMACEOUS EARTH | 1 |
| FERTILIZER 11-52-0 | 2 | DIESEL OIL | 1 |
| FERTILIZER 16-20-0 | 2 | FERTILIZER 20-0-0 | 1 |
| FERTILIZER 16-20-0-13 | 2 | FERTILIZER 20-0-0-24S PLUS ZINC | 1 |
| FERTILIZER 21-0-0-24 | 2 | FERTILIZER 21-0-0 AMMONIUM SULFATE | 1 |
| FLY ASH CLASS C | 2 | FERTILIZER 32-0-0 | 1 |
| GREEN LIQUOR | 2 | FERTILIZER CALCIUM CARBONATE | 1 |
| GROUND LIMESTONE | 2 | FERTILIZER K-MAG | 1 |
| LEAD ACID BATTERIES-DRY | 2 | FERTILIZER MAP | 1 |
| LIME | 2 | FERTILIZER MIXTURE | 1 |
| NATURAL GAS | 2 | FERTILIZER MURIATE OF POTASH 0-0-62 | 1 |
| NITROGEN CRYOGENIC | 2 | FERTILIZER POTASSIUM CHLORIDE | 1 |
| POLYVINYL CHLORIDE RESIN | 2 | FERTILIZER SUL PO MAG | 1 |
| SAND | 2 | FERTILIZER URAN 32-0-0 | 1 |
| SODA ASH | 2 | FLOUR | 1 |
| USED OIL | 2 | FLY ASH | 1 |
| WHEAT FLOUR | 2 | FUEL OIL | 1 |

2013 HAZARDOUS SUBSTANCE STORAGE IN OREGON

SUBSTANCES REPORTED IN QUANTITIES EXCEEDING 1 MILLION UNITS, continued

| Chemical Name | Count | Chemical Name | Count |
|--|-------|--------------------------------|------------|
| GASOLINE UNLEADED REGULAR | 1 | PEBBLE QUICKLIME | 1 |
| GRAPHITE | 1 | PERLITE ORE | 1 |
| GREEN DIAMOND SAND | 1 | PETROLEUM COKE | 1 |
| GREEN LIQUOR DREGS-SLAKER GRITS-LIME MUD | 1 | PHENOL FORMALDEHYDE RESIN | 1 |
| GYPSUM | 1 | PLY VENEER | 1 |
| HB FULLER HL0008 | 1 | POLYETHYLENE | 1 |
| HELIUM | 1 | POLYSTYRENE INSULATION | 1 |
| HIGH IRON-IRON SAND | 1 | POTASH | 1 |
| KINGSFORD CHARCOAL BRIQUETS | 1 | PROPANE | 1 |
| KINGSFORD MATCHLIGHT BRIQUETS | 1 | PUMICE | 1 |
| K-MAG | 1 | QUICKLIME | 1 |
| LATICRETE SANDED GROUT | 1 | RADIOACTIVE ISOTOPES | 1 |
| LATICRETE THINSET MORTAR | 1 | RECYCLED GLASS | 1 |
| LATICRETE UNSANDED GROUT | 1 | REFRACTORY BRICK | 1 |
| LEAD ALLOYS AND SCRAP | 1 | RESIN COATED SILICA SAND | 1 |
| LEAD OXIDE | 1 | RESIN UREA FORMALDEHYDE | 1 |
| LIGNITE | 1 | REX LIME SULFUR | 1 |
| LILLY MILLER ULTRAGREEN WEED AND FEED | 1 | RUBBER STYRENE BUTADIENE | 1 |
| LIME MUD | 1 | SCRAP METAL - RECYCLE | 1 |
| LIME SLUDGE | 1 | SILICA SAND | 1 |
| LIMESTONE | 1 | SILICON CARBIDE | 1 |
| LIQUOR BLACK HEAVY | 1 | SODIUM CHLORATE CRYSTALS | 1 |
| LIQUOR BLACK WEAK | 1 | SOYBEAN MEAL | 1 |
| LIQUOR GREEN | 1 | SPHERICHROME | 1 |
| LIQUOR WHITE | 1 | SWEET CRUDE OIL | 1 |
| LUBRICATING OIL | 1 | SYNTHETIC BLEND MOTOR OIL | 1 |
| MARINE DIESEL OIL | 1 | TALC | 1 |
| MARINE FUEL OIL | 1 | TITANIUM BASE ALLOYS | 1 |
| MAX CEM | 1 | TITANIUM CHIPS AND SPONGE | 1 |
| MELAMINE | 1 | UREA AMMONIUM NITRATE SOLUTION | 1 |
| METHANE | 1 | UREA AMMONIUM SOLN 32 | 1 |
| MONOAMMONIUM PHOSPHATE | 1 | UREA FERTILIZER | 1 |
| MOTOR OIL | 1 | VECTOBAC G | 1 |
| MURIATE OF POTASH 0-0-60 | 1 | WASTE BLAST MEDIA | 1 |
| NEWSPRINT | 1 | WASTE BOILER FLY ASH | 1 |
| NITROGEN | 1 | WASTEWATER TMT SLUDGE | 1 |
| NORTHSTAR SODIUM HYPOCHLORITE | 1 | WATER BASE FLEXOGRAPHIC INK | 1 |
| OIL BUNKER C | 1 | WELDING WIRE | 1 |
| OXYGEN LIQUID | 1 | WOOD PULP | 1 |
| PAINT THERMOPLASTIC WHITE | 1 | ZIRCONIUM BASE ALLOYS | 1 |
| PARTICLEBOARD | 1 | ZIRCONIUM METAL | 1 |
| | | TOTAL | 297 |

