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[3/2018]

# Finnish Rescue Services' Pocket Statistics 2013- 2017

Johannes Ketola, Esa Kokki

# FINNISH RESCUE SERVICES' POCKET STATISTICS 2013–2017

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### Further Inquiries:

Emergency Services College

Johannes Ketola, Planning Officer

[johannes.ketola@pelastusopisto.fi](mailto:johannes.ketola@pelastusopisto.fi)

Esa Kokki, Director of Research

[esa.kokki@pelastusopisto.fi](mailto:esa.kokki@pelastusopisto.fi)

[prontonet.fi](http://prontonet.fi)

Emergency Services College Publication

D-series: Other 3/2018

ISBN: 978-952-7217-08-5 (pdf)

ISSN: 2342-9305 pdf

# 1 INTRODUCTION

In Finland, the responsibility for the functions of rescue services is divided between 22 rescue service regions. The rescue services on the Åland Islands are regulated by regional legislation. The functions of rescue service regions include accident prevention, rescue operations and civil defence, etc.

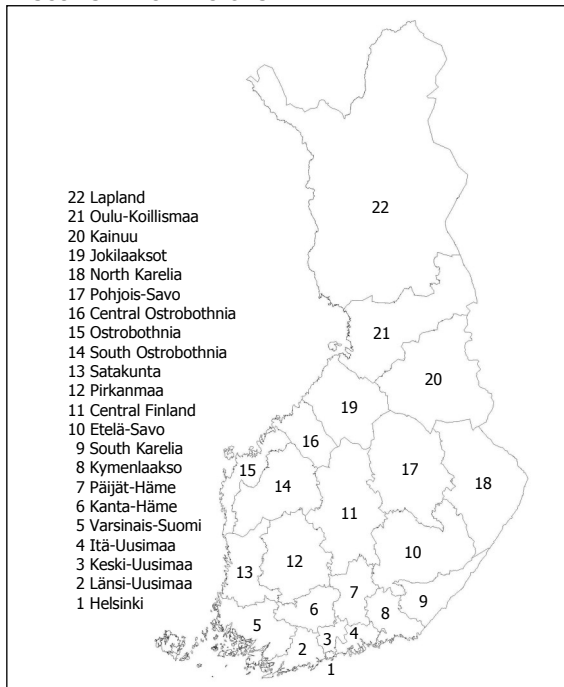
The pocket statistics is based on the data in the rescue services resource and accident statistics program (PRONTO) from 2013–2017, unless indicated otherwise. PRONTO is maintained by the regional rescue departments. The data in the statistics were gathered directly from PRONTO without a nationwide check.

In the statistics rescue operations refer to those incidents when a fire brigade was alerted by an emergency response centre, excluding ambulance service. The number of building fires includes the number of risk of building fires.

The data related to rescue operations have been tabulated in PRONTO based on the primary type of an emergency. The secondary types of emergencies have been counted into those tables which deal with accidents, causes for automatic fire calls and property damages. Separate missing data have not been included in the tables. All this should be taken into consideration when comparing the data presented in the tables.

## 2 RESCUE SERVICE SYSTEM AND RESOURCES

### RESCUE SERVICE REGIONS



## RESCUE SERVICE REGIONS POPULATION AND SURFACE AREA IN 2017

	Popula- tion*	Surface Area (km <sup>2</sup> )	Risk Squares by Risk Class				Land Area (km <sup>2</sup> )
			I	II	III	IV	
Helsinki	635 181	716	119	56	21	526	213
Länsi-Uusimaa	452 483	7 855	45	240	152	7 508	4 242
Keski-Uusimaa	443 691	1 986	66	240	100	1 579	1 940
Itä-Uusimaa	96 531	5 537	3	38	78	5 429	2 736
Varsinais-Suomi	474 711	20 539	33	236	280	20 088	10 663
Kanta-Häme	174 808	5 706	13	99	127	5 464	5 200
Päijät-Häme	201 702	6 256	16	144	87	6 041	5 124
Kymenlaakso	178 791	7 417	11	125	126	7 254	5 113
South Karelia	131 188	7 236	3	90	107	7 164	5 615
Etelä-Savo	150 392	18 768	7	93	94	18 537	13 984
Central Finland	275 788	19 952	13	152	210	19 576	16 706
Pirkanmaa	506 331	14 471	29	259	261	13 906	12 444
Satakunta	223 032	11 636	10	168	179	11 338	7 957
South Ostrobothnia	192 654	14 001	3	127	158	13 711	13 445
Ostrobothnia	150 473	17 411	8	65	160	16 128	7 381
Central Ostrobothnia	100 304	9 116	6	56	66	8 387	6 215
Pohjois-Savo	248 210	20 368	17	115	142	20 070	16 771
North Karelia	164 842	21 584	5	104	106	21 550	17 764
Jokilaaksot	121 882	17 259	2	69	108	17 792	13 499
Kainuu	78 425	24 453	2	51	61	24 488	21 503
Oulu-Koillismaa	285 161	26 180	14	145	156	25 957	21 739
Lapland	180 905	100 368	5	100	169	101 126	92 663
<b>Total</b>	<b>5 462 529</b>	<b>378 815</b>	<b>430</b>	<b>2 772</b>	<b>2 948</b>	<b>373 619</b>	<b>302 917</b>

\*Population 31.12.2016

## NUMBER OF FIRE STATIONS

	2016	2017
Fire Stations within Rescue Service	336	336
Contract Fire Brigades	447	490
Industrial, Institutional Fire Brigades	94	92

