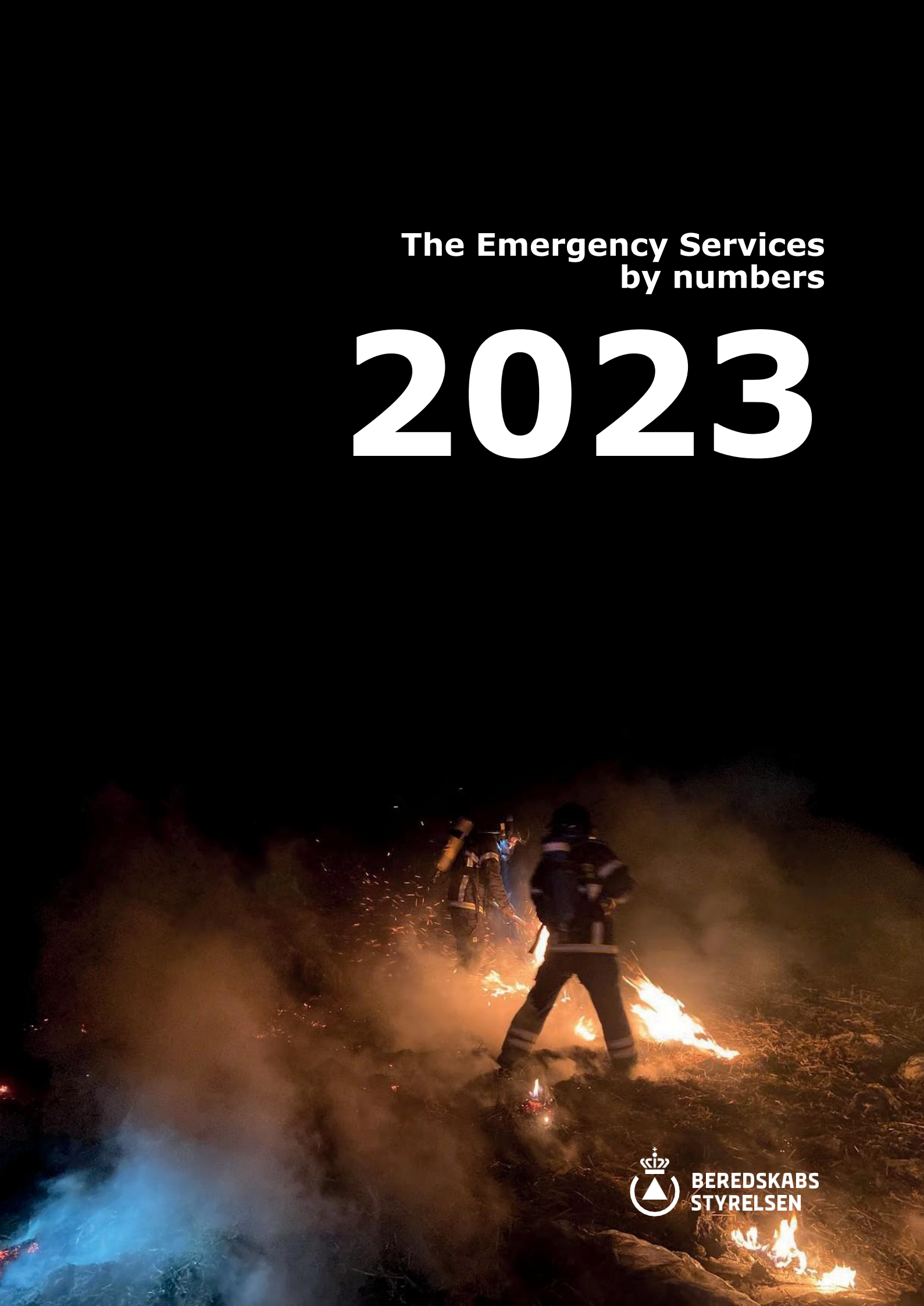
The Emergency Services by numbers

2023



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Preface

Welcome to the Emergency Services by Numbers 2023.

This publication contains key figures regarding the activities of the emergency services, encompassing municipal rescue services, state emergency services and Chemical Emergency services.

The publication includes information on the municipal rescue services' capabilities, deployments, response times, as well as the capacities, operations, and man-hours of the state rescue services. It also covers fire fatalities, casualties, and evacuations related to incidents. Additionally, the publication features two thematic sections: one on electric and hybrid vehicles, and another on fires caused by lithium-ion batteries.

The Danish Emergency Management Agency is continuously working to enhance data quality in close collaboration with municipal rescue services and Danske Beredskaber.

Further emergency management statistics can be found on DEMA's website **www.brs.dk** and in the Emergency Services Statistics Database at **http://statistikbank.brs.dk**.

We hope you find this publication useful.

Laila Reenberg
Director of Danish Emergency Management Agency (DEMA)


LED POWER

The Municipal Rescue Service

Deployments (Responses and Man-Hours)
The municipal rescue service had 39,921 responses in 2023. The number of responses in 2023 is 0.6 percent lower than in 2022 (40,157 responses), as shown in Figure 1.