SECTION II

2013 HAZARDOUS SUBSTANCE INCIDENTS IN OREGON

Local responding agencies and OSFM Regional Hazardous Material Response Teams reported 1,337 hazardous substance incidents in 2013. These incidents resulted in 34 civilian injuries and zero fire service injuries. Fifty-seven of the hazardous substance incidents were responded to by an OSFM Regional Hazardous Material Response Team.

Using information collected in Oregon Fire Bridge™, this section presents several snapshot views of hazardous substance incidents reported in Oregon.

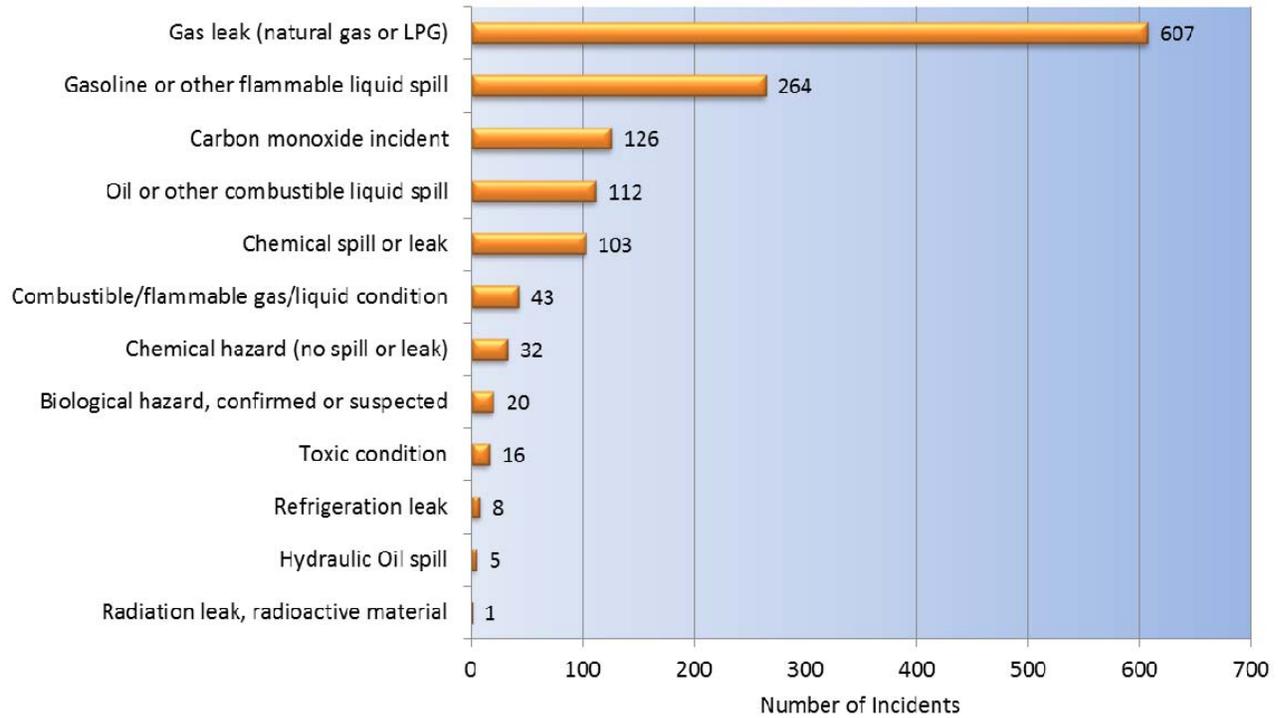
More information can be requested by contacting the CR2K Information Assistant at 503-934-8353 or emailing sfm.cr2k@state.or.us or from our website at: http://www.oregon.gov/osp/sfm/pages/cr2k_infoavailable.aspx

