

The Global Fire Monitoring Center (GFMC)

14th GFMC / IWPM / UNISDR Global Landscape Fire Network Bulletin

No. 27 – 15 September 2022

Global Landscape Fire Fatalities and Damages Report 2021

The evaluation of fatalities caused by landscape wildfires in 2021 at global level revealed that 189 people were killed worldwide compared to 621 fatalities in 2020, 235 fatalities in 2019, 354 fatalities in 2018, 303 in 2017, 127 in 2016, and 198 fatalities and in 2015.

The 2021 statistical database includes loss of homes, outbuildings, vehicles and other damages as well as evacuations (number of evacuations and people evacuated).



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14th Annual Global Landscape Fire Fatalities and Damages Report – 2021 Preliminary¹

The Global Landscape Fire Network Bulletin is published by the Global Fire Monitoring Center (GFMC)², the former International Forest Fire News (IFFN)³, the International Wildfire Preparedness Mechanism (IWPM)⁴ and the Global Wildland Fire Network. GFMC and GWFN are serving the United Nations International Strategy for Disaster Reduction (UNISDR) in the frame of the Science & Technology Partnership⁵ and a Voluntary Commitment to the implementation of the Sendai Framework.⁶

This 27th Issue of the Global Landscape Fire Network Bulletin (former Global Wildland Fire Network Bulletin) provides the 14th Annual Global Landscape Fire Fatalities and Damages Report, covering the year 2021. This report is based on the evaluation of media (newspaper, radio, and TV broadcasts) published on the internet, as well as agency reports and correspondents of the Global Wildland Fire Network from throughout the world.

The designation of this report series is renamed since 2016, since GFMC has now included other damages and consequences of wildfires, particularly those that are affecting people, property, infrastructures, and livelihood of people, including damages to agricultural products and livestock. Since only a small fraction of wildfire-related accidents is reported through those media that are published on the web, we presume that our attempt to compile a global statistical database is still very incomplete and may only scratch the surface, on a global level. However, among countries that do regularly report the negative impacts of wildfires (e.g. injuries and property damages), the data collected by the GFMC can be considered reliable and consistent with many official estimates. Unlike the World Almanac and other databases such as the International Disaster Database of the Centre for Research on the Epidemiology of Disasters (CRED)⁷, GFMC aims at identifying all individual incidents that have been reported.

¹ Data included in this report is often cross-referenced to other annual regional or national reports, some of which have yet to be released. This report will be updated with any new data at a later date.

² http://www.gfmc.online/ Note: IFFN production has been phased out in 2015.

³ http://www.gfmc.online/iffn/iffn.htm

⁴ http://www.gfmc.online/iwpm/index.htm

⁵ http://www.gfmc.online/GlobalNetworks/globalNet.html

⁶ https://sendaicommitments.unisdr.org/commitments/20190222 001

⁷ www.cred.be - Note: the CRED defines a disaster as "a situation or event, which overwhelms local capacity, necessitating a request to a national or international level for external assistance; an unforeseen and often sudden event that causes great damage, destruction and human suffering". For a disaster to be considered, at least one of the following criteria must be met: (a) 10 or more people reported killed; (b) 100 or more people reported affected, (c) declaration of a state of emergency, or (d) call for international assistance. The GFMC does not follow these criteria as fatalities or injuries caused by wildfires are usually below these thresholds, and the high number of incidents would otherwise not be recorded at all. The CRED reports do not provide explicit data on wildfire-related incidents.

At the end of this report, web links are provided to publications / reports reporting injuries and fatalities. The short incident notes (by country, in alphabetic order) are taken from

- Detailed reports that have been published on the dedicated GFMC web page "Recent Media Highlights on Fire, Policies, and Politics – Section 4 Current News Regularly selected by GFMC" between January and December 2021 (https://gfmc.online/media-highlights-on-fire-policies-and-politics.html) and
- Other reports, which have been stored in the GFMC database but were not published online. Links or detailed information on any event included in this report can be provided upon request.

Note concerning impact of landscape fire smoke pollution: Landscape fire smoke pollution is exerting high risk on human health and security. Extreme exposure to smoke may lead to premature mortality of up to several hundred thousand deaths per year. Statistical data / precise information about smoke-related injuries and fatalities related to individual landscape fires or smoke pollution episodes are not yet available – thus there are only estimated by modeling. In the GFMC Annual Global Landscape Fire Fatalities and Damages Reports we are not yet able to provide reliable statistical data. For more details see a recent WMO publication with numerous references on case studies and models.⁸

<u>Editorial Note</u>: Due to copyright restrictions, the GFMC is not entitled to publish / mirror all incidence reports freely accessible on the GFMC website. Institutions or individuals interested to work with GFMC in the scientific evaluation of data may request password-protected access to the files published on the web page "Recent Media Highlights on Fire, Policies, and Politics – Section 4 Current News Regularly selected by GFMC" (since 1999): https://gfmc.online/media-highlights-on-fire-policies-and-politics.html.