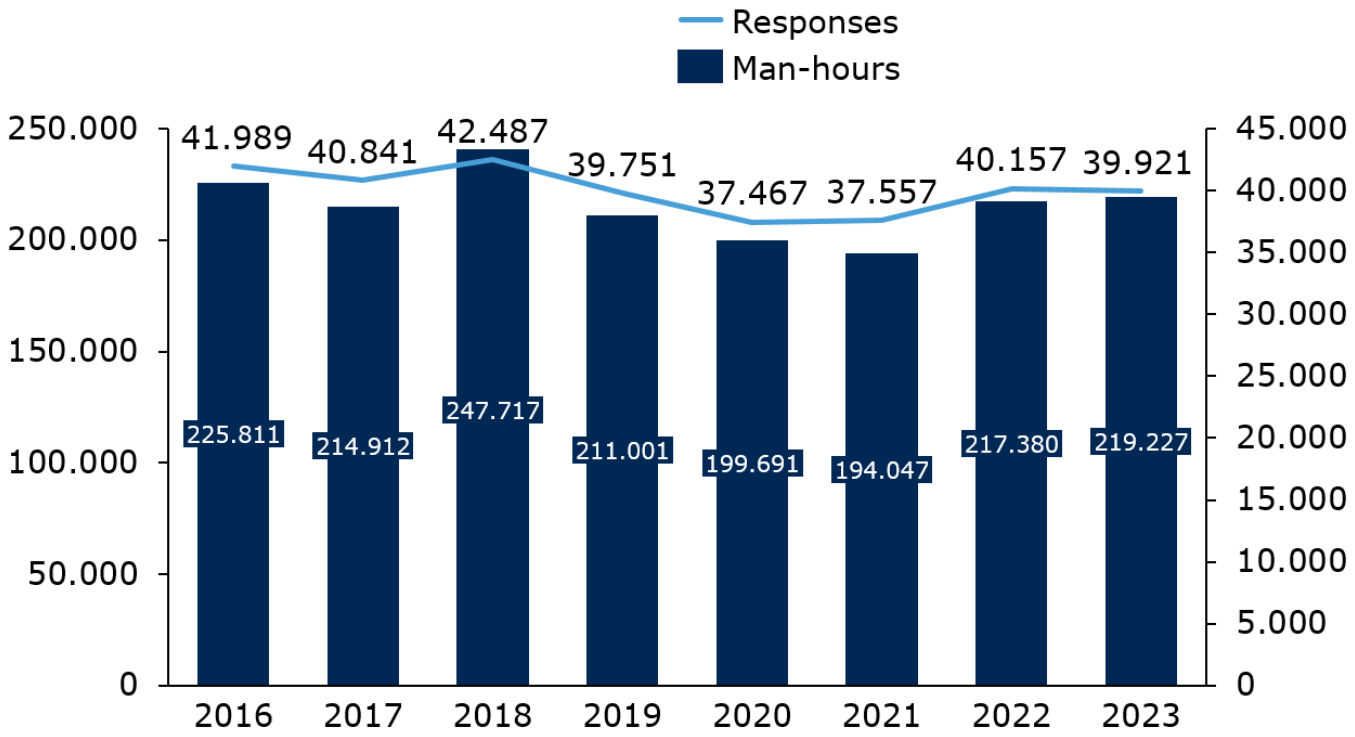

Figure 1: The municipal rescue service's responses and man-hour usage, 2016-2023.
Source: ODIN
Note: If multiple stations respond to the same incident, it is still counted as a single deployment in the overview.

Figure 1 also shows that the man-hour usage from 2022 to 2023 increased by approximately 2,000 hours (equivalent to an increase of 0.85 percent). A total of 219,227 man-hours were used by the municipal rescue service for responses in 2023.

Deployments per month in 2023

Figure 2 shows the number of responses per month in 2023. As indicated in Figure 2, the summer and autumn of 2023 stand out compared to the average from previous years. The dry months of May and June 2023 resulted in more responses during these months, while a wet July 2023 led to fewer responses than the average for previous years.

The weather conditions in the autumn of 2023 (including the storm surge in October) contributed to October being above the average from previous years.

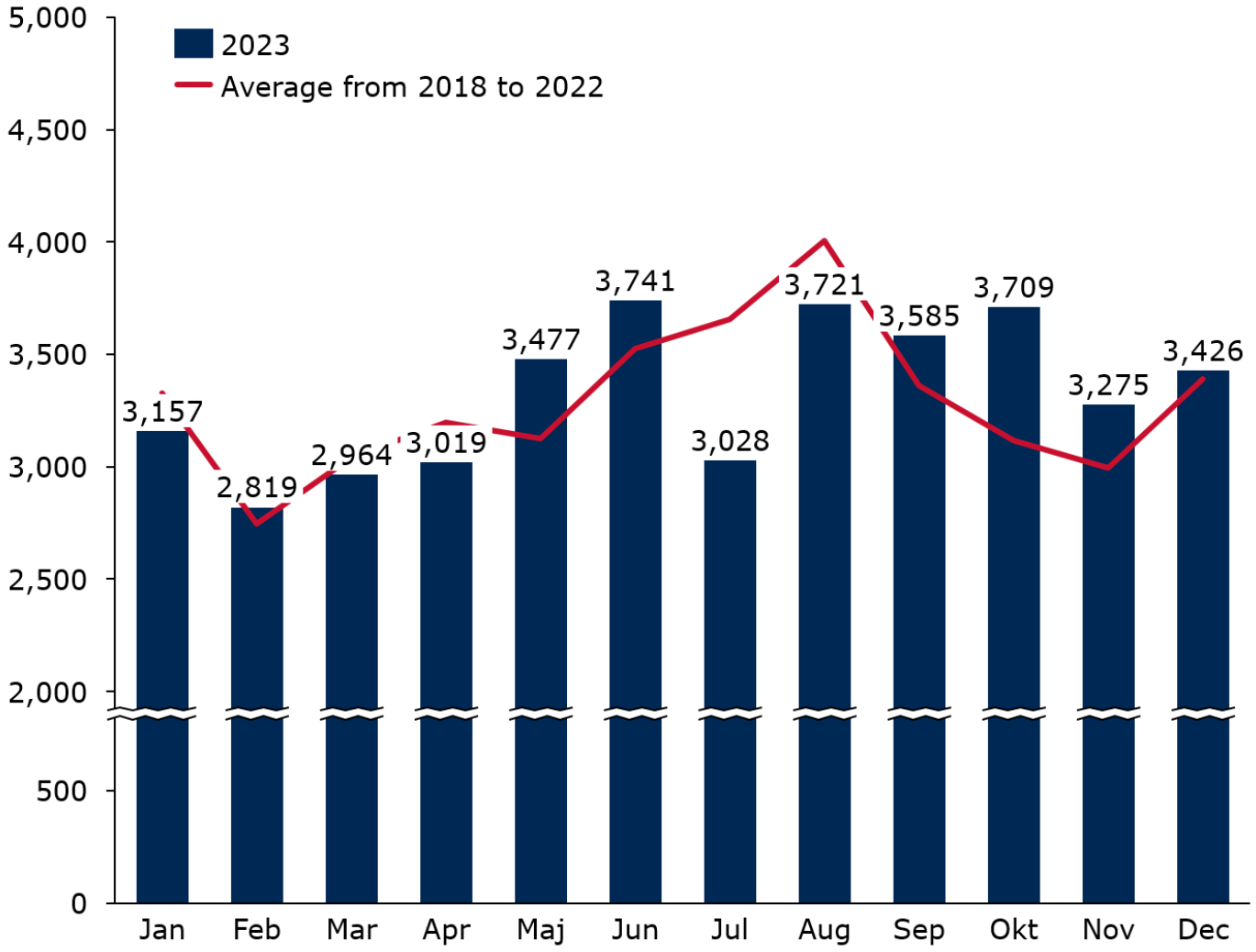

Figure 2: Responses by month in 2023, and average 2018-2022
Source: ODIN

Actual alarms

In 2023, the number of actual alarms decreased by 4 percent compared to 2022. This decline is particularly notable in the category of "Fire" responses, while there has been a slight increase in the number of responses to other types of incidents compared to 2022. There is a general trend of a decreasing number of actual alarms from 2018 to 2023, as shown in Figure 3.