## RESCUE SERVICE VEHICLES

	2013	2014	2015	2016	2017
Fire Engine	1 101	1 090	1 086	1 070	1 055
Lightweight Fire Truck	31	33	33	33	25
Water Tender	519	517	508	492	480
Ladder Unit, Hydraulic Platform Truck	84	84	80	78	80
Heavy Rescue Unit	46	48	45	49	43
Gear Truck	95	90	89	82	79
Foam Tender, Dry Powder Appliance	57	58	56	55	55
Damage Control Tender	24	23	25	22	22
Hazardous Materials Unit	12	14	15	17	17
Incident Command, Control Unit	237	234	197	190	183
Personnel Carrier	725	742	753	744	752
Rescue Diving Appliance	27	28	27	27	27
Other Rescue Service Vehicle	82	89	88	103	108
Snowmobile	204	203	208	213	204
ATV (all-terrain vehicle), Track	252	269	277	283	286
Boat	695	704	725	726	727
Other Vessel	100	92	81	78	78
EMS Vehicle*	272	252	244	254	239
Other Vehicle	493	470	494	506	775
Trailer	95	97	99	161	157
Container	94	97	98	100	98

\* EMS Vehicles of Fire Departments

## RESCUE DEPARTMENTS FINANCIAL\* 2017 (€/Inhabitant)

	Contributions of Municipali- ties Excluding Rent and Depreciation Costs	Investments	Expenditure Excluding Deprecia- tion Costs	Revenue Excluding Contribu- tions of Municipa- lities
Helsinki	-10	5	61	7
Länsi-Uusimaa	54	6	64	3
Keski-Uusimaa	49	4	55	2
Itä-Uusimaa	83	13	95	6
Varsinais-Suomi	60	7	69	4
Kanta-Häme	55	4	62	6
Päijät-Häme	69	3	87	4
Kymenlaakso	80	7	93	8
South Karelia	81	4	91	5
Etelä-Savo	78	6	82	4
Central Finland	64	3	78	3
Pirkanmaa	62	3	68	3
Satakunta	71	9	90	4
South Ostrobothnia	69	5	87	4
Ostrobothnia	65	9	71	5
Central Ostrobothnia	69	6	73	7
Pohjois-Savo	62	5	75	5
North Karelia	65	11	77	9
Jokilaaksot	92	4	99	6
Kainuu	85	5	93	3
Oulu-Koillismaa	52	3	60	3
Lapland	-	-	-	-

\*EMS information not been included

## RESCUE DEPARTMENTS FINANCIAL\* (MEUR)

	2013	2014**	2015	2016	2017***
Revenue	23	20	22	27	26
Expenditure	395	382	394	402	386
Personnel Costs	268	256	263	263	247
Net Expenditure	377	362	351	352	338
Investments	15	19	22	21	13

\*EMS information not been included \*\*Reference: Rescue Departments Partnership Network. Itä-Uusimaa information is missing. \*\*\*Lapland information is missing

## RESCUE SERVICES PERSONNEL

	2017
Full-time Employees of Rescue Departments	6 298
Contract Fire Brigade Personnel	15 414
Ministry of the Interior, Department of Rescue <sup>1</sup>	40
Emergency Services College <sup>2</sup>	103
Regional State Administrative Agencies, Department of Rescue <sup>3</sup>	36

References: <sup>1</sup>Ministry of the Interior, <sup>2</sup>Emergency Services College, <sup>3</sup>Regionala State Administrative Agencies

## RESCUE DEPARTMENTS\* FULL-TIME EQUIVALENT

	2017
Administrative, Support Services	555
Safety Services	392
Emergency Medical Services	1 990
Rescue Services	3 950
Total	6 887

\*Full-time employee



## PERSONNEL OF RESCUE DEPARTMENTS 2017

	Full-time Personnel			Contract Personnel		
	Total	Rescue Services, Women	Rescue Services, Men	Performance Test Approved	Rescue Services	Performance Test Approved
Helsinki	648	1	402	372	355	-
Länsi-Uusimaa	586	1	340	271	847	313
Keski-Uusimaa	420	8	276	265	579	40
Itä-Uusimaa	153	2	77	59	698	99
Varsinais-Suomi	481	2	264	239	1 906	379
Kanta-Häme	245	0	139	120	403	116
Päijät-Häme	246	0	178	148	460	116
Kymenlaakso	213	0	147	115	1 021	189
South Karelia	119	0	93	74	492	89
Etelä-Savo	181	2	110	96	592	90
Central Finland	354	1	207	105	941	370
Pirkanmaa	644	8	432	334	779	160
Satakunta	241	1	162	138	1 054	146
South Ostrobothnia	117	1	89	77	859	291
Ostrobothnia	180	2	82	70	937	98
Central Ostrobothnia	104	2	73	59	427	106
Pohjois-Savo	256	0	170	166	595	196
North Karelia	261	1	131	137	525	176
Jokilaaksot	257	3	84	59	638	168
Kainuu	67	1	55	42	147	70
Oulu-Koillismaa	380	1	170	141	386	107
Lapland	145	0	126	70	773	60

## 3 ACCIDENT PREVENTION

### SAFETY EDUCATION

	2013	2014	2015	2016	2017
Events	11 705	11 219	11 095	10 949	11 592
Participants	894 765	857 785	885 305	849 574	920 389
Share of Population (%)	17	16	16	16	17

### SAFETY EDUCATION EVENTS BY TYPE OF IMPLEMENTATION

	2013	2014	2015	2016	2017
Safety Information Campaigns	674	654	619	723	603
Fairs, Other Public Events	1 533	1 588	1 685	1 611	1 849
Safety Training	7 791	7 083	7 056	7 064	7 364
Safety Advicing	1 666	1 829	1 711	1 520	1 527

### SAFETY EDUCATION EVENTS BY TARGET GROUP

	2013	2014	2015	2016	2017
Citizens, Public Servants	7 368	7 253	7 270	7 337	7 841
Children, the Young	4 873	4 833	4 817	4 645	5 002
Public Servants, Trustees	205	216	191	119	85
Companies, Institutions	3 665	3 368	3 299	3 080	3 140
Personnel in Care Institution	1 806	1 629	1 601	1 564	1 711
Personnel in Education Institution	365	385	355	323	327
Personnel in Day Care Center	317	338	342	270	260
Civil Defence Organisations	53	47	16	29	36
Other Target Group	618	548	508	500	574