Freiburg, Germany, 15 September 2022

Global Fire Monitoring Center (GFMC) Staff

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⁸ Goldammer, J.G. et al. 2018. Vegetation Fire and Smoke Pollution Warning and Advisory System (VFSP-WAS): Concept Note and Expert Recommendations. World Meteorological Organization (WMO), GAW Report No. 235, 44 p. Download at GFMC: <u>WMO GAW Report No. 235</u> (PDF, 3.3 MB)

Table of Contents

SUMMARY	5
OVERVIEW OF FATALITIES	6
EVACUATIONS	11
DAMAGES	13
ANNEX I: PEOPLE KILLED AND INJURED BY WILDLAND FIRES – OVERVIEW BY COUNTRIES	16
ANNEX II: PREVIOUS YEARS' REPORTS	29
List of figures	
Figure 1. Worldwide deaths of civilians caused by wildfires (2009-2021)	7 7 8 y*8
List of tables	
Table 1. Summary global wildland fire fatalities report 2021: All people killed and inj	
due to wildfire Table 2. Summary of firefighters killed and injured in 2021 by country	
Table 3. Summary of hirefighters kined and injured in 2021 by country	
operations	
Table 4. Summary of all people killed and injured by wildland fires in 2021 by continu	
countries.	
Table 5. Summary of evacuation cases by country	
Table 6. Summary of structural losses	13

Summary

The 14th Annual Global Landscape Fire Fatalities and Damages report contains the summary of fatalities, all the structural and agricultural losses, evacuation cases for the year of 2021. The data were compiled from online media reports. While a large number of incidents have been reported independently by various sources and thus could be cross-checked and confirmed, other incidents are vaguely described and occasionally do not include specific details.

The fatalities report details that in 2021, globally 162 civilians and 27 firefighters (including aerial resources personnel / pilots) lost their lives and 330 civilians and 147 firefighters (including aerial resources personnel / pilots) were injured by wildfires in 27 countries.

The causes of the deaths of firefighters include plane and car crash, burn, struck by a tree, hard landing, overrun by fire front, fell from a bridge and unspecified/unknown. The causes of injuries are airplane and vehicle accidents related, burns, other medical emergencies, line of duty, body injuries, unknown and other.

In total, more than 1590 private homes were destroyed and more than 103 homes in 12 countries were damaged by wildfires in 2021. Additionally, more than 2,959 outbuildings, and thousands of structures destroyed and damaged, as well as many farm animals and home pets killed in 24 countries. Details are given in Table 6.

The number of reported vehicles lost in five countries exceeded 3,500, with additional 10 motorcycles, and 43 other vehicles and reported losses – but unknown numbers – of recreational vehicles, fire trucks or agricultural tractors and other farm equipment. Details are given in Table 7.

There were in a total of 131 evacuation cases reported in 18 countries. There were more than 117,412 people had to be evacuated, more than 5,929 homes / families and more than 362 other residences were evacuated (Tab.5). There were 31 cases of evacuations with unknown number of people and homes affected.

Due to the wildfires, a school, a resort, a park, an apartment complex, a nursing home, a waterpark, 60 properties, 50 camps, 4 camps and 2 urban residential areas were evacuated, and one university was closed.

Overview of fatalities

Detailed numbers of all killed and injured people caused by wildfires in 2021 by countries, regions and continents are illustrated in this section.

Table 1. Summary global wildfire fatalities report 2021: Civilians killed and injured due to wildfire (this table does not include personnel involved in firefighting – see Table 2).

Regions	Killed	injured	total
Africa	77	3	80
Asia	30	21	51
Europe	41	230	271
Middle East	1	31	32
North America	10	29	39
South America	3	16	19
Worldwide	162	330	492

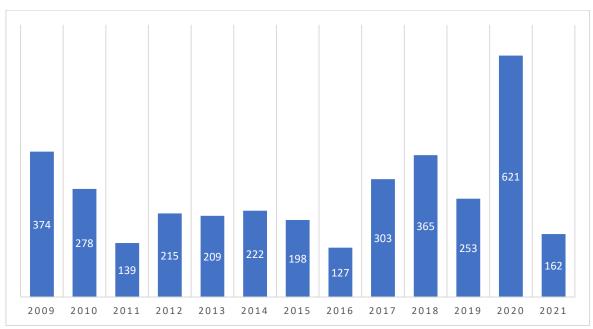


Figure 1. Worldwide deaths of civilians caused by wildfires (2009-2021)

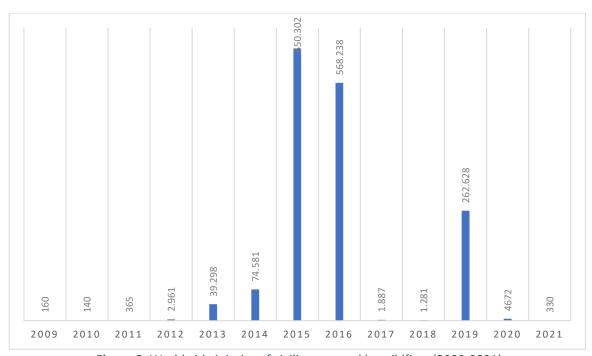


Figure 2. Worldwide injuries of civilians caused by wildfires (2009-2021)

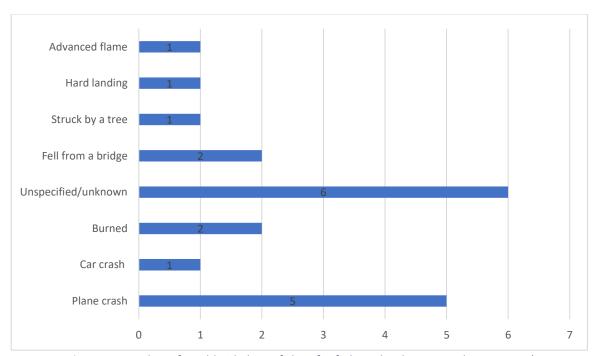


Figure 3. Number of worldwide line-of-duty firefighter deaths in 2021 by category*

^{*} Line-of-duty deaths and injuries of all firefighters (regardless of type of fire department / agency) because of active duty in connection with landscape fires including responding to or returning from, or, as a result of overexertion in connection with training or suppression activities.