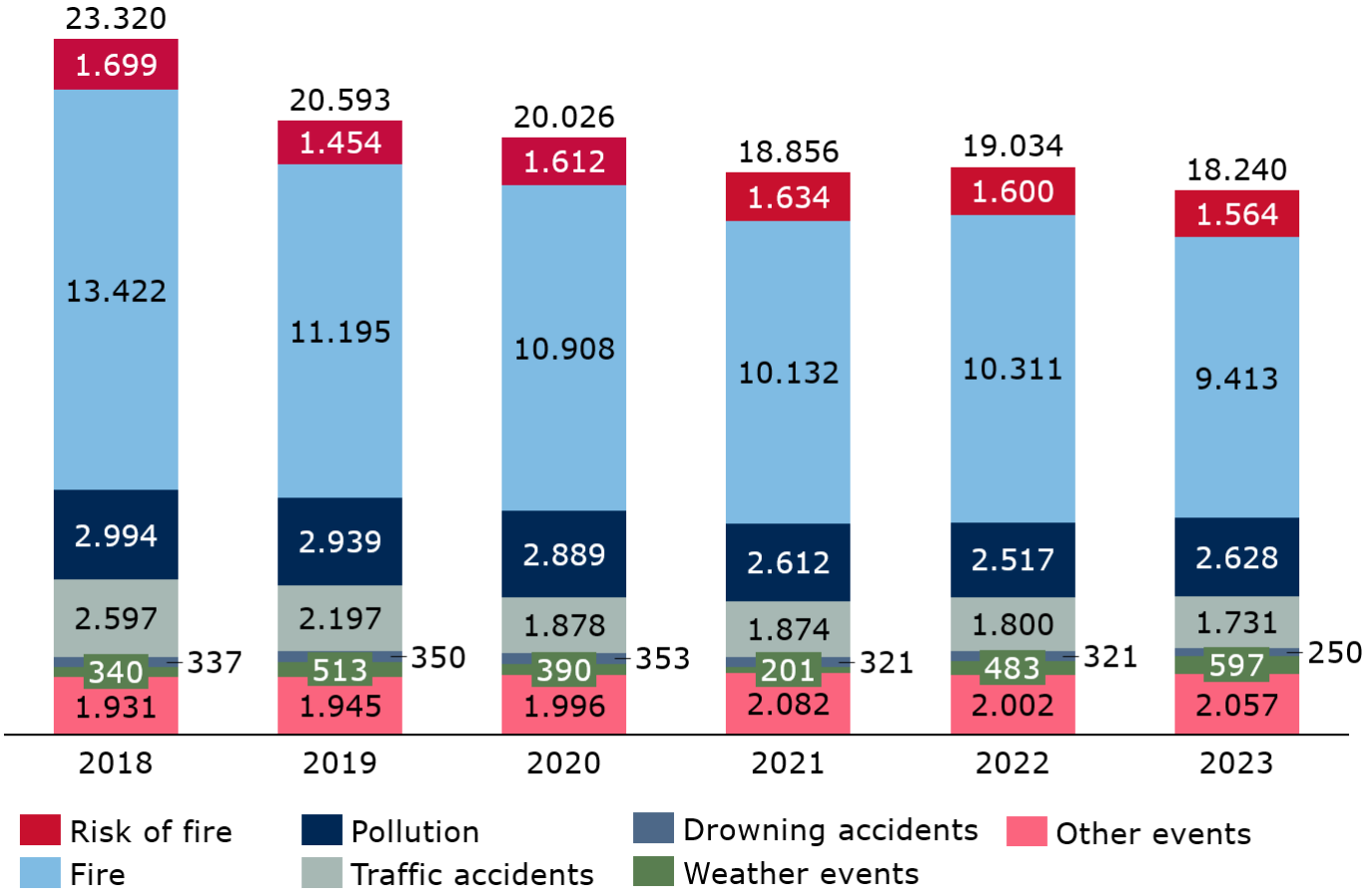

Figure 3: Actual alarms by incident type, 2018-2023
Source: ODIN

Over the entire period, there has been a decrease in the municipal rescue service's responses to fires, traffic accidents, and pollution, while there has been an increase in weather-related incidents.


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False alarms
A false alarm is a call to the rescue service made in good faith, where no incident has occurred at the address.

In 2023, there were a total of 20,628 false alarms to the rescue service, 88 percent of which came from automatic fire alarm systems (AFA).[1]

Figure 4 shows that in 2023 there was a 2 percent increase in the number of false alarms compared to 2022. The 18,244 false AFA alarms in 2023 is the highest number recorded in ODIN.