## SOCIAL MEDIA 2017

	Reachability (Contacts)	Interaction (Reacted)
Helsinki	-	-
Länsi-Uusimaa	3 705 812	349 963
Keski-Uusimaa	417 072	14 744
Itä-Uusimaa	427 336	9 997
Varsinais-Suomi	-	-
Kanta-Häme	603 978	74 860
Päijät-Häme	644 155	41 500
Kymenlaakso	-	-
South Karelia	2 515 684	200 432
Etelä-Savo	513 123	21 157
Central Finland	-	-
Pirkanmaa	5 091 145	391 548
Satakunta	2 948 813	114 647
South Ostrobothnia	329 505	9 086
Ostrobothnia	158 202	10 841
Central Ostrobothnia	400 315	35 009
Pohjois-Savo	513 123	26 537
North Karelia	2 291 885	-
Jokilaaksot	-	-
Kainuu	-	-
Oulu-Koillismaa	-	-
Lapland	-	-

## FIRE INSPECTIONS

	2013	2014	2015	2016	2017
Planned inspections	50 318	48 630	45 128	35 985	48 699
Inspections	45 343	44 112	38 518	33 152	38 105
A1 Building in Use 24/7	4 574	4 546	4 404	3 813	3 999
A2 Education Building, Day Care Center	3 897	4 018	3 822	2 921	3 362
A3 Assembly, Commercial Building	5 003	5 406	5 919	5 109	5 218
A4 Production, Storage Building	6 227	5 983	5 726	5 367	5 712
A5 Agricultural Building	2 762	2 744	2 717	1 975	1 914
A6 Other Annually Inspected	2 920	3 277	2 898	2 847	3 092
Residential Building	19 279	17 752	12 883	10 902	13 666
Free-time Residence	681	386	149	218	1 142
Inspection-%	90	100	98	96	78

## DOCUMENT AUDITING

	2013	2014	2015	2016	2017
Self-Inspection Checklists	56 480	68 070	78 188	74 410	86 326
Returning-%	78	85	84	82	84
Rescue Plans	2 500	1 952	1 329	1 063	1 247
Rescue Plans for Events	2 003	2 397	2 217	2 858	4 026
Documents of Technical Fire Safety Installations	3 252	4 226	4 296	6 103	6 811
Other Document Auditing	3 009	4 236	2 717	2 933	4 225
Total	67 244	80 881	88 750	87 367	102 635

## INSPECTIONS AND RULINGS REGARDING HAZARDOUS MATERIALS AND EXPLOSIVES

	2013	2014	2015	2016	2017
Inspection Visits	1 874	2 409	2 008	2 013	2 132
Inspections Based on Documents	2 370	2 313	2 326	2 774	3 292
Rulings	1 134	1 090	894	1 150	1 304

## EXPERT SERVICES

	2013	2014	2015	2016	2017
Guidance Regarding Building Code, Land Use	21 206	17 758	17 693	24 670	28 796
Other Guidance	1 844	1 801	1 586	1 555	1 657
Other Rulings	-	-	1 099	1 281	1 388

## FACILITIES REQUIRING AN EVACUATION SAFETY REPORT

	2013	2014	2015	2016	2017
Facilities	2 220	3 428	3 179	3 402	3 752
Facilities Meeting Requirements	1 361	2 156	2 230	2 426	2 748

## 4 RESCUE OPERATIONS

### RESCUE OPERATIONS BY TYPE

	2013	2014	2015	2016	2017
Fires	13 421	14 027	11 223	12 063	11 854
Building Fire	5 727	5 958	5 211	5 520	5 290
Risk of Building Fire	3 386	3 665	3 201	3 356	3 184
Vehicle Fire	2 335	2 142	2 200	2 262	2 081
Wildfire	2 764	3 511	1 581	2 008	2 181
Other Fire	2 595	2 416	2 231	2 273	2 302
Other Accidents	15 876	16 579	16 940	17 419	18 415
Traffic Accident	13 140	13 725	14 107	14 558	15 464
Oil Spill	2 330	2 427	2 410	2 495	2 602
Hazardous Material Accident	344	387	378	315	308
Explosion, Risk of Explosion	24	18	15	16	16
Collapse, Risk of Collapse	38	22	30	35	25
Other Operations	75 552	68 468	71 510	74 272	74 142
Fire Alarm System Check or Inspection	19 033	18 076	17 500	19 199	17 324
Smoke Alarm System Check or Inspection	2 133	2 918	2 482	3 358	3 213
Other Check or Inspection	8 649	9 351	8 816	9 109	9 232
First Response	26 226	21 156	21 094	22 655	24 327
Human Rescue	2 425	2 529	2 467	2 336	2 273
Animal Rescue	2 090	2 146	2 380	2 502	2 380
Loss Prevention	10 226	7 105	11 027	8 708	8 187
Assistance	3 471	3 827	4 332	4 903	5 621
Executive Assistance	1 299	1 360	1 412	1 504	1 585
<b>Total</b>	<b>104 849</b>	<b>99 074</b>	<b>99 673</b>	<b>103 756</b>	<b>104 411</b>

## RESCUE OPERATIONS BY RESCUE SERVICE REGION

	2013	2014	2015	2016	2017
Helsinki	8 391	8 143	8 408	8 813	9 454
Länsi-Uusimaa	7 151	6 610	6 780	7 439	8 195
Keski-Uusimaa	6 631	6 403	6 650	7 114	8 158
Itä-Uusimaa	1 928	1 961	2 128	2 140	2 503
Varsinais-Suomi	8 759	7 894	7 777	8 329	8 375
Kanta-Häme	3 717	3 610	3 658	3 970	3 661
Päijät-Häme	4 028	3 876	3 914	4 238	4 416
Kymenlaakso	3 384	3 449	3 225	3 542	3 609
South Karelia	2 630	2 551	2 498	2 745	2 593
Etelä-Savo	3 575	3 255	3 349	3 726	3 357
Central Finland	5 928	5 415	5 364	5 403	4 871
Pirkanmaa	10 265	10 136	10 308	10 550	10 143
Satakunta	5 395	4 967	4 782	5 012	4 909
South Ostrobothnia	5 677	3 930	4 131	4 324	4 273
Ostrobothnia	3 312	2 619	2 455	2 580	2 455
Central Ostrobothnia	2 714	2 010	1 897	1 880	1 719
Pohjois-Savo	4 936	5 126	5 322	5 197	5 070
North Karelia	3 588	3 823	3 755	3 826	3 882
Jokilaaksot	2 754	2 725	3 009	2 679	2 597
Kainuu	1 519	1 784	1 600	1 521	1 464
Oulu-Koillismaa	4 324	4 331	4 464	4 361	4 309
Lapland	4 237	4 450	4 187	4 358	4 379
Cooperations	1 664	2 042	1 758	1 887	1 968