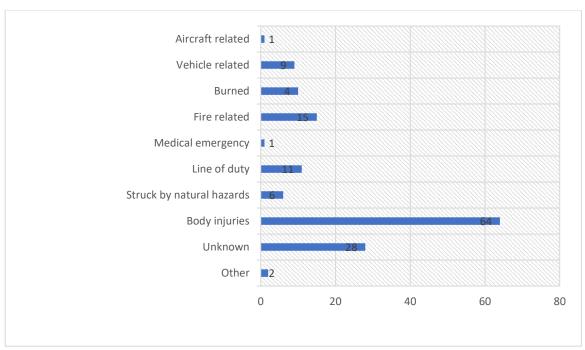


Figure 4. Number of worldwide line-of-duty firefighter injuries in 2021 by category*

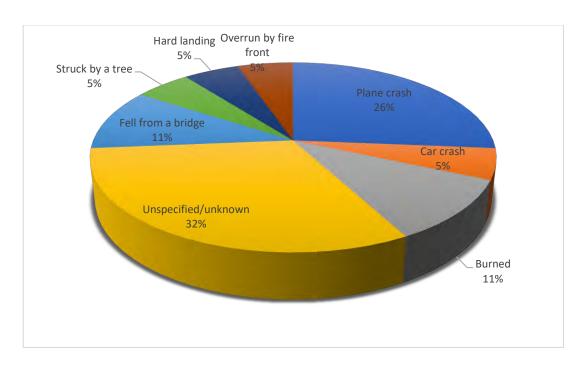


Figure 5. Percentage of worldwide line-of-duty firefighter deaths in 2021 by category*

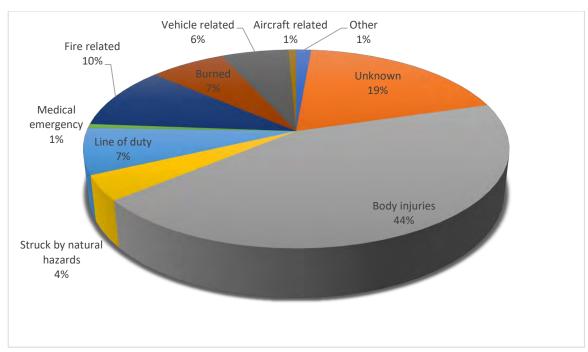


Figure 6. Percentage of worldwide line-of-duty firefighter injuries in 2021 by category*

Table 2. Summary of firefighters killed and injured in 2021 by country

Country	Firefighters killed	Firefighters injured	Total
Argentina	-	64	64
Bolivia	1	-	1
Canada	-	5	5
Chile	-	2	2
China	4	-	4
Greece	1	2	3
Mexico	2	24	26
South Africa	-	3	3
Spain	2	2	4
USA	9	45	54
Total	19	147	166

Table 3. Summary of aircraft personnel killed and injured in 2021 during firefighting operations.

Country	Aircraft personnel killed	Aircraft personnel injured
Argentina	2	-
Canada	2	-
Chile	-	1
USA	4	1
TOTAL	8	2

Table 4. Summary of civilians killed and injured by wildfires in 2021 by continents and countries.

Africa	Killed	Injured	Total
Algeria	75	2	77
Gambia	1	-	1
Kenya	1	-	1
South Africa	-	1	1
Total	77	3	80

Asia	Killed	Injured	Total
China	5	6	11
India	12	13	25
Israeli	-	1	1
Kazakhstan	1	2	3
Lebanon	1	30	31
Nepal	11	-	11
Philippines	1	-	1
Total	31	52	83

Europe	Killed	Injured	Total
Albania	1	-	1
Bulgaria	2	1	3
Cyprus	4	-	4
France	3	-	3
Greece	1	27	28
Italy	7	-	7
Kosovo	1	-	1
Russia	1	18	19
Spain	1	-	1
Turkey	20	184	204
Total	41	230	271

North America	Killed	Injured	Total
Guatemala	2	-	2
Mexico	-	15	15
USA	8	14	22
Total	10	29	39

South America	Killed	Injured	Total
Argentina	1	13	14
Chile	-	3	3
Peru	2	-	2
Total	3	16	19

Evacuations

Table 5. Summary of evacuation cases by country

Category	Number of evacuation cases	Number of people evacuated	Number of families evacuated	Number of residences evacuated	Number of cases unknown number of people and homes	Number of neighbourhoods / Villages evacuated	Number of road/lane/ trail closure	Number of highway closure	Other evacuations	Interruptions caused by wildfires
Algeria	1	9000								
Argentina	1	200								
Australia	3	456							A park	
Canada	13	3645	217		2		1		60 properties, 50 camps,	
Chile	5	100		26	1		1	2	1 town	
Columbia	1		4				1	1		
France	3	12070						2		
Greece	4	210			1	18		1	1 nursing home,	
India	1	100								
Israeli	4	10000	150				2			
Italy	4	2873			1					
Lebanon	1	17						1		
Mexico	1		17							
New Zealand	3	30		16				1	15 cats and dogs	