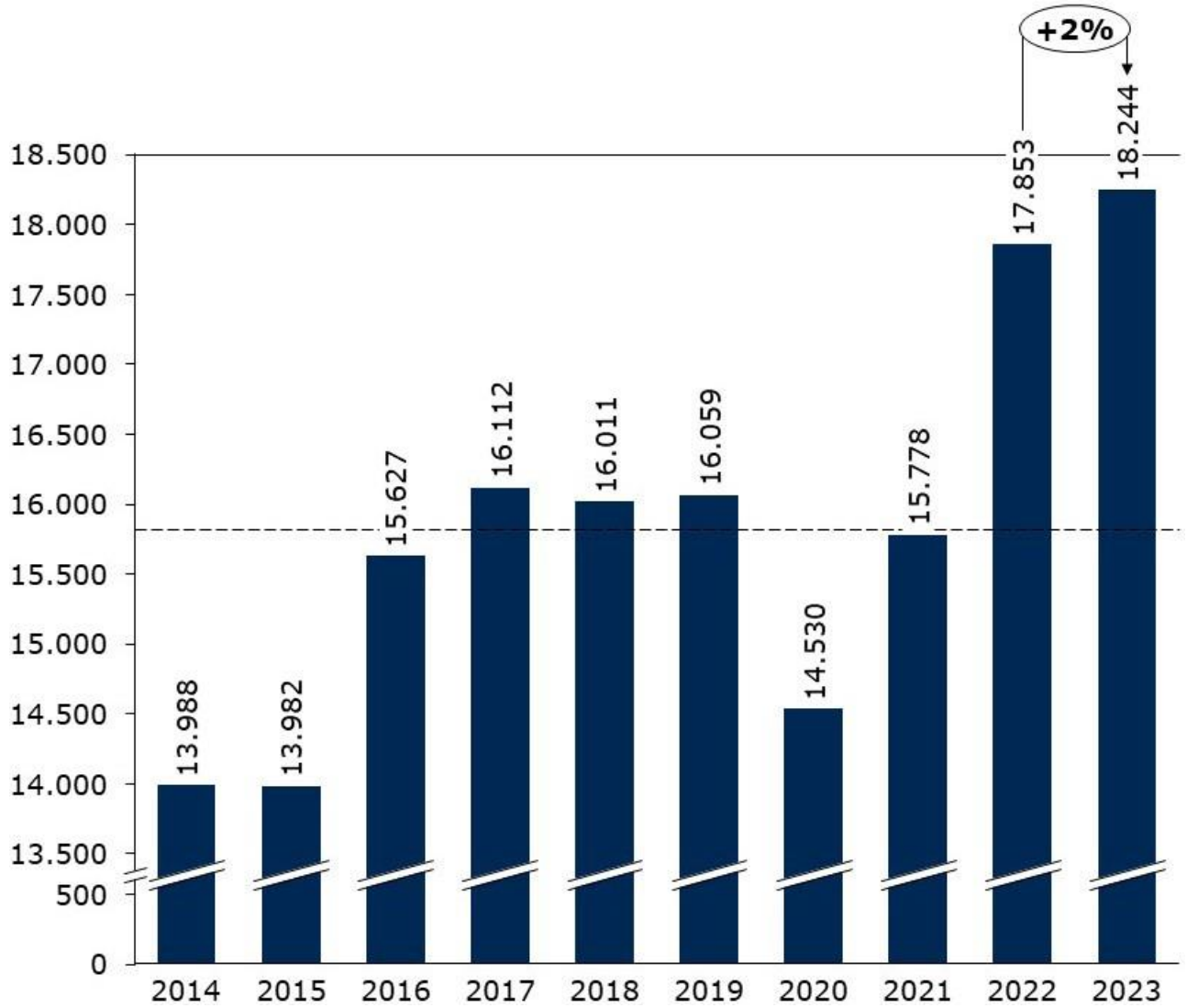

Figure 4: False AFA alarms, 2014-2023
Source: ODIN

[1] *Refer to Figure 5 in the appendix for the causes of false AFA-alarms.*

Departure times

The requirement for the municipal rescue service is that the first response must depart as soon as possible, but no later than 5 minutes after the rescue service has received the alarm.[2]

Figure 5 shows that the average departure time decreased by 1 second from 2022 to 2023. Throughout the period, the average departure time has remained stable at just over 2 minutes and 30 seconds.

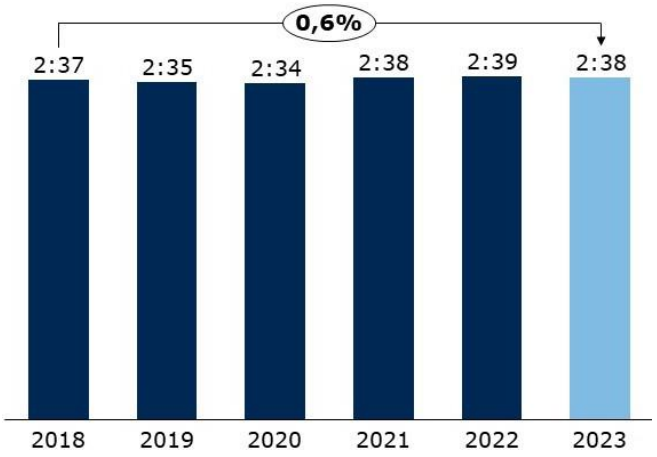

Figure 5: Average departure time, 2018-2023, Source: ODIN
Note: In ODIN, departure time is defined based on the first departing vehicle, which must not be a command vehicle. It is not possible to measure the total first response departure time

Figure 6 shows that 19 percent of all responses from the municipal rescue service in Denmark departed within 1 minute or less in 2023. 69 percent of all responses departed between 1 and 5 minutes, while 12 percent of responses departed with a time of over 5 minutes in 2023.

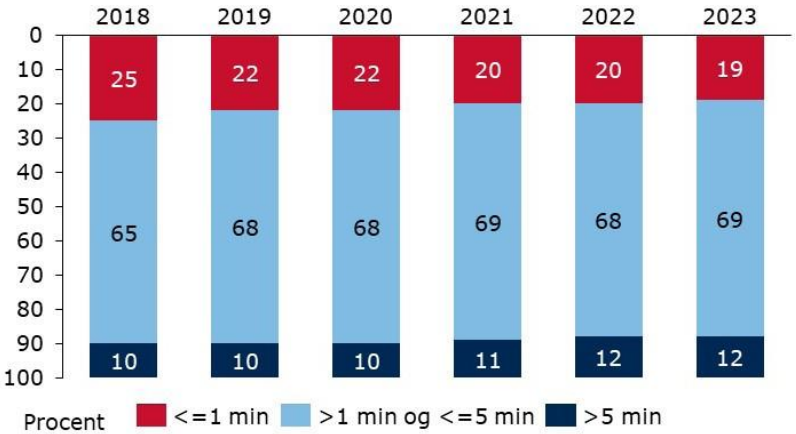

Figure 6: Cumulative frequency of departure times, 2018-2023. Source: ODIN

[2] *Executive Order No. 1085 of October 25, 2019 on risk-based municipal emergency preparedness*

Response times

The response time is the duration from when the municipal rescue service is alerted until they arrive at the incident site. Figure 7 shows that the rescue service had an average response time of 8 minutes and 2 seconds in 2023. This is 5 seconds faster on average compared to 2022.

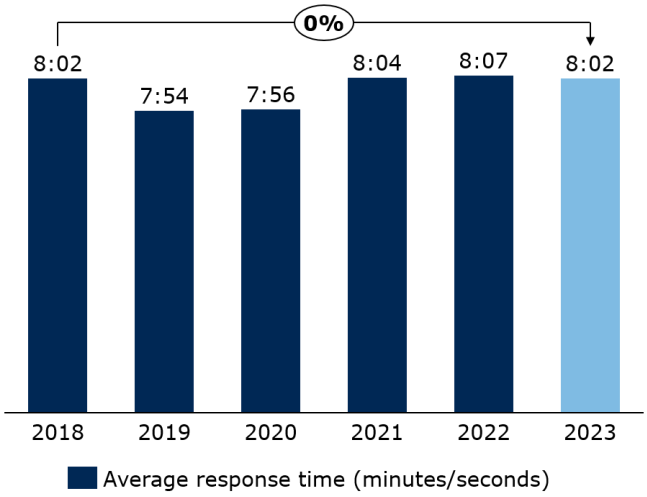

Figure 7: Average response time, 2018-2023, Source: ODIN
Note: Response time is defined here as the time from when the alarm center issues the alert to when the first vehicle, excluding command vehicles, arrives at the incident site.

As shown in Figure 8, 75 percent of all responses from the municipal rescue service arrived at the incident site within a maximum of 10 minutes in 2023, while 94 percent arrived within 15 minutes. In 6 percent of the responses, it took more than 15 minutes to reach the incident site.