## RESCUE OPERATIONS BY URGENCY

	2013	2014	2015	2016	2017
Urgent	77 728	73 457	70 059	74 410	74 026
Non-urgent	21 936	20 739	24 568	23 688	24 584
Canceled	4 802	4 702	4 820	5 442	5 552

## RESCUE OPERATIONS BY MONTH

	2013	2014	2015	2016	2017
January	7 686	7 728	8 189	10 416	8 332
February	6 532	5 851	6 394	6 826	7 313
March	7 607	7 213	7 135	6 842	8 060
April	7 629	7 918	8 371	7 239	7 661
May	9 302	8 944	8 640	8 958	9 308
June	10 574	8 464	9 005	10 037	9 744
July	9 928	12 088	8 527	9 752	9 737
August	9 126	9 689	9 029	11 461	10 312
September	8 187	8 126	8 009	8 222	8 231
October	7 793	7 688	9 588	7 700	8 360
November	9 476	6 998	8 117	7 892	7 928
December	11 010	8 367	8 669	8 411	9 425

## RESCUE OPERATIONS BY WEEK DAY

	2013	2014	2015	2016	2017
Monday	14 171	13 949	13 336	13 893	14 338
Tuesday	14 563	13 865	13 089	14 267	14 667
Wednesday	13 969	14 370	14 062	14 387	14 369
Thursday	14 357	14 788	13 764	14 264	14 815
Friday	17 124	14 682	15 946	15 600	16 252
Saturday	15 193	14 862	16 151	17 723	15 951
Sunday	15 473	12 558	13 325	13 622	14 019



## RESCUE OPERATIONS BY TIME

	2013	2014	2015	2016	2017
00-02	4 807	4 666	4 506	4 982	4 889
02-04	4 202	3 597	3 703	3 887	3 837
04-06	4 274	3 450	3 528	3 703	3 765
06-08	6 615	5 489	5 711	5 826	6 117
08-10	10 224	9 041	9 220	9 440	9 471
10-12	11 471	10 542	10 739	11 204	11 249
12-14	12 138	11 725	11 777	12 224	12 200
14-16	12 653	12 159	12 267	12 561	12 486
16-18	12 077	12 370	12 212	12 369	12 323
18-20	10 664	10 832	10 668	11 182	11 528
20-22	9 143	8 930	8 924	9 523	9 916
22-24	6 582	6 273	6 418	6 855	6 630

## RISK CATEGORIES DEFINED BY ACCIDENT

	2013	2014	2015	2016	2017
Risk class I	4 796	4 975	4 730	4 825	5 530
Risk class II	7 796	7 809	7 759	7 736	7 235
Risk class III	2 418	2 286	2 295	2 430	2 452
Risk class IV	10 604	10 994	10 735	11 301	11 508
Total	25 614	26 064	25 519	26 292	26 725

## INTERNATIONAL CIVIL PROTECTION MISSIONS

	2013	2014	2015	2016	2017
Co-operation with neighbouring countries	13	3	11	9	19
Seconded experts <sup>1</sup>	16	15	15	7	3
Civil protection module activated <sup>1</sup>	0	0	1	0	1
In kind assistance <sup>2</sup> (€)	10 000	1 000 550	302 279	722 331	0

References: <sup>1</sup>CMC Finland, <sup>2</sup>Ministry of the Interior

## BUILDING FIRES BY BUILDING TYPE

	2013	2014	2015	2016	2017
Residential Building	3 069	3 232	2 878	2 971	2 921
Detached House	1 415	1 400	1 283	1 399	1 254
Attached House	323	311	304	306	265
Block of Flats	1 331	1 521	1 291	1 266	1 402
Free-time Residence	172	201	149	195	139
Commercial Building	345	333	303	338	317
Office Building	127	113	102	84	74
Transport, Communications Build.	92	92	77	87	69
Institutional, Healthcare Building	209	245	189	247	233
Assembly Building	82	72	77	80	74
Educational Building	111	102	114	108	95
Industrial Building	624	639	545	598	570
Warehouse	203	224	185	205	172
Building for Fire Services	10	5	4	6	4
Agricultural Building	226	213	175	200	179
Other Building	522	567	474	471	515
Sauna	239	268	207	211	229
<b>Total</b>	<b>5 792</b>	<b>6 038</b>	<b>5 272</b>	<b>5 590</b>	<b>5 362</b>

## CAUSE OF BUILDING FIRE

	2013	2014	2015	2016	2017
Human Activity	2 706	2 931	2 599	2 575	2 690
Machine, Device Failure	1 729	1 738	1 554	1 801	1 582
Natural Phenomena	208	256	86	148	106
Flammable Substance	97	102	97	127	100
Animal	50	41	50	24	41
Other Cause	538	519	458	499	407
Cause Unknown	465	452	430	417	442

## BUILDING FIRE CAUSE OF IGNITION

	2013	2014	2015	2016	2017
Cooking	918	1 060	971	888	975
Deliberate	344	344	330	292	386
Open Fire	727	750	650	632	664
Juvenile Fire Setting	54	46	48	43	54
Hot Work	138	125	130	133	118
Match, Other Firemaking Device	117	107	100	85	85
Cigarette, Other Tobacco Product	256	267	203	201	224
Firework, Pyrotechnic Products	15	18	10	12	11
Candle, Outdoor Candle	84	103	96	80	88
Machine, Device, Process	1 738	1 695	1 581	1 797	1 590
Electrical Device	711	694	677	790	657
Hot Object, Ash, Spark	188	234	201	238	194
Fireplace, Flue	691	736	593	732	617
Frictional Heat, Spontaneous Ignition, Explosion	129	124	97	109	100
Natural Phenomena	190	236	59	119	72
Other Known Cause	395	383	348	344	300
Cause Unknown	472	477	444	440	470