Paraguay	.		,		, 		1	'		
Russia	3	900				2		2		An airport closed
South Africa	2	50000			1			2		A university shut down
Spain	13	6238	24		2	4	2	9	1 water park, 2 urban residential areas,	
Taiwan										
Turkey	5	100	3219		1	35		2		
USA	63	21473	2298	320	21		58	44	A school, a resort, livestock, a casino, an apartment complex, 4 camps	A railroad freight cut off, a number of lakes, campsites and portages closed; areas closed
TOTAL	131	117412	5929	362			65	67		

Damages

Table 6. Summary of structural losses

Category	Number of residences destroyed	Number of Residences damaged	Number of outbuildings destroyed	Number of outbuildings damaged	Number of shed/storage/barn destroyed	Other structures destroyed/damaged	Number of vehicles destroyed/ damaged	Number of helicopters destroyed	Number of livestock and animals killed
Algeria	3								
Argentina	200								1 horse, 2 dogs
Australia	81	5			3	1 facility unit destroyed, 6 unit damaged, several structure lost/substantially damaged,9 buildings damaged, 1 historic homestead destroyed			
Canada							6 trailers and RVs damaged		
Chile	148				2	1 stable structure, 2 structures, a sawmill destroyed			
Columbia									
France									

Greece		12				Unknown number of cars destroyed	1	
India	9							
Israeli	3	6						
Italy					1 property damaged			
Lebanon								
Nepal	6				7 cow sheds destroyed			
Mexico	115	20					1	
New Zealand					150-year-old building destroyed			
Paraguay		,						
Peru				2	2 structures destroyed			
Russia	85				8 maintenance buildings destroyed			
South Africa					several campus buildings, 3500 historic collections and moster's mill destroyed, chalets damaged, 13000 ha farmland destroyed			
Spain								18 goats and sheep
Taiwan								
Turkey					120 grass houses destroyed			1000 farm animals
UK	1							

USA	939	60	2959	15	More than 5	Over 200 structures, 1 historic home, a houseboat, 7 garages, 18 mobile homes, several fences, boats, power lines and utility poles, a travel trailor, 60 hunting camps, 10 outhouses destroyed; 274 structures damaged, electricity production shut down / reduced	Around 10 vehicles destroyed, and 2 cars damaged		
TOTAL	1590	103	2959	15	More than 12			2	

Annex I: People killed and injured by wildland fires – Overview by countries

Some of the comment sections are left empty due to the sources that are no longer available on the internet.

Country	Date	Civilian Death	Civilian Injury	Firefighter Death	Firefighter Injury	Aviation Death	Aviatio n Injury	missing people	Cause	Source
	19.01.				, ,					https://thepoint.gm/africa/gambia/edi torial/focus-on-bushfires
Gambia	2021	1								
									helicopter	http://www.ladiscusion.cl/helicoptero -cayo-cuando-se-dirigia-a-combatir-
	26.01.								crash	un-incendio-forestal/
Chile	2021				1					
									the water	https://www.biobiochile.cl/noticias/nacional/region-de-
									discharged	valparaiso/2021/01/28/brigadista-
									by an	resulta-lesionado-mientras-trabajaba- en-incendio-forestal-reactivado-en-
61.11	29.01.								aircraft fell	<u>limache.shtml</u>
Chile	2021				1				on him.	https://today.rtl.lu/news
Argenti	29.01.								line of duty	/science-and-environment
na	2021				4					/a/1662294.html
									heel sprains,	https://www.rionegro.com.ar/el- bolson-quemaduras-y-esguinces-de-
									strange	tobillos-las-principales-consultas-de-
									objects	los-brigadistas-1682713/
									in eyes and	
Argenti	09.02.								minor	
na	2021				60				burnings	
									crash due to	https://www.biobiochile.cl/noticias/nacional/region-de-los-
									low visibility	lagos/2021/02/13/tres-personas- lesionadas-en-accidente-de-transito-
	13.02.								by	producto-del-humo-de-incendio-
Chile	2021		3						smoke	<u>forestal-en-calbuco.shtml</u>

Chile	24.02. 2021					1		Firefighting airplane crashed	https://www.puranoticia.cl/noticias/regiones/avioneta-que-combatia-incendio-forestal-en-nueva-imperial-capoto-piloto/2021-02-24/181820.html
Guate mala	01.03. 2021	2						-	https://www.prensalibre.com/ciudade <u>\$</u> /huehuetenango/incendio-en-las- cercanias-de-las-ruinas-de-zaculeu- deja-dos-mujeres-fallecidas-breaking/
South Africa	28.02. 2021				2			unknown	https://wildfiretoday.com/2021/02/27 /two-firefighters-injured-in-south- africa-wildfire/
India	01.03. 2021		5						https://kalingatv.com/state /5-critical-in-forest-fire-in- mayurbhanj-district/
India	08.03. 2021		2						https://timesofindia.indiatimes.com/ci t y/hyderabad/another-fire-at- amrabad-reserve-two-tribals- hurt/articleshow/81382334.cms
Argenti na	11.03. 2021	1	7				11		https://www.batimes.com.ar/news/ar gentina /forest-fires-in-patagonia-leave-7- injured-15-missing.phtml
USA	13.03. 2021			1				unknown	https://www.1011now.com/2021/03/ 11/ firefighter-dies-while-battling-brush- fire-north-of-omaha/
USA	13.03. 2021		1						https://www.timesfreepress.com/news/lo s/lo cal/story/2021/mar/12/brush- fire/543192/
China	13.03. 2021	2	6						https://www.straitstimes.com/asia/ea st- asia/2-dead-6-injured-in-forest-fire-in- north-west-china
USA	15.03. 2021				1			line of duty	https://nypost.com/2021/03/15/doze n s-of-homes-damaged-in-massive-new- jersey-forest-fire/