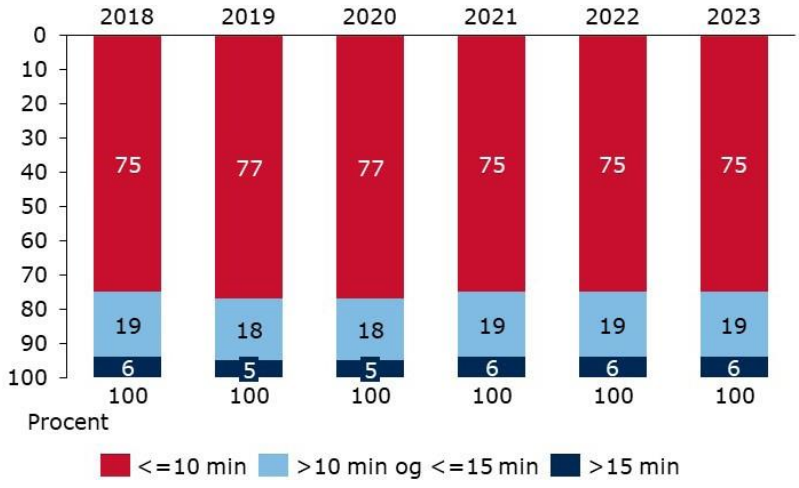

Figure 8: Cumulative frequency of response times, 2018-2023, Source: ODIN


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The State Rescue Service

For larger, longer-lasting, or manpower-intensive incidents, as well as incidents requiring special equipment or expertise (e.g., flooding or chemical spills), the municipal rescue services can call for assistance from the state rescue service, namely the Danish Emergency Management Agency (DEMA). Additionally, authorities such as the police and the Danish Veterinary and Food Administration can request assistance from DEMA.

Over the past six years, the number of DEMA interventions has ranged from 544 to 1,311. During the same period, the man-hours have varied from under 50,000 in 2018 to 220,286 in 2021, as shown in Figure 9.

In 2023, with 684 interventions and 55,732 man-hours, the numbers are above the levels seen in 2018 and 2019 but below the levels for 2020 to 2022.

The largest increase in 2023 was in the category of "High Water Levels," while the largest decrease was in incidents involving avian influenza (see Table 23 in the appendix for further details).

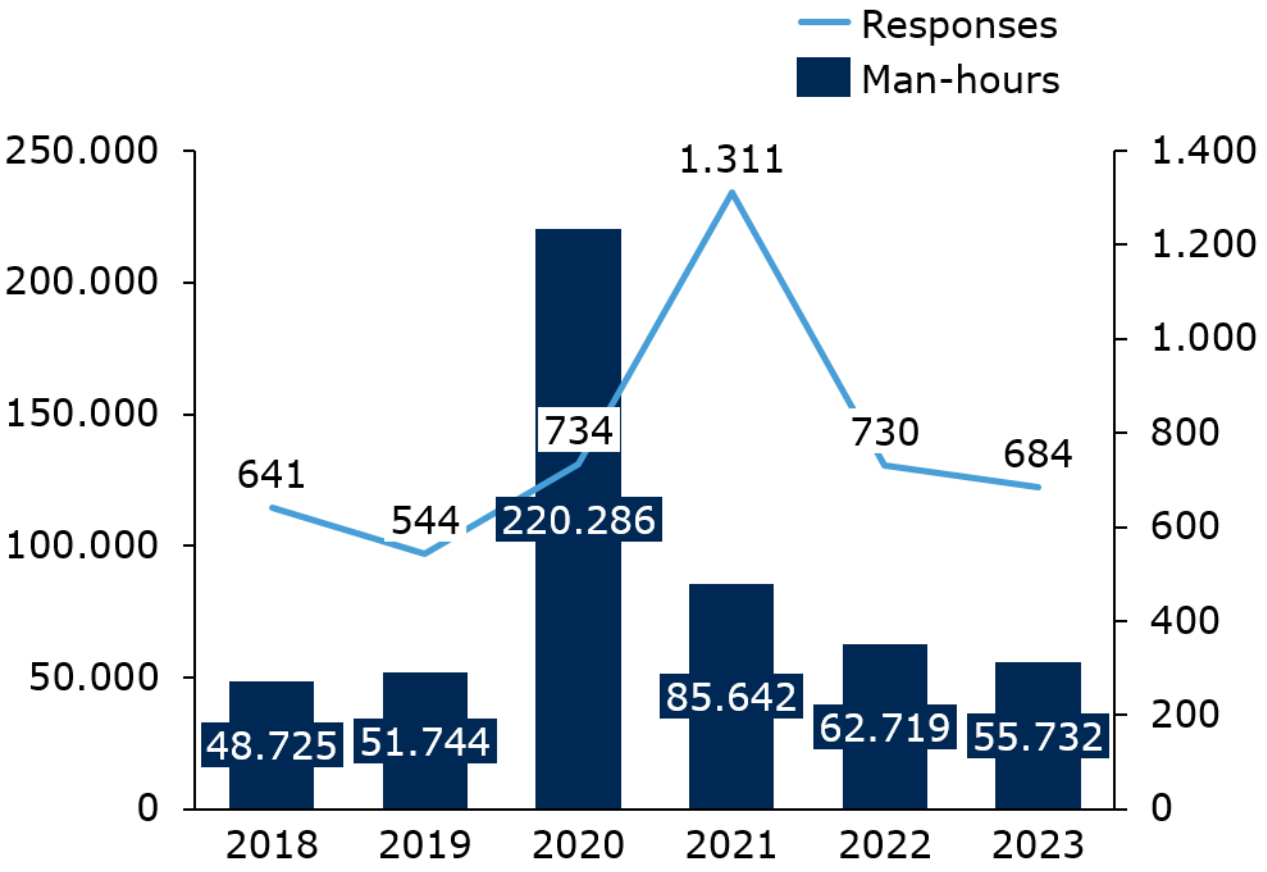

Figure 9: DEMA's responses and man-hour usage, 2018-2023
Source: ODIN
Note: There has been an extraordinary revision of man-hour data from 2018 to 2021, and an additional adjustment was made in 2022.


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Figure 10 shows DEMA's interventions distributed by requester. Requests from the police, the Danish Veterinary and Food Administration, and "Other Requesters" have constituted an increasing share of DEMA's total number of interventions in recent years

Assistance to the municipal rescue services accounted for 43% of DEMA's total interventions in 2023, an increase compared to 2022, where they constituted 33% of DEMA's total assistance. The Danish Veterinary and Food Administration (avian influenza control) and the police are frequent partners requesting DEMA's assistance.