## INTENTIONALITY OF BUILDING FIRE

	2013	2014	2015	2016	2017
Intentional	458	450	430	378	491
Negligence, Carelessness	1 079	1 262	1 025	1 068	1 120
Accidental	1 039	1 083	1 020	1 015	962
Unknown	130	136	124	117	117
Total	2 706	2 931	2 599	2 578	2 690

## CHIMNEY FIRES

	2013	2014	2015	2016	2017
Building Fire, Not spread	302	328	264	324	264
Building Fire, Spread	16	19	15	16	13

## USE OF FIRST EXTINGUISHING IN BUILDING FIRES

	2013	2014	2015	2016	2017
Used	1 965	2 005	1 730	1 891	1 840
Not Used	3 351	3 563	3 188	3 333	3 164
Unknown	477	471	356	367	364

## EFFECT OF FIRST EXTINGUISHING IN BUILDING FIRES

	2013	2014	2015	2016	2017
Extinguished Fire	1 116	1 176	1 038	1 116	1 081
Limited Fire	600	599	494	536	548
No Effect	238	227	190	231	206
Extinguisher Did Not Work	11	3	8	8	5

## SMOKE ALARM ACTIVATION IN RESIDENTIAL BUILDING FIRES

	2013	2014	2015	2016	2017
Smoke Alarm Activated	1 046	1 122	1 022	1 049	1 095
Smoke Alarm Did Not Activate	446	499	440	443	423
Smoke Alarm Activation Unknown	398	393	334	381	357
No Smoke Alarm	949	1 007	862	877	829

## WILDFIRES

	2013	2014	2015	2016	2017
Forest Fire	1 504	1 708	768	978	912
Other Wildfire	1 360	1 929	876	1 123	1 351

## CAUSE OF WILDIRE

	2013	2014	2015	2016	2017
Human Activity	1 913	2 191	1 110	1 524	1 708
Natural Phenomena	348	685	152	130	103
Machine, Device Failure	111	129	64	85	87
Animal	12	26	9	20	25
Flammable Substance	8	26	15	10	13
Other Cause	127	147	76	89	69
Cause Unknown	344	433	216	243	257

## WILDFIRE CAUSE OF IGNITION

	2013	2014	2015	2016	2017
Open Fire	1 553	1 761	890	1 205	1 337
Juvenile Fire Setting	81	119	47	79	124
Campfire, Grill	582	487	322	375	338
Rubbish Burning	332	479	258	344	391
Match, Other Firemaking Device	161	149	64	80	106
Cigarette, Other Tobacco Product	199	264	108	161	168
Prescribed Burning	168	241	73	140	181
Natural Phenomena	296	589	84	77	62
Lightning	268	540	31	39	25
Machine, Device, Process	135	165	84	125	104
Electrical Device	34	34	30	29	18
Hot Object, Ash, Spark	123	148	78	108	134
Fireplace, Flue	19	11	8	8	14
Frictional Heat, Spontaneous Ignition, Explosion	77	154	58	79	57
Deliberate	141	176	100	124	148
Other Known Cause	151	167	105	94	97
Cause Unknown	368	466	235	281	309

## INTENTIONALITY OF WILDFIRE

	2013	2014	2015	2016	2017
Intentional	342	346	211	268	281
Negligence, Carelessness	826	1 004	484	691	812
Accidental	480	595	273	379	395
Unknown	265	247	143	186	220
Total	1 913	2 192	1 111	1 524	1 708

## VEHICLE FIRES BY VEHICLE TYPE

	2013	2014	2015	2016	2017
Road Vehicle	2 299	2 113	2 125	2 217	2 028
All Terrain Vehicle	31	26	46	37	47
Water Vehicle	40	41	46	37	37
Rail Vehicle	13	10	11	7	8
Air Vehicle	2	0	1	1	0
Other Vehicle	31	34	43	39	29
Total	2 416	2 224	2 272	2 338	2 149

## CAUSE OF VEHICLE FIRE

	2013	2014	2015	2016	2017
Machine, Device Failure	1 455	1 343	1 349	1 473	1 360
Human Activity	410	401	411	408	363
Flammable Substance	34	38	39	16	29
Natural Phenomena	4	7	2	6	8
Animal	1	1	2	2	3
Other Cause	153	106	103	103	81
Cause Unknown	358	328	365	330	305

## INTENTIONALITY OF VEHICLE FIRES

	2013	2014	2015	2016	2017
Intentional	281	265	303	282	229
Negligence, Carelessness	45	60	48	45	57
Accidental	63	55	48	54	56
Unknown	21	21	12	27	21
<b>Total</b>	<b>410</b>	<b>401</b>	<b>411</b>	<b>408</b>	<b>363</b>

## ROAD VEHICLE FIRES

	2013	2014	2015	2016	2017
Passenger Car	1 350	1 273	1 351	1 369	1 285
Van	158	143	158	157	150
Lorry, Truck	315	239	231	247	238
Engine-powered Work Vehicle	86	83	65	92	59
Tractor	115	108	75	89	97
Bus	50	54	53	60	44
Motor Caravan, Caravan	54	59	51	51	39
Moped	70	69	59	68	53
Moped Car	21	19	23	21	14
Off-road Vehicle	31	26	46	37	47
Trailer	21	24	21	12	15
Motorcycle	25	17	11	17	14
Other Road Vehicle	34	25	27	34	20

## OTHER FIRES

	2013	2014	2015	2016	2017
Immovable Structure	276	262	279	292	541
Underground Waste Bin	-	-	-	-	133
Waste Shelter	-	-	-	-	120
Remains of a Burnt Building	-	-	-	-	118
Playhouse, Hut	-	-	-	-	75
Mobile Structure	154	130	148	149	196
Demountable Body	79	59	80	56	87
Barrack	33	35	26	30	16
Waste Materials, Recycle Materials	827	744	727	680	428
Less than 15m <sup>3</sup>	-	-	-	-	390
More than 15m <sup>3</sup>	-	-	-	-	38
Stack of Wood Materials	294	269	246	238	247
Less than 15m <sup>3</sup>	-	-	-	-	179
More than 15m <sup>3</sup>	-	-	-	-	68
Transformer, Utility Pole	240	258	193	195	194
Other Material	836	778	659	742	723