							car crash	https://www.eluniversal.com.mx/esta
	15.03.							<u>d</u> os/se-accidentan-bomberos-que-
Mexico	2021			1	7			acudiran-combatir-incendio-forestal- en-veracruz
								https://www.newindianexpress.com/s
	18.03.							<u>t</u> ates/telangana/2021/mar/18/telanga
India	2021	2						na-forest-fire-toll-rises-to-two-as-
IIIuia	2021	2					unknown	another-chenchu-dies-2278024.html https://philadelphia.cbslocal.com/202
							UTIKITOWIT	1/
	18.03.							03/16/new-jersey-forest-fire-100- percent-contained-firefighter-
USA	2021				1			critically-injured-in-blaze/ https://abcnews.go.com/US/devastati
	20.03.						cardiac arrest	nttps://abcnews.go.com/OS/devastati n
USA	2021				1			g-jersey-wildfire-intentionally-set- authorities/story?id=76567593
03/1	2021				-		unknown	https://bismarcktribune.com/news/st
							dinare wii	ate-and-regional/fir e-near-richardton-burns-880-acres-
								firefighter-calves-
								injured/article 37d750ca-c4c1-5a8d- 8940-
								362a89dab198.html?fbclid=IwAR0OYN
								9WauRGMt8yA2so7YUSuWQrSzkUa4ti
	31.03.							<u>aFZ5wrRJduzeIFDSXcsqXFY</u>
USA	2021				1			
							fire truck	https://www.usatoday.com/story/new
	01.04.						crash	s/nation/2021/03/ 31/south-dakota-wildfires-mount-
USA	2021				1			rushmore-closed-crews-make-
USA	2021				1		smoke	progress/4825267001/ https://www.idahostatejournal.com/fr
							inhalation	eeaccess/elderly-
	02.04						IIIIIaiatiUII	man-injured-when-brush-fire-nearly- destroys-local-home-
LICA	02.04.							garage/article 16e51210-49fa-525e-
USA	2022		1					b950-361b638b9733.html http://www.xinhuanet.com/english/as
	05.04.							iapacific/2021-04/
India	2023	4	2					<u>04/c 139858243.htm</u>

	06.04.						https://timesofindia.indiatimes.com/ci ty/dehradun/two- children-suffer-severe-burns-in-forest- fires/articleshow/81918879.cms
India	2024		2				
Nepal	06.04. 2025	10					https://english.khabarhub.com/2021/ 06/175520/ https://www.aljazeera.com/news/202 1/4/9/nepal-battles-worst-forest-fires- in-years-as-air-quality- dropsom/2021/06/175520/
USA	07.04. 2025		1				https://www.wbir.com/article/news/local/brush-fire-threatens-cabins-in-wears-valley-extra-fire-personnel-called-into-help/51-503cb976-7e48-4837-a1e4-a94457f0089a
Phillipin es	07.04. 2026	1				suffocation	https://www.philstar.com/nation/202 1/04/07/2089477/farmer-dies- bushfire
India	09.04. 2027	3	2				https://www.newindianexpress.com/nation/2021/apr/09/three-labourers-killed-in-forest-fire-in-maharashtra-2287951.html
India	12.04. 201	1					https://in.search.yahoo.com/?fr2=inr
Mexico	13.04. 2021		15	10		10 FF smoke inhalation	https://www.infobae.com/america/mexico/2021/04/13/al-menos-15-heridos-en-el-incendio-forestal-detepoztlan-dos-personas-tuvieron-quesaltar-a-un-tanque-de-agua-para-escapar-de-las-llamas/
USA	13.04. 2021			3		smoke inhalation	https://www.firehouse.com/operation <u>s-</u> training/wildland/news/21218287/thr

							ee-ca-firefighters-injured-during- prescribed-burn
							https://www.republicworld.com/india -news/accidents-and-
	13.04.						disasters/labourer-injured-in-gondia- forest-fire-dies-in-nagpur-
India	2021	1					hospital.html
	14.04.					burned	https://mexiconewsdaily.com/news/forest-fire-in-morelos-continues-to-
Mexico	2021			6			spread-180-hectares-affected/
	17.04.						https://in.search.yahoo.com/?fr2=inr
India	2021	1				log injury	https://kymkemp.com/2021/04/19/fir
						leg injury while sliding	efighter-injured-at-vegetation-fire- burning-west-of-willits-on-highway-
						down the hill	20-after-car-fire-spreads-to-wildland/
	19.04.			_			
USA	2021			1		-1	https://heraldodemexico.com.mx/naci
	20.04.					unknown	onal/2021/4/19/muere-bombero-de-
Mexico	2021		1				morelia-cuando-combatia-incendio- forestal-286107.html
	21.04.						https://www.foxla.com/news/forward -progress-stopped-in-lincoln-heights-
USA	2021						fire-evacuations-lifted
	21.04.					unknown	https://patch.com/california/lakeelsin ore-wildomar/evacuation-orders-
USA	2021			1			issued-brush-fire-gavilan-hills
						intoxication	https://www.eluniversal.com.mx/estados/combatientes-de-incendio-
	26.04.						forestal-en-nuevo-leon-quedan-
Mexico	2021			1			atrapados-entre-las-llamas
	10.05.					plane crash	https://www.globaltimes.cn/page/202 105/1223051.shtml
China	2021		4				