Assistance to "Other Requesters" covered a larger number of interventions in 2020 and 2021, primarily due to assistance to the Danish Health Authority in connection with Covid-19.[3]

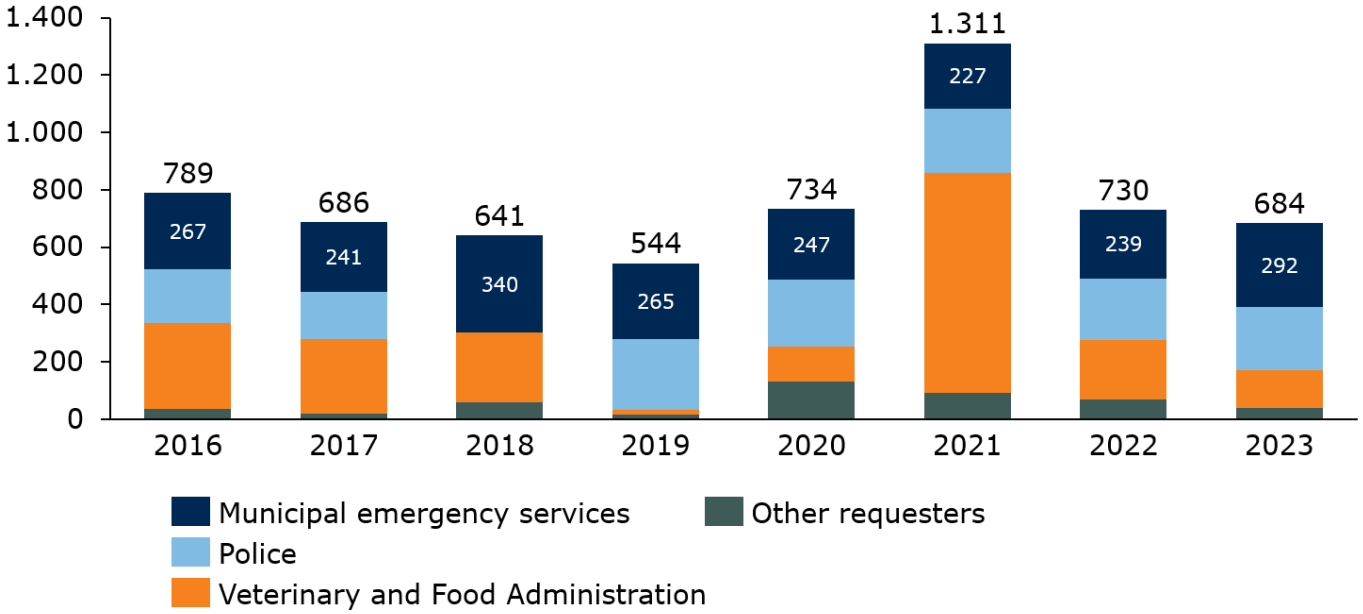

Figure 10: DEMA's interventions by requester, 2016-2023
Source: ODIN

[3] *Refer to a more detailed breakdown in the appendix under the section on "Det statslige redningsberedskab," including Chemical Emergency Services.*


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Fires in electric and hybrid vehicles

The number of registered electric and hybrid vehicles in Denmark increased from 16,114 at the end of 2018 to 332,089 at the end of 2023. The number of conventional cars peaked in June 2021 at 3,048,346 and has decreased to 2,852,167 in 2023.[4]

In 2023, there were 46 fires involving electric and hybrid vehicles compared to 20 fires in 2022. Compared to the increase in the number of registered vehicles, Figure 11 shows that the number of fires per 10,000 electric and hybrid vehicles rose from 1.1 in 2022 to 1.7 in 2023.

Figure 11 also shows that in all surveyed years, there have been fewer fires in electric and hybrid vehicles per 10,000 vehicles compared to conventional vehicles (denoted as 'Other vehicles'). The fire-damaged conventional vehicles have an average age of about 10 years, while the fire-damaged electric and hybrid vehicles have an average age of about 2 years.[5]

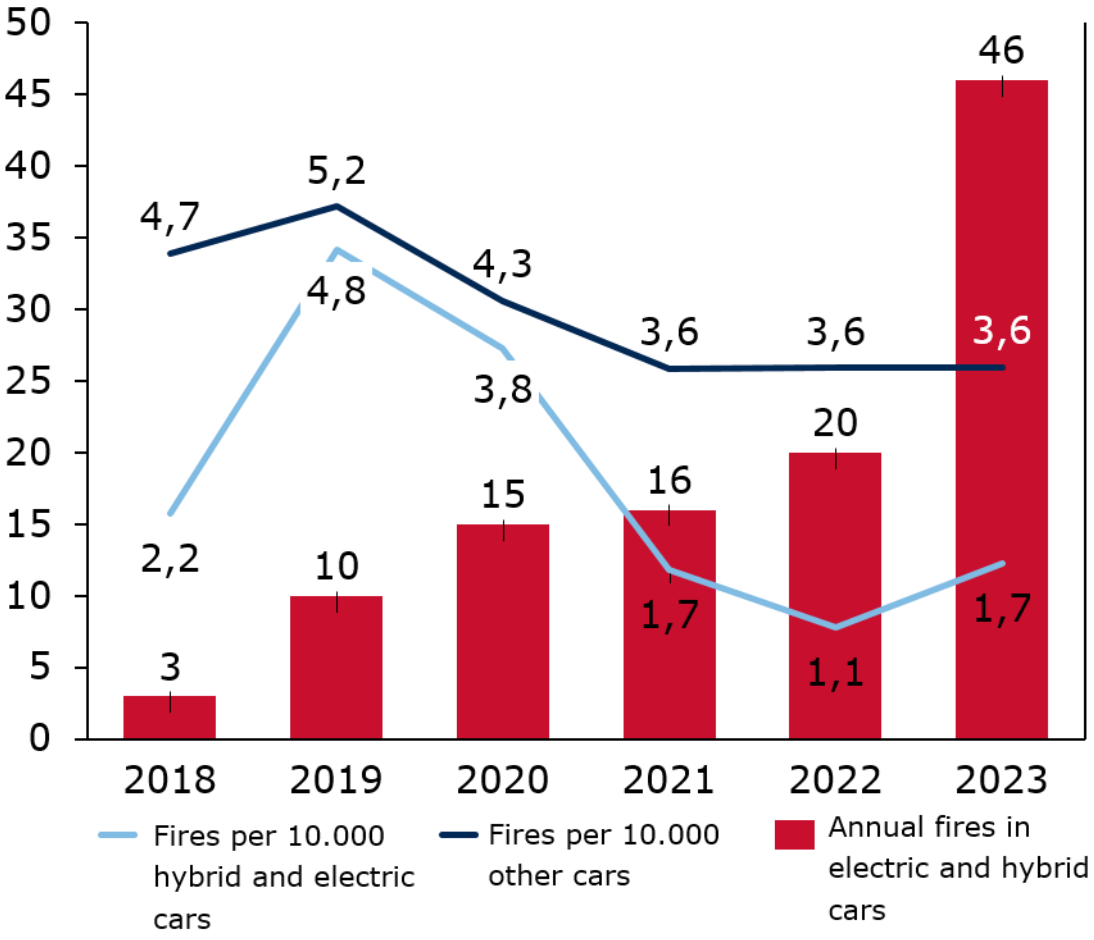

Figure 11: Development in annual fires for registered passenger cars and vans, 2018-2023[6]
Source: ODIN and Statistics Denmark

[4] *According to Statistics Denmark's tables BIL54*

[5] *Information from Forsikring & Pension*

[6] *The report has changed marginally compared to previously reported data, due to both a new automatic and standardized assessment of car fires, and the possibility of retrospective adjustments to ODIN data.*

Fires in smaller lithiumion products

In recent years, there has been increased focus on whether lithium-ion batteries pose a particular fire hazard, as these batteries are used in a wide range of products - from electric cars and e-bikes to mobile phones, power tools, and garden equipment.