## CAUSE OF OTHER FIRE

	2013	2014	2015	2016	2017
Human Activity	1 730	1 591	1 540	1 509	1 553
Machine or Device Failure	252	238	205	231	240
Natural Phenomena	147	184	117	136	121
Flammable Substance	23	23	16	24	28
Animal	8	14	10	9	5
Other Cause	240	179	161	175	166
Cause Unknown	228	212	202	212	216



## OTHER FIRE CAUSE OF IGNITION

	2013	2014	2015	2016	2017
Open Fire	867	783	735	777	749
Juvenile Fire Setting	42	44	43	57	83
Campfire, Grill	113	108	94	100	115
Rubbish Burning	143	140	137	120	155
Match, Other Firemaking Device	256	180	185	150	119
Cigarette, Tobacco	197	197	146	192	161
Firework, Pyrotechnic Products	79	76	101	122	77
Fireplace, Flue	24	25	27	30	29
Machine, Equipment, Process	211	200	159	198	216
Electrical Device	98	95	93	97	111
Hot Object, Ash, Spark	112	79	107	107	97
Frictional Heat, Spontaneous Ignition, Explosion	117	116	102	133	106
Natural Phenomena	100	120	63	53	54
Deliberate	652	562	597	521	582
Other Known Cause	264	223	199	201	213
Cause Unknown	281	333	262	276	283

## INTENTIONALITY OF OTHER FIRE

	2013	2014	2015	2016	2017
Intentional	1 031	867	924	802	853
Negligence, Carelessness	313	342	284	319	332
Accidental	186	172	153	165	166
Unknown	200	210	179	224	202
<b>Total</b>	<b>1 730</b>	<b>1 591</b>	<b>1 540</b>	<b>1 510</b>	<b>1 553</b>

## TRAFFIC ACCIDENTS

	2013	2014	2015	2016	2017
Road Traffic	12 642	13 246	13 608	14 038	14 909
Rail Transport	137	135	138	151	160
Railway Level Crossing	52	55	67	56	58
Waterway Transport	106	94	99	77	92
Air Traffic	27	26	34	29	22
Off-road traffic	145	126	145	167	174
Other Traffic	116	111	123	128	139
<b>Total</b>	<b>13 174</b>	<b>13 738</b>	<b>14 147</b>	<b>14 590</b>	<b>15 496</b>

## OIL SPILLS

	2013	2014	2015	2016	2017
Overfill	155	152	153	196	159
Tank Leak	70	67	55	52	61
Other Leak in Storing, Dispensing Device	138	129	115	141	125
Road Vehicle	1 372	1 465	1 453	1 489	1 666
Rail Vehicle	7	8	9	6	8
Water Vehicle	63	80	71	96	85
Other Vehicle	299	290	311	283	282
Other Machine or Device	125	131	132	133	147
Treatment of Waste Oil, Used Oil	37	43	29	29	34
Unknown Oil Spill in Water Body, Sewer	98	116	111	116	91
Other Cause, Accident	221	217	196	202	221
<b>Total</b>	<b>2 585</b>	<b>2 698</b>	<b>2 635</b>	<b>2 743</b>	<b>2 879</b>

## HAZARDOUS MATERIAL ACCIDENT SITE

	2013	2014	2015	2016	2017
Industrial Plant	51	51	51	51	49
Warehouse, Warehouse Area	53	51	44	32	31
Street, Other Urban Area	96	120	113	95	103
Highway	42	38	32	31	26
Shop, Petrol Outlet	73	49	69	65	44
Public Building	9	21	21	19	13
Accommodation, Restaurant Premises	4	7	5	8	7
Residential Building	32	26	38	26	26
Other Building	16	21	16	24	27
Port, Water Body	9	18	7	8	10
Yard, Railway	8	8	6	9	7
Other Site	24	45	27	28	44
<b>Total</b>	<b>417</b>	<b>455</b>	<b>429</b>	<b>396</b>	<b>387</b>

## ADR CLASSIFICATION OF HAZARDOUS MATERIAL ACCIDENTS

	2013	2014	2015	2016	2017
Explosives	1	0	0	0	1
Gases	97	84	85	90	75
Flammable Liquids	208	251	233	188	183
Flammable Solids	3	9	3	5	2
Oxidising Substances, Organic Peroxides	7	8	11	9	12
Toxic, Infectious Substances	5	0	1	2	4
Radioactive Substances	0	0	0	1	1
Corrosive Substances	49	50	44	58	53
Other Hazardous Material, Goods	4	7	2	1	6

## CAUSE OF LOSS PREVENTION OPERATIONS

	2013	2014	2015	2016	2017
Natural Phenomena	8 026	4 823	8 846	6 193	5 775
Wind, Storm	6 928	3 880	7 318	4 909	4 290
Flood, Rain Water	771	411	316	723	392
Snow, Ice	187	348	1045	199	938
Frost	33	48	25	230	48
Defect or Malfunction in a Machine, Device	1 017	977	910	1 223	1 072
Defect, Malfunction of Mains	564	529	444	724	523
Defect, Malfunction of Vehicle	250	267	264	273	324
Human Activity	796	871	841	870	904
Animal	35	42	30	29	33
Other Cause	269	283	277	284	276
Cause Unknown	81	101	120	109	126

## CAUSE OF ASSISTANCE OPERATIONS

	2013	2014	2015	2016	2017
Assistance of EMS	2 372	2 944	3 357	3 880	4 468
Human Activity	370	285	397	399	486
Defect, Malfunction in a Machine, Device	291	232	205	238	285
Defect, Malfunction of Vehicle	182	144	129	112	135
Defect, Malfunction of Mains	21	14	10	13	18
Defect, Malfunction of Grid	14	6	8	5	6
Natural Phenomena	113	73	103	101	85
Wind, Storm	56	32	50	33	34
Flood, Rain Water	16	13	26	26	9
Snow, Ice	20	13	18	29	32
Animal	59	44	37	62	51
Other Cause	245	222	217	211	232
Cause Unknown	13	16	16	12	12