For additional information about Regional HazMat Response Teams, you may visit our website at: http://www.oregon.gov/osp/SFM/pages/eru_rhm_teams.aspx

2013 HAZARDOUS SUBSTANCE INCIDENTS IN OREGON

TYPES OF HAZARDOUS SUBSTANCE INCIDENTS

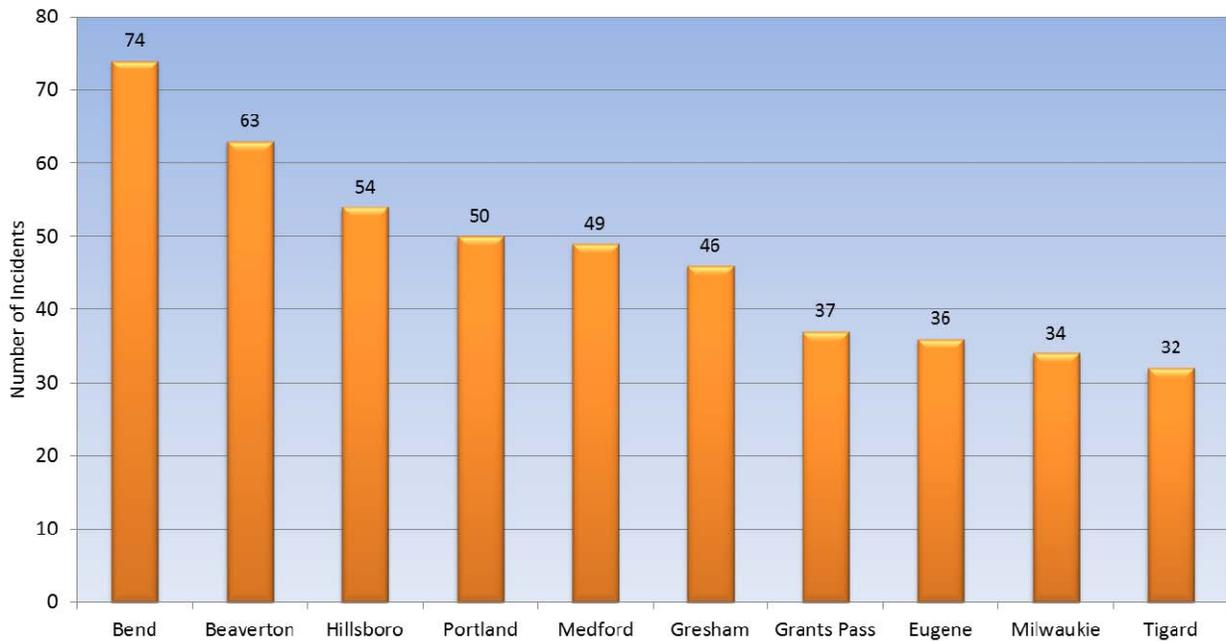
Incident reporters categorize hazmat incidents in one of several broad categories. These categories describe the general types of responses to incidents.