Figure 12 shows the development of fires in smaller lithium-ion products from 2018 to 2023. As shown in the figure, there has been an increase in the number of fires in these products every year. In 2023, the number of fires increased by 24 percent compared to 2022

The largest product group among the registered fires is products within smaller personal transport means (such as e-bikes and e-scooters), which accounted for 41 percent of all fires in the period 2018-2023. In 2023, the number of fires in personal transport means decreased to 44 compared to 55 fires the previous year.

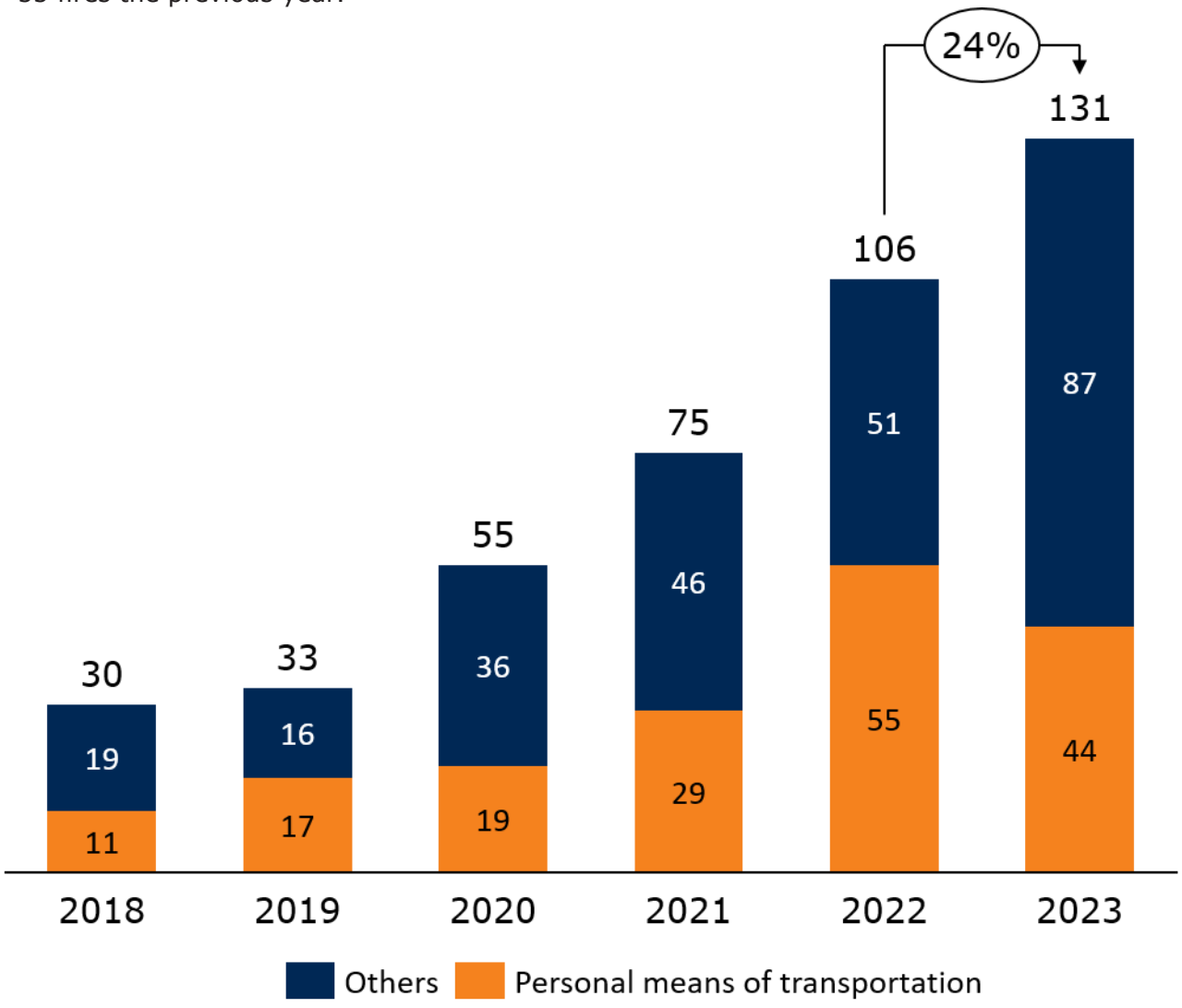

Figure 12: Development in fires in smaller lithium-ion products, 2018-2023[7]
Source: ODIN

[7] *The selection of fires from the ODIN database in the 2023 report has been adjusted compared to previous data compilations in this area. Data from 2018-2023 has been manually quality-assured based on a newly established, standardized reporting method.*


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Fatal fires and fire-related deaths

In 2023, 50 people died in 48 fatal fires, as shown in Figure 13. One person died in each of 46 fires, and two people died in two fires. The number of fatal fires in 2023 is, along with 2019, the lowest number ever recorded. Compared to 2022, there was a decrease of 10 fires and 8 fatalities.

