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## Welcome to this FRIC webinar!

2024-02-13

The webinar will start at 11 am

### Please notice that the webinar will be recorded

- During the webinar, your microphone and camera will be turned off by default, by the host.
- Please use the Q&A to ask questions or raise your hand if you wish to speak:



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# The effect of Bjørnis the fire mascot

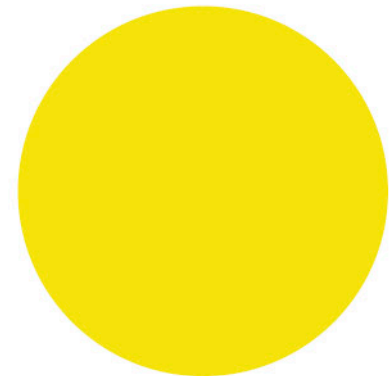
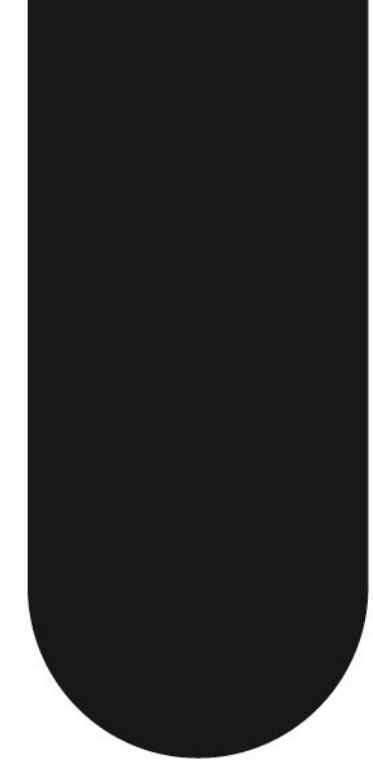
## The effect of Bjørnis for the fire safety in Norwegian households

Project group: Ragni Fjellgaard Mikalsen<sup>1</sup>, Janne Siren Fjærestad<sup>1</sup>, Nora Fredagsvik<sup>2</sup>, Annette Nergård<sup>2</sup> og Anniken Lie<sup>3</sup>

- 1) RISE Fire Research
- 2) Stiftelsen Brannbamsen Bjørnis
- 3) Trøndelag fire and rescue service IKS (TBRT)

**Webinar about the results from the study, 13. February 2024**

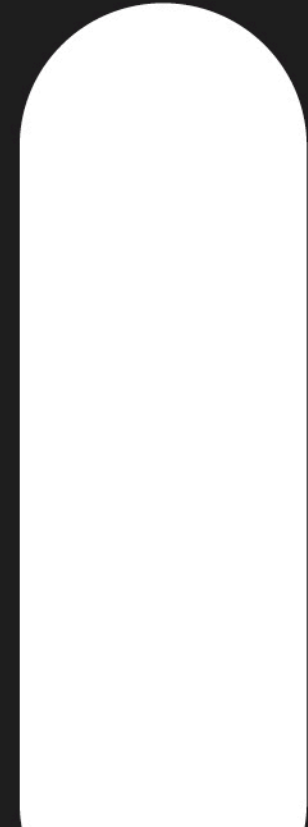
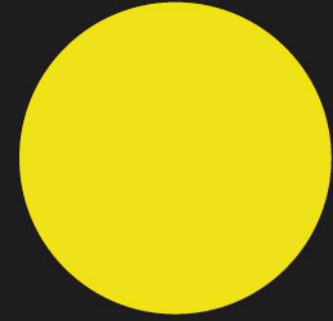
**FRIC study D4.3-2024.01, ISBN 978-91-89821-79-8**



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**Bjørnis**



**Bjørnis - Norway's  
most important  
teddy bear.**



# From comfort teddy bear to super hero



## THE COMFORT TEDDY BEAR

is deployed on fire trucks across the country and is used as a tool when children are involved in fires or accidents.



## THE KINDERGARTEN

**MATERIAL** enable fire safety education for children, and raise awareness of fire safety among parents and grandparents.



## THE FIRE DEPARTMENTS

**MASCOT** lives an exciting life at the fire stations and is visible in social media, shows, music children's TV, books and more.

*Brannbamsen Bjørnis is intended to be the fire department's positive ambassador, providing preventive knowledge, security and care to children.*

## THE BRANNBAMSEN BJØRNIS

**FOUNDATION** is a non-profit organization where the fire department naturally holds a strong ownership, where the surplus goes towards furthering the purpose.

# The Brannbamsen Bjørnis foundation shall:

**...stand together with all fire departments** in encounters with children, parents and grandparents.

**...elevate fire safety education and fire drills** in kindergartens and primary schools, and assist families in creating safe homes.

**...maintain a healthy economy**, where the entire surplus is allocated to strengthening and further developing Bjørnis.