2013 HAZARDOUS SUBSTANCE INCIDENTS IN OREGON

CITIES WITH THE MOST REPORTED HAZARDOUS SUBSTANCE INCIDENTS

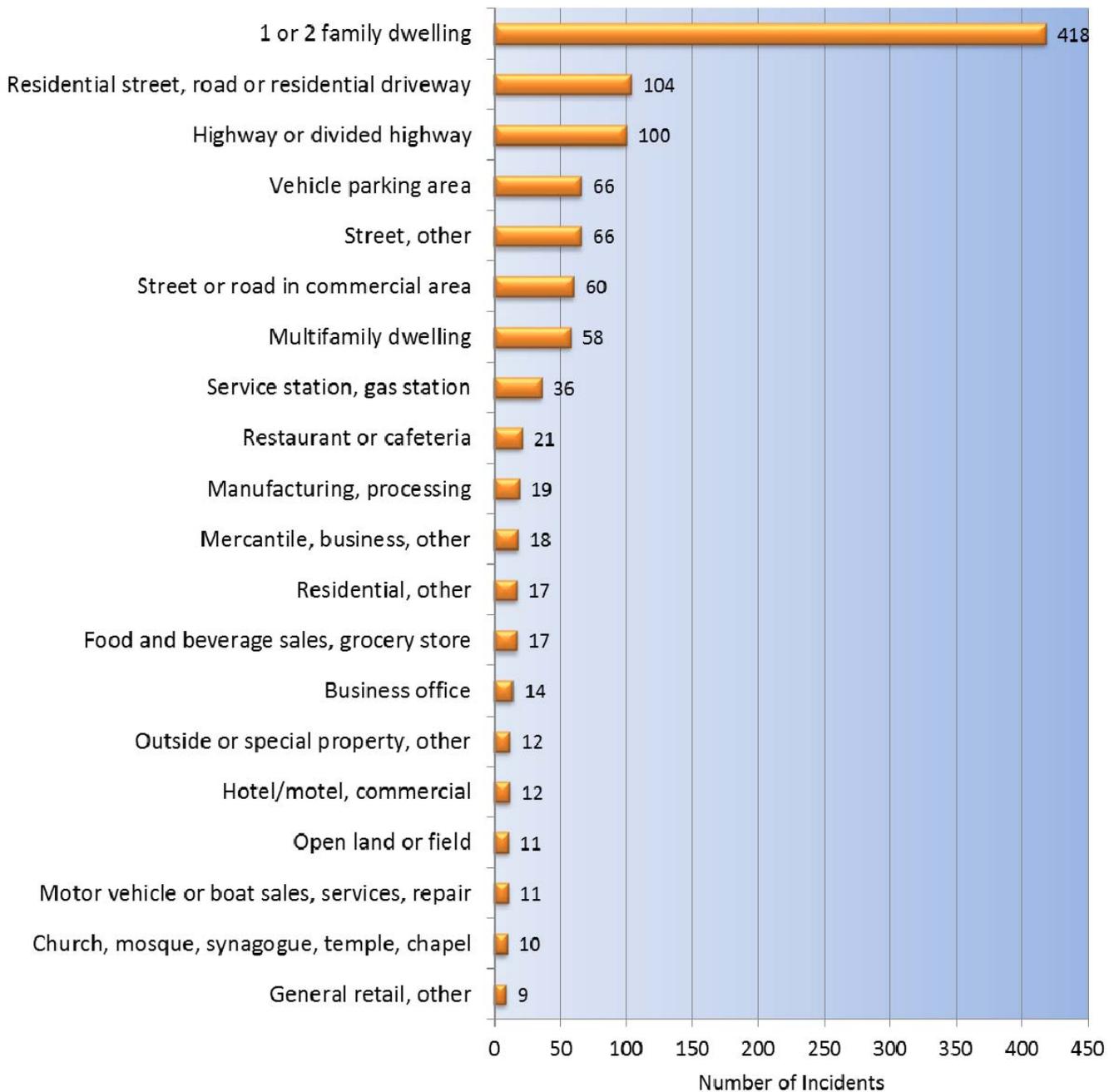
The following chart shows the 10 cities reporting the highest number of hazardous substance incidents. The cities listed in this graph are based on the zip code of the address in which the incident occurred and may not necessarily be within the city limits.



2013 HAZARDOUS SUBSTANCE INCIDENTS IN OREGON

TYPES OF PROPERTY USES WHERE HAZARDOUS SUBSTANCE INCIDENTS OCCURRED

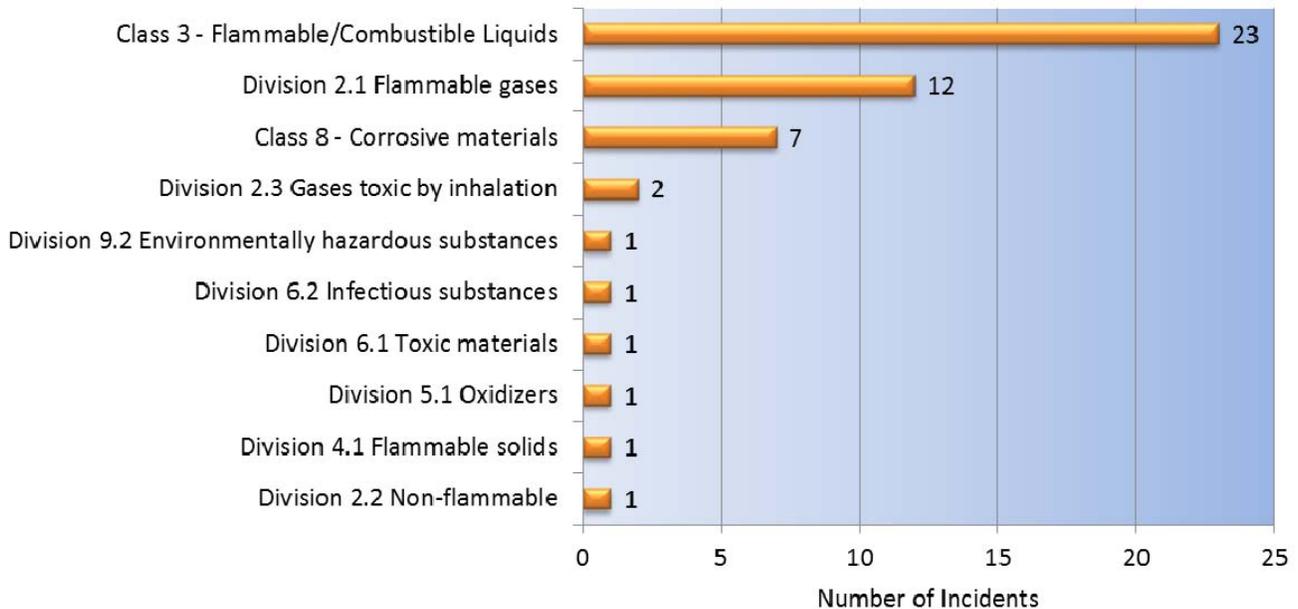
This chart shows the 20 types of property uses where the most reported hazardous substance incidents took place. This is a count only and does not reflect the severity of the incidents.