	1						1	https://www.reuters.com/world/midd
	44.05							<u>le-east/least-one-killed-two-injured-</u>
Kazakhs	11.05.							large-kazakhstan-wildfire-2021-05-10/
tan	2021	1	2					
	11.05.						line of duty	https://www.wmtw.com/article/brownfield-firefighter-injured-responding-
USA	2021				1			to-wildfire/36388379#
03/1	17.05.				-		burned	https://english.khabarhub.com/2021/
Nepal	2021	1					Barrica	<u>17/184538/</u>
ПСраг	2021						plane crash	https://www.npr.org/2021/05/26/100
							piane crasn	0451095/a-florida-firefighting-
	26.05.							helicopter-crashed-and-no-survivors- have-been-found
USA	2021	4						
	20.05							https://account.fresnobee.com/paywa Il/subscriber-
	30.05.		2					only?resume=251793293&intcid=ab_a
USA	2021		2					rchive https://www.kob.com/archive/wildlan
	30.05.						hard landing	d-firefighter-injured-while-battling-
USA	2021				1			eicks-fire-in-southern-new-mexico/
							unknown	https://elcomercio.pe/peru/cusco-
							diminoviii	incendio-forestal-cobra-la-vida-de-
	03.06.							adulto-mayor-cuando-trataba-de- apagar-las-llamas-nndc-noticia/
Dami		4						
Peru	2021	1						https://goldrushcam.com/sierrasunti
							hard landing	mes/index.php/news/local-
	04.06.							news/30239-u-s-forest-service-
USA	2021			1				mourns-the-death-of-firefighter-tim- hart
								https://www.tbnewswatch.com/local-
	10.06.							news/helicopter-fighting-forest-fire- forced-to-make-emergency-landing-
USA	2021					1		injuring-pilot-3859283
							unknown	https://www.cbsnews.com/losangeles
								<u>/news/400-acre-flats-fire-10-</u> contained-2-homes-destroyed-a-
	14.06.							firefighter-injured-and-experts-
USA	2021				1			worried-about-dry-conditions-across- southland/
33,1	1-02-				-			<u>Soutinanu/</u>

USA	15.06. 2021			1		lo	njury to a ower extremity	https://www.centralillinoisproud.com/ news/local-news/wildland-fire-sends- one-peoria-firefighter-to-er-monday- afternoon/
USA	18.06. 2021		5			p	lane crash	https://dnews.com/local/crash-sets- back-montana-firefighting- efforts/article_ccb7d941-0c02-54ac- 9220-6ced503cf5c0.html
USA	21.06. 2021			2		u	nknown	https://kesq.com/news/2021/06/20/two-firefighters-injured-while-battling-valley-brushfire/
USA	22.06. 2021			1		u	nknown	https://www.msn.com/en- us?ocid=hplocalnews
Turkey	28.06. 2021		1					https://www.dailysabah.com/turkey/o ne-killed-in-forest-fire-in-turkeys- marmaris/news
Canada	29.06. 2021				1			https://q107.com/news/7988737/heli copter-crash-evansburg-alberta- wildfire/
USA	30.06. 2021			1		liı	ne of duty	https://www.q13fox.com/news/3-dnr- firefighters-injured-in-24-hours-while- battling-washington-wildfires
Cyprus	04.07. 2021	4						https://www.bbc.com/news/world- europe-57710048
USA	04.07. 2021			2			urned/heat xhaustion	https://abc30.com/timely-woodward- park-fresno-fire-friant/10857325/
Canada	07.07. 2021				1			https://en.royanews.tv/news/29450/2 021-07-06
USA	07.07. 2021			2		u	nknown	https://abcnews.go.com/US/evacuatio ns-ordered-tumbleweed-fire-spreads- southern-
USA	10.07. 2021			1			wisted his nee	https://www.fox13now.com/news/loc al-news/firefighter-injured-battling- salt-lake-city-brush-fire

USA	10.07. 2021					2		plane crash	https://www.azcentral.com/story/news/local/arizona-breaking/2021/07/10/2-firefighters-die-plane-crash-responding-wildfire-near-wikieup-arizona/7928853002/
USA	12.07. 2021			1		1		plane crash	https://www.12news.com/article/new s/local/wildfire/2-wildland- firefighters-die-in-aircraft-accident- while-fighting-cedar-basin-fire/75- dd66c275-5917-4c60-864c- d23d800720cc
USA	12.07. 2021			2				unknown	https://www.aljazeera.com/gallery/20 21/7/11/california-wildfire-advances- as-heatwave-hits-west-us
Russia	13.07. 2021	1	18						https://newseu.cgtn.com/news/2021- 07-12/Russia-sweats-in-fatal- heatwave-as-forest-fires-rage-in- Chelyabinsk-11QbHmlzNYY/index.html
USA	18.07. 2021				1			burned	https://wildfiretoday.com/2021/07/17 /firefighter-suffers-serious-burns- while-fighting-fire-in-montana/
Canada	24.07. 2021				5			unknown	https://www.newscenter1.tv/five- firefighters-injured-responding-to- montana-wildland-fire/
USA	26.07. 2021				5			unknown	https://www.claimsjournal.com/news/west/2021/07/26/304997.htm
USA	26.07. 2021						1 has been found		https://www.kxlf.com/weather/fir e-watch/update-firefighter-missing- has-been-found-safe
USA	27.07. 2021				1			heat exhaustion	https://www.spokesman.com/stories/ 2021/jul/26/one-fire-fighter-injured- no-homes-lost-in-north-sp/