## HUMAN RESCUE OPERATIONS

	2013	2014	2015	2016	2017
Water Rescue	425	479	411	422	367
Rescue from Trap, Shaft, Collapse, Well	56	58	43	56	47
Rescue from Other Dangerous Place, Situation	267	280	276	301	269
Rescue from Place, Situation with No Immediate Danger	516	552	536	463	489
Rescue from Terrain	383	362	416	455	514
Lift Rescue	611	644	615	508	447
Other Rescue Operation	163	148	169	131	140

## ANIMAL RESCUE OPERATIONS

	2013	2014	2015	2016	2017
Water Rescue	193	250	229	321	257
Rescue from Trap, Shaft, Collapse, Well	254	194	225	237	206
Rescue from Other Dangerous Place, Situation	207	186	197	223	194
Rescue from Place, Situation with No Immediate Danger	878	968	1 058	1 051	941
Rescue from Terrain	114	94	168	107	121
Lift Rescue	6	4	5	9	6
Other Rescue Operation	435	448	497	554	654

## CAUSE FOR AUTOMATIC FIRE ALARM

	2013	2014	2015	2016	2017
Negligence in Property Repair, Installation, Maintenance Work	2 292	2 345	2 230	2 326	2 340
Exhaust Gas	152	143	126	172	138
Smoking	205	191	301	357	281
Cooking	3 478	3 295	3 602	4 129	3 575
Other Smoke, Dust	2 383	2 205	2 107	2 225	2 004
Temporary High Temperature	369	378	272	304	232
Fire	365	375	359	386	287
Moisture, Water	1 622	1 547	1 436	1 731	1 445
Sensor Failure in Fire Alarm, Fixed Fire Extinguishing System	754	636	512	614	552
Sprinkler System Failure	969	867	841	1 071	819
Other System Failure	490	452	457	388	379
Overvoltage	307	330	137	221	109
Impact on Sensor	309	266	263	273	300
Error, Misuse	712	424	476	437	492
Malicious Use	461	393	522	520	525
Other Cause, Cause Unknown	4 843	4 598	4 254	4 571	4 084

## AUTOMATIC FIRE ALARMS

	2013	2014	2015	2016	2017
Building Fire	810	765	748	784	708
Risk of Building Fire	715	692	669	724	617
Vehicle Fire	4	5	4	6	6
Other Fire	25	21	28	19	35
Hazardous Material Accident	19	16	21	10	26
Explosion, Risk of Explosion	1	2	3	5	5
<b>Total</b>	<b>19 858</b>	<b>18 928</b>	<b>18 386</b>	<b>20 113</b>	<b>18 145</b>
Share of False Alarm (%)	96	96	96	96	96

## OTHER CHECK OR INSPECTION OPERATIONS

	2013	2014	2015	2016	2017
Smoke Observation	3 866	3 867	3 868	3 869	3 870
Oil Observation	488	532	493	463	491
Gas Observation	135	142	132	119	139
Chemical Observation	88	116	126	118	116
Carbon Monoxide Alarm Check	29	40	44	53	45
Blind Call	531	626	552	592	624
False Call	128	112	119	96	108
Risk of Air Crash	120	95	89	129	108
Other Cause	3 254	3 812	3 389	3 670	3 729

## 5 ACCIDENT DAMAGES

### DEATHS

	2013	2014	2015	2016	2017
Building Fire	50	85	69	80	58
Wildfire	1	1	0	0	1
Vehicle Fire	1	2	5	4	2
Other Fire	1	0	1	2	2
Traffic Accident	268	249	265	270	233
Oil Spill	0	0	0	0	0
Hazardous Material Accident	0	3	0	0	0
Explosion, Risk of Explosion	2	1	0	0	0
Collapse, Risk of Collapse	1	3	0	1	0
Human Rescue	125	159	133	128	106

### INJURED

	2013	2014	2015	2016	2017
Building Fire	563	772	588	678	617
Wildfire	5	36	4	20	22
Vehicle Fire	43	29	50	72	50
Other Fire	10	14	13	25	7
Traffic Accident	9 764	10 103	9 781	9 472	9 651
Oil Spill	19	16	14	8	7
Hazardous Material Accident	25	29	69	121	71
Explosion, Risk of Explosion	11	12	9	5	9
Collapse, Risk of Collapse	9	1	4	4	12
Human Rescue	644	599	627	635	701



## FIRE DEATHS

	2013	2014	2015	2016	2017
Fire Deaths	58	86	74	82	61
Accidental Cause of Fire	49	73	63	65	50
Non-accidental Cause of Fire	9	13	11	17	11
Deaths per Million Inhabitants	11	16	13	15	11

## FIRE DEATHS BY GENDER

	2013	2014	2015	2016	2017
Men	43	58	54	59	44
Women	15	28	19	23	17

## FIRE DEATHS BY CAUSE OF IGNITION

	2013	2014	2015	2016	2017
Cooking	7	9	4	4	1
Deliberate	13	18	11	17	11
Open Fire	19	34	21	23	24
Cigarette, Other Tobacco Product	15	27	16	16	20
Electrical Device	4	6	2	7	6
Other Known Cause	6	11	14	19	11
Cause Unknown	9	8	22	12	8

## FIRE DEATHS BY BUILDING TYPE

	2013	2014	2015	2016	2017
Residential Building	50	77	58	61	55
Detached houses	19	36	41	31	34
Attached houses	7	11	3	14	3
Blocks of flats	22	26	14	16	16
Free-time Residence	0	4	4	11	2
Institutional, Healthcare Building	1	1	2	0	0
Other Building	2	3	4	2	5

## SMOKE ALARM ACTIVATION IN FATAL FIRES

	2013	2014	2015	2016	2017
Smoke Alarm Activated	13	15	10	10	13
Smoke Alarm Did Not Activate	2	6	6	7	1
Smoke Alarm Activation Unknown	7	17	33	40	25
No Smoke Alarm	18	19	13	15	16