2013 HAZARDOUS SUBSTANCE INCIDENTS IN OREGON

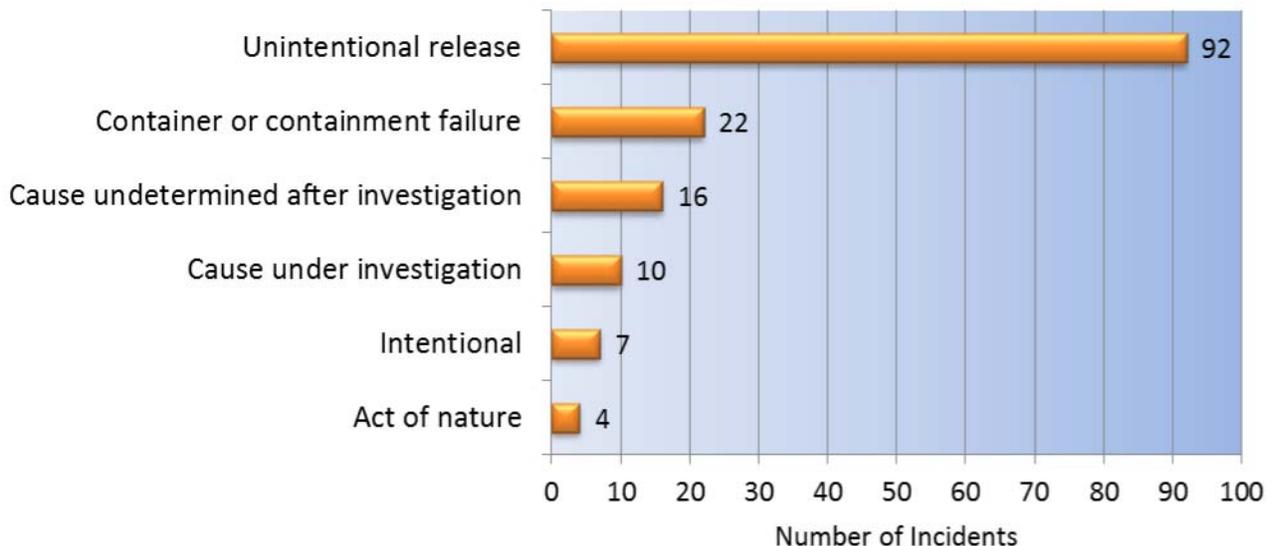
COUNT OF HAZARDOUS SUBSTANCE INCIDENTS BY U.S. DOT HAZARD CLASSES

The following chart was derived from reported incidents. The hazard classes of the substances involved were not always clearly stated in responder reports. Of the 1,337 hazardous substance incidents reported, only 50 are identifiable by the hazard class.