							https://apnews.com/article/lifestyhttp
							s://www.reuters.com/world/middle-
							east/death-toll-turkish-wildfires-rises-
							four-blazes-rage-2021-07-30/le- middle-east-europe-fires-turkey-
							221b65f565f878f8e547b980dc72759a
							22130313031076166317336046727334
	29.07.						
Turkey	2021		183				
,							https://apnews.com/article/middle-
Lebano	29.07.						east-syria-fires-environment-and-
	2021	1	30				nature-lebanon-
n	2021	1	30				<u>1f2d0f7d6a973518c788a3f2b3a699d7</u>
	30.07.						https://www.reuters.com/world/midd le-east/death-toll-turkish-wildfires-
							rises-four-blazes-rage-2021-07-30/
Turkey	2021	4					
							https://www.reuters.com/world/euro
	03.08.						pe/wildfire-burns-near-athens- industrial-zone-trains-disrupted-2021-
Greece	2021		7				08-03/
							https://bianet.org/english/environme
	04.08.						nt/248177-163-forest-fires-in-38-
		1.0					provinces-in-7-days-11-fires-still-
	2021	16					raging
Bulgari	04.08.						https://www.rferl.org/a/russia- wildfires-yakutia-
a	2021	2	1				evacuations/31393368.html
-	04.08.						https://www.rferl.org/a/russia-
							wildfires-yakutia-
-	2021	1					evacuations/31393368.html
	04.08.						https://www.rferl.org/a/russia-
Albania	2021	1					wildfires-yakutia- evacuations/31393368.html
, abarna	2021	-					https://apnews.com/article/europe-
	07.08.						fires-athens-heat-waves-
	2021	1	20				4fca06093b6e4c0c463210dfe7fb4cfb
		1	20				https://thonourdaily.com.au/neus/wa
	09.08.						https://thenewdaily.com.au/news/world/2021/08/09/italy-bushfire-
Italy	2021	2					campomarino/

USA	09.08. 2021				6		unknown	https://account.sacbee.com/paywall/s ubscriber- only?resume=253350723&intcid=ab_a rchive
Algeria	10.08.	75	2					https://www.aljazeera.com/news/202 https://www.rfi.fr/en/africa/20210812 -france-sends-aircraft-to-algeria-as- wildfires-claim-more- victims1/8/10/algeria-forest-fires
Italy	10.08. 2021	2						https://www.reuters.com/world/least- 65-killed-algerian-wildfires-greece- italy-burn-2021-08-11/
Greece	11.08. 2021			1	2		burned	https://www.local10.com/news/world /2021/08/11/greek-wildfires- multinational-force-fights-to-tame- flareups/
Italy	13.08. 2021	3						https://www.theguardian.com/world/ 2021/aug/13/all-thats-left-are-ashes- italian-communities-count-cost-of- wildfires
USA	18.08. 2021		2					https://edition.cnn.com/2021/08/18/ weather/us-western-wildfires- wednesday/index.html
France	19.08. 2021	3						https://www.npr.org/2021/08/18/102 9004559/wildfires-are-moving-quickly- in-southern-france-killing-at-least-3- people-so-far
USA	25.08. 2021			1			struck by a tree	https://kcby.com/news/local/sheriff- tree-unexpectedly-snapped-and-fell- to-the-ground-killing-wildland- firefighter
USA	28.08. 2021			1			fell from a bridge	https://www.khq.com/news/spokane- firefighter-dies-while-working-brush- fire/article f74208fa-0778-11ec-b59a- 03c8d9ea8cb6.html
USA	28.08. 2021	1	2					https://www.cbsnews.com/sacrament o/news/dead-south-sacramento-fire/

Spain	15.08. 2021	1						https://larepublica.pe/sociedad/2021/ 08/10/incendio-forestal-deja-un- fallecido-en-la-region-ancash-lrnd/
Bolivia	15.08. 2021			1			burned	https://www.paginasiete.bo/sociedad /tragedia-en-sacaba-muere-joven- bombera-al-combatir-un-incendio- forestal-OAPS306822
Spain	15.08. 2021			1			unknown	https://as.com/diarioas/2021/09/09/a ctualidad/1631216733 801027.html
Spain	13.09. 2021				2		line of duty	https://www.europapress.es/andaluci a/malaga-00356/noticia-dan-alta- bomberos-heridos-incendio-sierra- bermeja-otro-permanece- observacion-20210913135236.html
South Africa	05.09. 2021		1		1		line of duty	https://www.sabcnews.com/sabcnews/two-injured-as-motorists-are-re-routed-from-n1-in-the-free-state-due-to-raging-veld-fires/
USA	08.09. 2021				1		Fire truck rollover	https://www.eastbaytimes.com/2021/ 09/07/oakley-fire-truck-rollover- injures-firefighter-during-grass-fire- response/
Spain	10.09. 2021			1			unknown	https://english.elpais.com/spain/2021 -09-10/firefighter-killed-during-efforts- to-control-wildfires-in-malaga- province.html
USA	22.09. 2021				1		line of duty	https://www.kron4.com/news/bay- area/crews-battle-grass-fire-burning- in-vallejo-2/
Peru	21.09. 2021	1						https://www.americatv.com.pe/notici as/actualidad/cusco-gerente-distrital- fallecio-mientras-ayudaba-sofocar- incendio-forestal-n445755?ref=hcron
Argenti na	26.09. 2021		6					https://www.sanjuan8.com/san- juan/un-incendio-pasturas-termino-6- personas-internadas-y-animales- muertos-n864866