## TOTAL PROPERTY DAMAGES FROM FIRES

	2013	2014	2015	2016	2017
Burnt Floor Area in Residential Building Fires (m <sup>2</sup> )	73 592	75 394	66 363	75 142	67 445
Damage to Building, Furnishings in Building Fires (MEUR)	120	141	103	142	167
Property in Danger in Building Fires (MEUR)	4 104	2 838	2 969	2 920	3 150
Burnt Land Area (ha)	743	1 325	308	558	788
Burnt Forest Area (ha)	469	888	146	322	470
Vehicle Fire (MEUR)	20	26	20	23	17
Other Fire (MEUR)	26	9	10	8	5

## AVERAGE PROPERTY DAMAGES FROM FIRES

	2013	2014	2015	2016	2017
Burnt Floor Area in Residential Building Fires (m <sup>2</sup> )	23	23	22	24	22
Damage to Building, Furnishings in Building Fires (€)	20 705	23 413	19 527	25 350	31 132
Burnt Land Area (ha)	0,26	0,36	0,19	0,27	0,35
Burnt Forest Area (ha)	0,31	0,52	0,19	0,33	0,52
Vehicle Fire (€)	8 310	11 655	8 698	9 685	7 754
Other Fire (€)	9 965	3 809	4 290	3 473	2 073

## 6 RESCUE OPERATIONS

### RESCUED AND EVACUATED HUMANS

	2013	2014	2015	2016	2017
Building Fire	1 930	3 361	2 076	1 630	2 388
Vehicle Fire	83	15	13	453	69
Other Fire	24	31	1	2	20
Traffic Accident	1 406	1 216	1 218	1 217	1 454
Hazardous Material Accident	223	180	205	342	126
Explosion, Risk of Explosion	301	47	4	0	57
Collapse, Risk of Collapse	252	1	52	2	0
Human Rescue	2 219	2 121	1 918	1 823	1 805

### ACTIVITY ON RESCUE OPERATIONS

	2013	2014	2015	2016	2017
Forcible Entry	1 326	1 419	1 267	1 514	1 633
Extinguishing, Confining Fire	9 325	9 805	7 557	8 227	8 222
Smoke Venting	4 349	4 414	4 383	4 701	4 739
Technical Rescue, Clearing	14 293	12 540	15 702	13 328	13 912
Prehospital Care	20 398	17 035	17 224	18 789	20 636
Warning the population	90	65	76	88	82

### METHODS ON RESCUE ACTIVITIES

	2013	2014	2015	2016	2017
Water Extinguishing	8 190	8 670	6 528	7 260	7 064
Using the Extinguishing Cutter	90	108	71	92	38
Foam Extinguishing	887	831	878	917	819
Smoke Diving	2 163	2 057	2 040	2 089	1 769
Surface Rescue	220	241	223	279	222
Water Diving	78	78	75	62	65
Using the Thermal Camera	3 368	3 799	3 652	4 527	4 279

## MEDIAN OF THE RESPONSE TIME OF FIRST UNIT\*

	2013	2014	2015	2016	2017
Time 08-16	7:05	7:14	7:14	7:13	7:20
Time 16-24	7:27	7:36	7:33	7:37	7:43
Time 00-08	8:00	8:10	8:16	8:12	8:11
	7:25	7:34	7:34	7:34	7:40

\*Urgent assignments excluding medical assignments

## MEDIAN OF THE RESPONSE TIME

	2013	2014	2015	2016	2017
Risk Class I	10:34	10:39	10:42	10:39	10:50
Risk Class II	11:01	10:56	11:02	11:06	11:16
Risk Class III	10:09	10:21	10:33	10:36	10:40
Risk Class IV	15:14	15:26	15:13	15:24	15:29
	11:54	12:00	12:03	12:07	12:13

## RISK SQUARES\*\* WHERE THE RESPONSE TIME IS NOT ACHIEVED

	2013	2014	2015	2016	2017
Risk Class I (11 min)	115	128	127	125	160
Risk Class II (14 min)	15	19	15	21	17
Risk Class III (22 min)	0	1	0	0	0
Risk Class IV (40 min)	0	0	0	0	0

\*\*Only those risk squares where at least 5 incidents per year have taken place have been taken into account

## MEDIAN OF THE TOTAL RESPONSE TIME

	2013	2014	2015	2016	2017
Helsinki	13:02	13:14	13:28	13:18	13:12
Länsi-Uusimaa	13:41	14:19	13:58	13:47	13:52
Keski-Uusimaa	13:31	13:37	13:28	13:52	13:35
Itä-Uusimaa	14:06	13:48	14:03	14:12	14:25
Varsinais-Suomi	14:11	14:01	14:09	13:53	14:04
Kanta-Häme	14:38	14:48	14:20	14:24	14:22
Päijät-Häme	14:05	14:21	14:10	13:39	14:18
Kymenlaakso	14:10	14:46	14:34	14:25	14:22
South Karelia	15:33	15:44	15:31	16:21	16:20
Etelä-Savo	17:43	17:47	17:32	19:00	18:00
Central Finland	15:16	15:55	16:16	16:23	16:49
Pirkanmaa	14:44	14:27	14:04	14:06	14:18
Satakunta	14:02	14:20	14:01	14:27	14:06
South Ostrobothnia	14:00	14:25	14:20	14:46	14:39
Ostrobothnia	14:45	14:54	14:50	15:18	15:24
Central Ostrobothnia	12:58	13:30	13:10	13:16	13:43
Pohjois-Savo	16:14	16:13	16:27	16:17	15:58
North Karelia	17:28	17:34	17:12	17:41	18:19
Jokilaaksot	15:48	16:04	15:59	16:10	16:32
Kainuu	18:42	18:55	18:04	18:17	18:22
Oulu-Koillismaa	14:18	14:18	14:07	14:48	14:26
Lapland	18:12	17:54	18:08	17:23	17:49
Total	14:29	14:41	14:35	14:40	14:40