CAUSES OF HAZARDOUS SUBSTANCE INCIDENTS

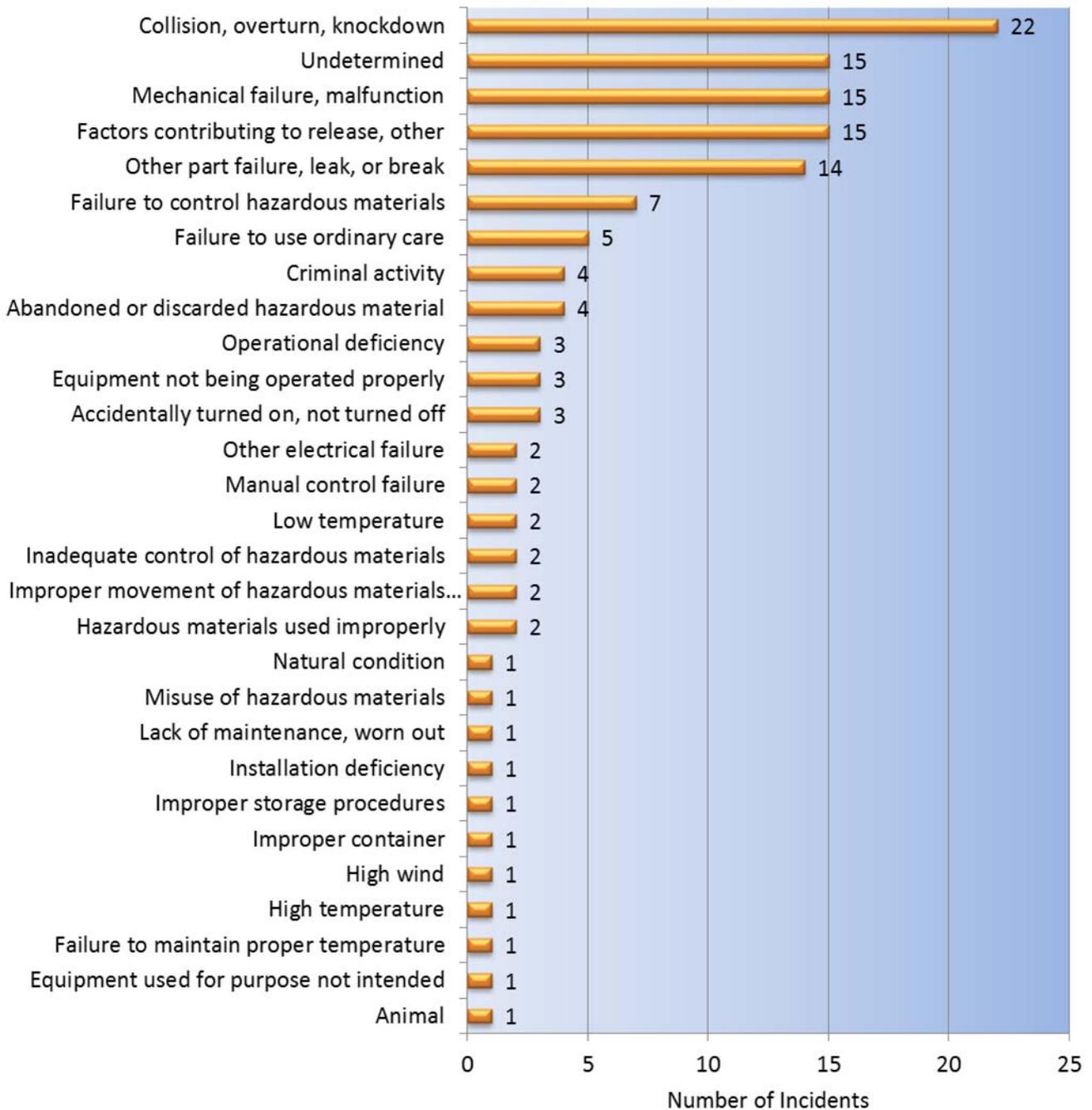
Several options are given for causes of a hazardous substance incident. Not all reports list the cause of an incident. This chart illustrates the reported causes.



2013 HAZARDOUS SUBSTANCE INCIDENTS IN OREGON

FACTORS CONTRIBUTING TO HAZARDOUS SUBSTANCE INCIDENTS

Several options are given for contributing factors to a hazardous substance incident. Not all reports list a contributing factor. The following chart lists the reported contributing factors.



2013 HAZARDOUS SUBSTANCE INCIDENTS IN OREGON

OREGON REGIONAL HAZMAT TEAM RESPONSES

Oregon's 13 Regional Hazardous Material Response Teams responded to 57 incidents in 2013. The following table shows the number of responses for each team color coded to a map of the Regional Hazardous Material Response Team boundaries on the following page.

Collectively, 32 different substances were identified by the Regional Hazardous Material Response Teams. These substances are listed in the second chart below.