USA	08.10. 2021				4		tree fell on them	https://www.cbsnews.com/sanfrancis co/news/knp-complex-wildfire-falling- tree-critically-injures-four-firefighters/
USA	12.10. 2021				1		hit by a rolling rock	https://www.yourcentralvalley.com/n ews/local-news/firefighter-hit-and- injured-by-rock-while-battling-knp- complex-fire/
USA	13.10. 2021				1		tree fell on them	https://kymkemp.com/2021/10/12/fir efighter-injured-after-a-tree-fell- during-the-fairway-fire-south-of- garberville/
USA	28.10. 2021			1			overrun by fire front	https://www.westernslopenow.com/fi res/colorado-firefighter-killed-fighting- blaze-in-high-winds/
China	29.10. 2021	3						https://www.devdiscourse.com/article /international/1786850-3-killed-after- helicopter-crashes-in-central-china
USA	30.10. 2021				1		unknown	https://mynewsla.com/life/2021/10/2 8/fire-scorches-half-acre-of-brush-in- malibu-area-firefighter-hospitalized/
Kenya	06.11. 2021	1						https://www.theelephant.info/feature s/2021/11/05/fire-and-death-british- army-ignored-five-fires-before- sparking-kenya-inferno/
USA	13.11. 2021			1			unknown	https://www.fireengineering.com/hea lth-safety/ks-firefighter-dies-after- being-burned-in-structure-fire/
Israeli	13.11. 2021		1					https://www.timesofisrael.com/real- danger-to-northern-village-from- nearby-wildfire-75-families- evacuated/
USA	17.11. 2021	1						https://apnews.com/article/wildfires- fires-montana-evacuations- 5eb83a7811603a9162f70f99902d2f2d

USA	18.11. 2021					1			helicopter crash	https://kdvr.com/news/local/pilot- killed-in-crash-explains-mission-to- help-firefighters-in-last-interview- with-fox31/
USA	18.12. 2021	2								https://abcnews.go.com/US/wireStory /dead-kannsas-wildfires-fueled-windy- dry-weather-81823498
Argenti na	30.12. 2021					2			helicopter crash	https://www.reuters.com/markets/commodities/helicopter-fighting-fire-crashes-argentinas-patagonia-killing-two-2021-12-29/
TOTAL		162	330	19	147	8	2	11		

Annex II: Previous Years' Reports

Global Wildland Fire Fatalities Report 2008

GFMC / IWPM / UNISDR Global Wildland Fire Network Bulletin No. 13 (27 July 2009) https://gfmc.online/wp-content/uploads/GFMC-Bulletin-02-2009.pdf

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GFMC / IWPM / UNISDR Global Wildland Fire Network Bulletin No. 14 (19 July 2010) https://gfmc.online/wp-content/uploads/GFMC-Bulletin-01-2010.pdf

Global Wildland Fire Fatalities Report 2010

IFFN-GFMC UNISDR Global Wildland Fire Network Bulletin No. 15 (31 July 2011) https://gfmc.online/wp-content/uploads/GFMC-Bulletin-01-2011-1.pdf

Global Wildland Fire Fatalities Report 2011

IFFN-GFMC UNISDR Global Wildland Fire Network Bulletin No. 17 (29 July 2012) http://gfmc.online/wp-content/uploads/GFMC-Bulletin-01-2012.pdf

Global Wildland Fire Fatalities Report (2012)

IFFN-GFMC UNISDR Global Wildland Fire Network Bulletin No. 18 (31 August 2013) https://gfmc.online/wp-content/uploads/GFMC-Bulletin-01-2013.pdf

Global Wildland Fire Fatalities Report 2013

IFFN-GFMC UNISDR Global Wildland Fire Network Bulletin No. 19 (30 December 2014) https://gfmc.online/wp-content/uploads/GFMC-Bulletin-01-2014.pdf

Global Wildland Fire Fatalities Report 2014

GFMC / IWPM / UNISDR Global Wildland Fire Network Bulletin No. 20 (20 April 2015) https://gfmc.online/wp-content/uploads/GFMC-Bulletin-01-2015.pdf

Global Wildland Fire Fatalities Report 2015

GFMC / IWPM / UNISDR Global Wildland Fire Network Bulletin No. 21 (12 September 2016) http://gfmc.online/wp-content/uploads/GFMC-Bulletin-01-2016.pdf

Global Wildland Fire Fatalities Report 2016

GFMC / IWPM / UNISDR Global Wildland Fire Network Bulletin No. 22 (18 December 2017) http://gfmc.online/wp-content/uploads/GFMC-Bulletin-01-2017.pdf

Global Wildland Fire Fatalities Report 2017

GFMC / IWPM / UNISDR Global Wildland Fire Network Bulletin No. 23 (31 December 2018) http://gfmc.online/wp-content/uploads/GFMC-Bulletin-01-2018.pdf

Global Wildland Fire Fatalities Report 2018

GFMC / IWPM / UNISDR Global Wildland Fire Network Bulletin No. 24 (15 September 2019) https://gfmc.online/wp-content/uploads/GFMC-Bulletin-01-2019.pdf

Global Wildland Fire Fatalities Report 2019

GFMC / IWPM / UNISDR Global Wildland Fire Network Bulletin No. 25 (31 December 2020) (in prep.)

https://gfmc.online/wp-content/uploads/GFMC-Bulletin-01-2020.pdf

Global Wildland Fire Fatalities Report 2020

GFMC / IWPM / UNISDR Global Wildland Fire Network Bulletin No. 26 (31 December 2021) https://gfmc.online/wp-content/uploads/GFMC-Bulletin-01-2021.pdf

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