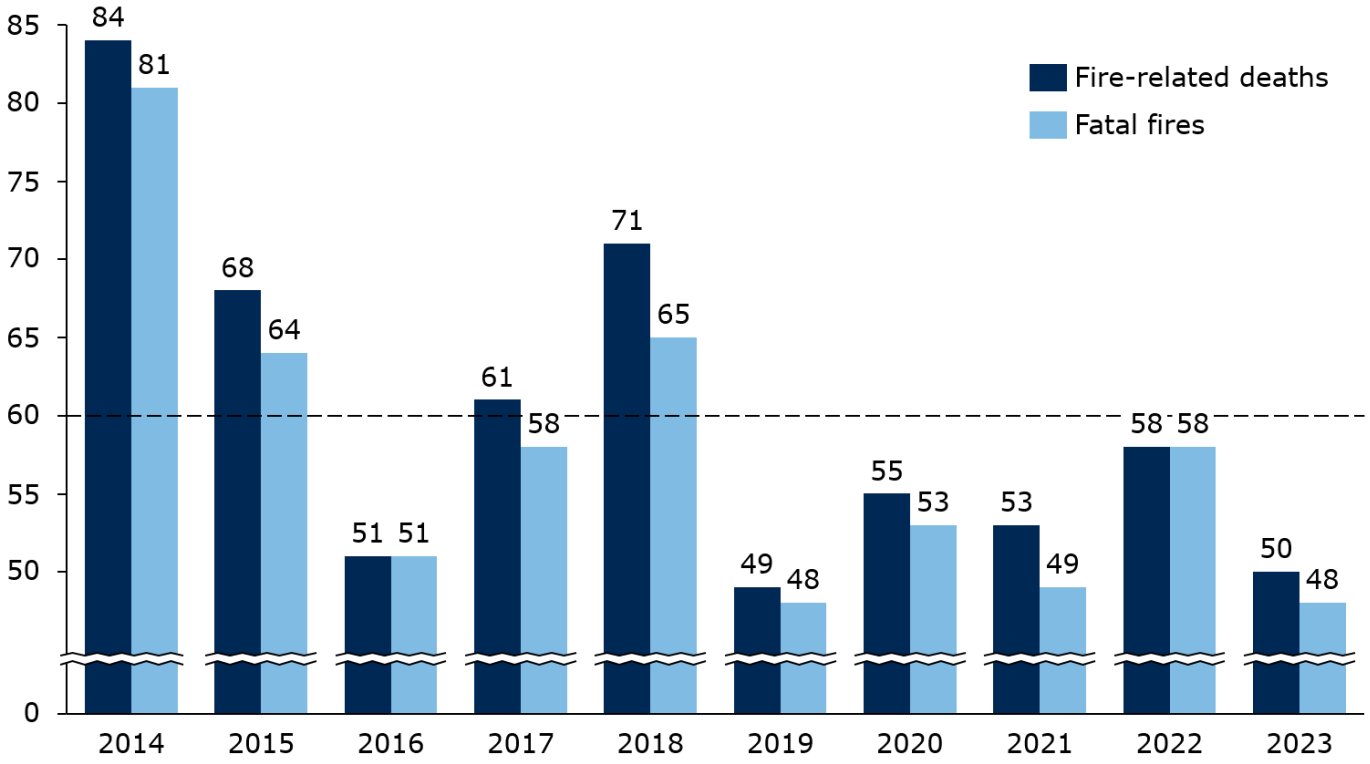

Figure 13: Number of fatal fires and fire-related deaths, 2014-2023, Source: DEMA's Fatal Fire Database
Note: The dotted line shows the average number of deaths over the last 10 years, which is 60
Note: An extraordinary revision for 2018 to 2022 added one extra fatal fire/death in 2020, 2021, and 2022

Figure 13 shows that, on average, 60 people have died in fires over the past 10 years. Since 2019, the number of fatalities has been below the average for the period.

Since 2004, there has generally been a decline in the number of fire-related deaths in the Nordic countries, as shown in Figure 14.

Denmark has, for most years, been slightly above the level in Sweden, while Finland has only recently approached the lower levels of the other countries. Norway has consistently maintained a lower level compared to the other countries.

In 2023, Denmark's rate of fire-related deaths per 100,000 inhabitants fell below that of both Sweden and Finland.

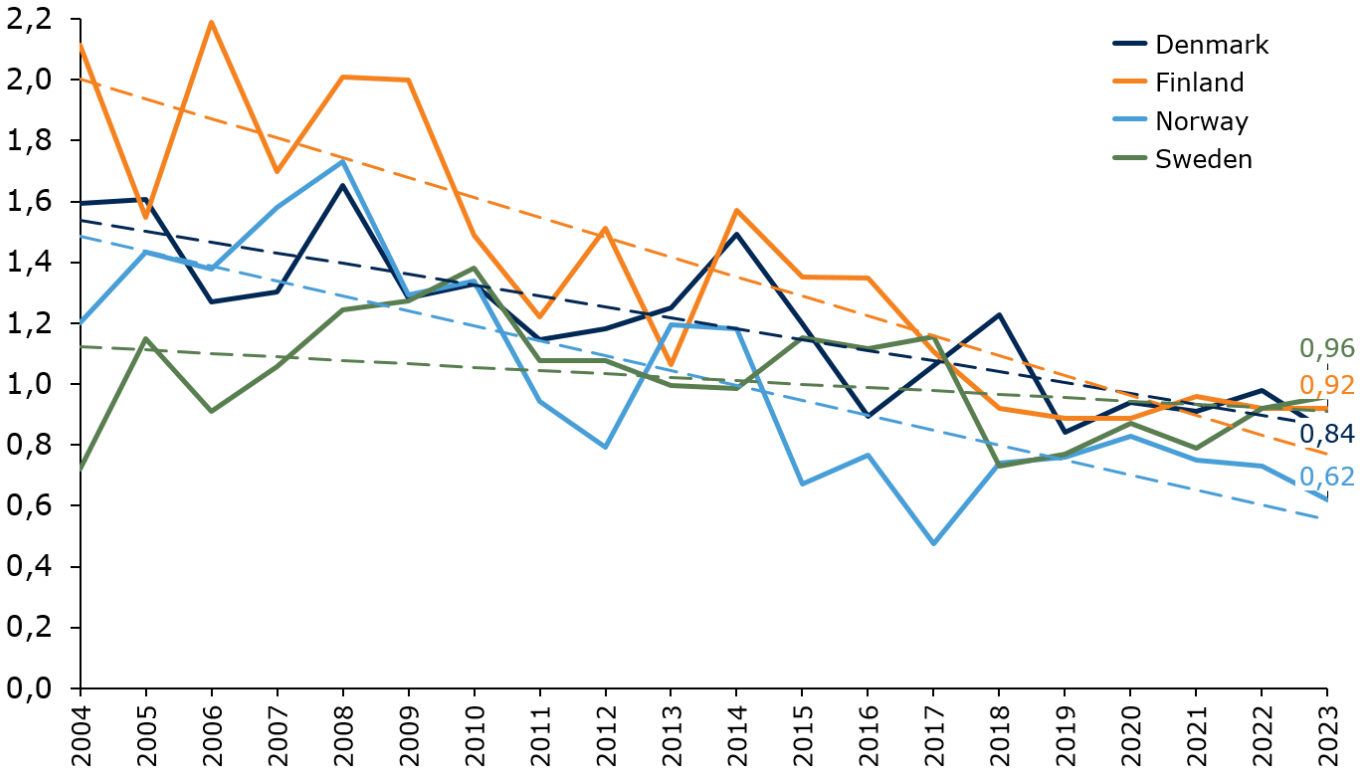

Figure 14: Fire-related deaths per 100,000 inhabitants in selected nordic countries, 2004-2023
Source: Nordstat

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On the Danish Emergency Management Agency's website www.brs.dk
you can find other publications such as

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Historical materials

Graphic Design
Pernille Gaarden, Publikationselementet, Korsør

BEREDSKABS STYRELSEN

Beredskabsstyrelsen
Datavej 16
3460 Birkerød
Telefon: 7285 2000
Fax: 7285 2005

E-mail: brs@brs.dk
www.brs.dk

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