| Team | Number of Incidents |
|------------------------------|---------------------|
| Team 1 Roseburg | 3 |
| Team 2 Eugene | 2 |
| Team 3 Gresham/Multnomah Co. | 8 |
| Team 4 Klamath Falls | 4 |
| Team 5 Linn/Benton | 3 |
| Team 7 Portland | 12 |
| Team 8 Medford | 0 |
| Team 9 TVF&R | 5 |
| Team 10 Hermiston | 8 |
| Team 11 Astoria | 0 |
| Team 13 Salem | 6 |
| Team 14 Ontario | 6 |
| Team 15 Coos Bay | 0 |

| Substance Name |
|------------------------------|
| White Powder |
| Diesel fuel |
| Sulfuric acid |
| Petroleum |
| Aluminum sulfate |
| 1,4-Dichlorobenzene |
| Aluminum (dust) |
| Ammonia, anhydrous |
| Nickel sulfate |
| Ammonium nitrate fertilizers |
| Silane |
| Anhydrous ammonia |
| Urea |
| beta-Butyrolactone |
| Mineral oil |
| Cadmium sulfate |

| Substance Name |
|---------------------------------------|
| 2,4-D |
| Peracetic acid |
| Acrylonitrile |
| Phosphoric acid |
| Potassium |
| Potassium chromate |
| Diethylenetriamine |
| Sodium hydroxide(solution) |
| Formaldehyde(solution, flammable) |
| Acetic acid (Solution in Water 1-80%) |
| Water |
| Acetone |
| ZP |
| Gasoline |
| Kerosene |
| LOX |

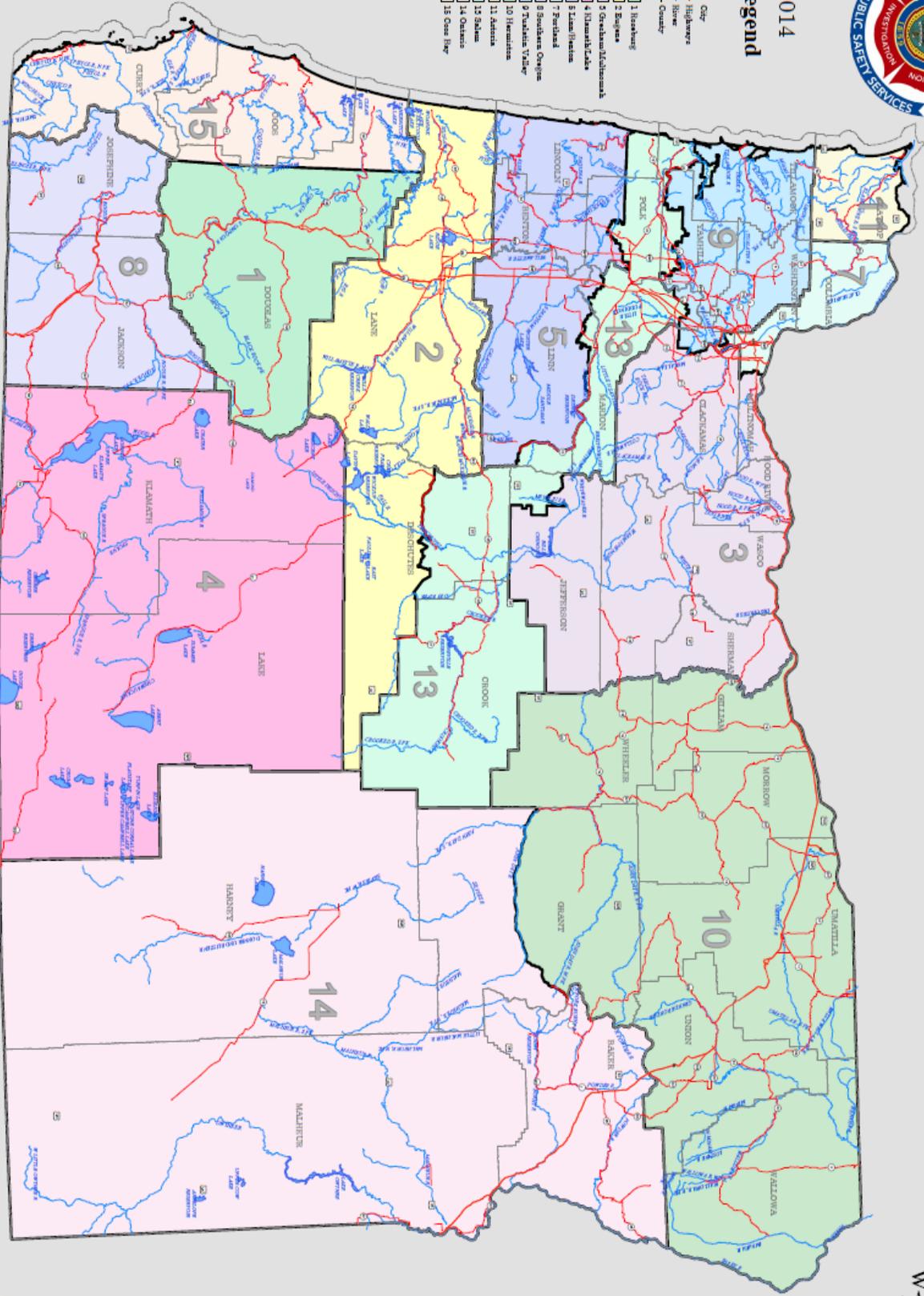


Oregon Regional HazMat Team Boundaries

2014

Legend

- City
- Highway
- River
- County
- 1 Roseburg
- 2 Eugene
- 3 Gresham/McMinnville
- 4 Klamath/Cake
- 5 Lake/Prineas
- 7 Portland
- 8 Southern Oregon
- 9 Tualatin/Valse
- 10 Medford/Grants
- 11 Astoria
- 13 Salem
- 14 Clatsop
- 15 Coos Bay



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2013 HAZARDOUS SUBSTANCE INCIDENTS IN OREGON

OREGON REGIONAL HAZMAT TEAM RESPONSES

Outreach

In 2013, Oregon Regional Hazardous Material Response Teams conducted 68 outreach events and training sessions across the state. Most training was conducted at local fire departments within the response regions and often included representatives from industries within the region. Outreach training conducted by the hazmat teams ensures local responders are prepared to respond quickly and safely, and assist the hazmat team in the event of a hazardous substance incident. The table below identifies the number of outreach events conducted by each team.

Telephone Advisory Calls

In addition to incident response, teams provide an additional resource through telephone advisories to local responders, industry representatives, and others throughout their respective regions. In 2013, the teams conducted 117 telephone advisory calls. The table below identifies the number of calls handled by each team.

| 2013 Regional HazMat Outreach | |
|-------------------------------|-----------|
| Team # | Events |
| Team 1 | 10 |
| Team 2 | 2 |
| Team 3 | 5 |
| Team 4 | 3 |
| Team 5 | 4 |
| Team 7 | 7 |
| Team 8 | 2 |
| Team 9 | 2 |
| Team 10 | 6 |
| Team 11 | 6 |
| Team 13 | 6 |
| Team 14 | 3 |
| Team 15 | 12 |
| TOTAL | 68 |

| 2013 Telephone Advisory Calls | |
|-------------------------------|------------|
| Team # | Calls |
| Team 1 | 1 |
| Team 2 | 0 |
| Team 3 | 1 |
| Team 4 | 4 |
| Team 5 | 5 |
| Team 7 | 61 |
| Team 8 | 3 |
| Team 9 | 15 |
| Team 10 | 0 |
| Team 11 | 1 |
| Team 13 | 9 |
| Team 14 | 2 |
| Team 15 | 15 |
| TOTAL | 117 |

2013 HAZARDOUS SUBSTANCE INCIDENTS IN OREGON

REPORTED CASUALTIES FROM HAZARDOUS SUBSTANCE INCIDENTS

This chart shows the reported casualties associated with hazardous substance incidents in 2013. They are categorized by fire service personnel and civilian. They are further separated based on whether the injury or death was caused by the hazardous substance or by some other factor in the incident.

| | Injury - Substance | Death - Substance | Injury - Other | Death - Other |
|--------------|--------------------|-------------------|----------------|---------------|
| Civilian | 34 | 0 | 8 | 0 |
| Fire Service | 0 | 0 | 0 | 0 |
| Total | 34 | 0 | 8 | 0 |

The following is a brief description of the incidents reflected in these reported casualties:

Incident 1 - Two civilians were injured and 75 people were evacuated due to a refrigerant leak at a restaurant.

Incident 2 - Thirty two civilians were injured and 100 people were evacuated when freon-12 was accidentally released in a Safeway store.

Incident 3 - One civilian was injured when hydrochloric acid was spilled in a laboratory at Clackamas Community College.

Incident 4 - Two civilians were injured when a semi-tanker trailer crashed into a ditch and its tank ruptured, spilling approximately 3,500 gallons of gasoline. The injuries were due to the crash rather than exposure to the gasoline.

Incident 5 - Five civilians were injured when a truck rolled over and spilled approximately 250 gallons of highly toxic Tetramethylammonium Hydroxide. Four were injured by exposure to the chemical and one was injured in the crash.

175 people were evacuated in these incidents.

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General Phone: 503-378-3473

General Fax: 503-378-1825

Information Request Phone: 503-934-8353

Hazardous Substance Information Hotline: 800-454-6125 or 503-378-6835

General E-mail: oregon.sfm@state.or.us

Info Request E-mail: sfm.cr2k@state.or.us

General Web: www.oregon.gov/OSP/SFM

CR2K Web: http://www.oregon.gov/OSP/SFM/pages/cr2k_home.aspx

Information Access Web: http://www.oregon.gov/osp/SFM/pages/cr2k_infoavailable.aspx