**...meet children and families** where they are, with high quality communication that helps everyone make safe choices, warms and entertains.

**...offer sustainable products and services**, that increase the interest of Bjørnis .

**...collaborate with actors we share interest with**, and invite to joint effort to secure children and families.





# Bjørnis the fire preventor

- **Long-term effect:**

Bjørnis gives children fundamental skills and knowledge about fire safety, which they carry with them throughout their lives.

- **Immediate effect:**

Bjørnis accompanies the children home and influences many parents and grandparents to take action regarding fire safety.



## Numbers & facts



155 fire  
departments  
87 mascots



75 %  
of kindergartens



41 million



33 million

facebook

61 000

Instagram

13 000



9 titles  
133 000 books



nrk  super

32 episodes  
37 mill. views



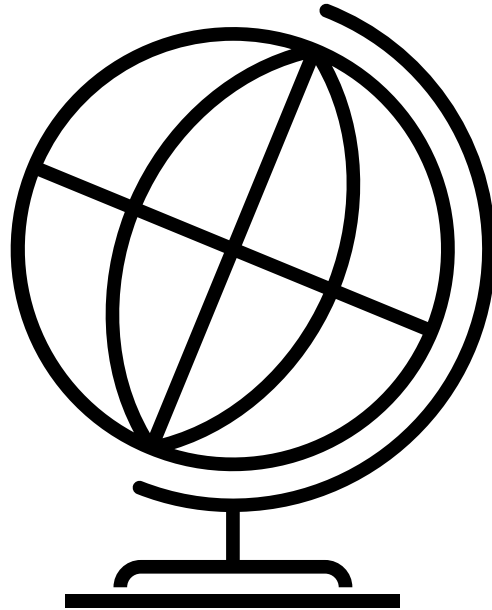
Bjørnis the  
movie is coming  
to cinemas



In summary:

Bjørnis has provided Norwegian fire departments with a communication tool with a reach and influence we could only dream of!

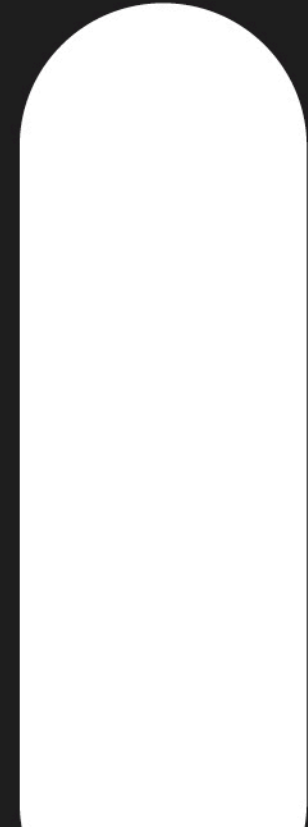
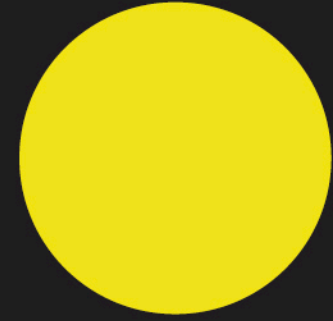
**Bjørnis has many colleagues internationally**



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Goal



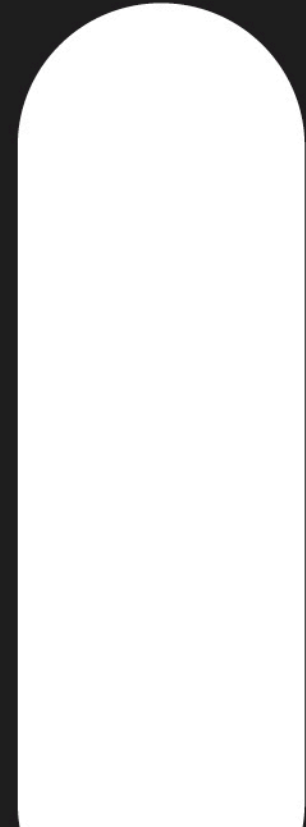
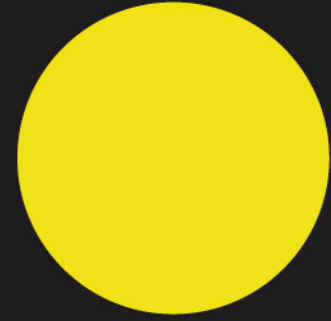
## Goal

- Main goal: **Document and quantify the preventive effect of Bjørnis for fire safety in Norwegian households**
- Part goal: Understand whether there are differences in the effect of Bjørnis depending on **which and the number of arenas** the child meets Bjørnis in, in order to have a good basis for deciding where to invest effort.
- Part goal: Understand whether Bjørnis increases the fire safety of people in the **circle around** the child/family, such as grandparents, to understand whether the prevention also helps people with **risk factors**.

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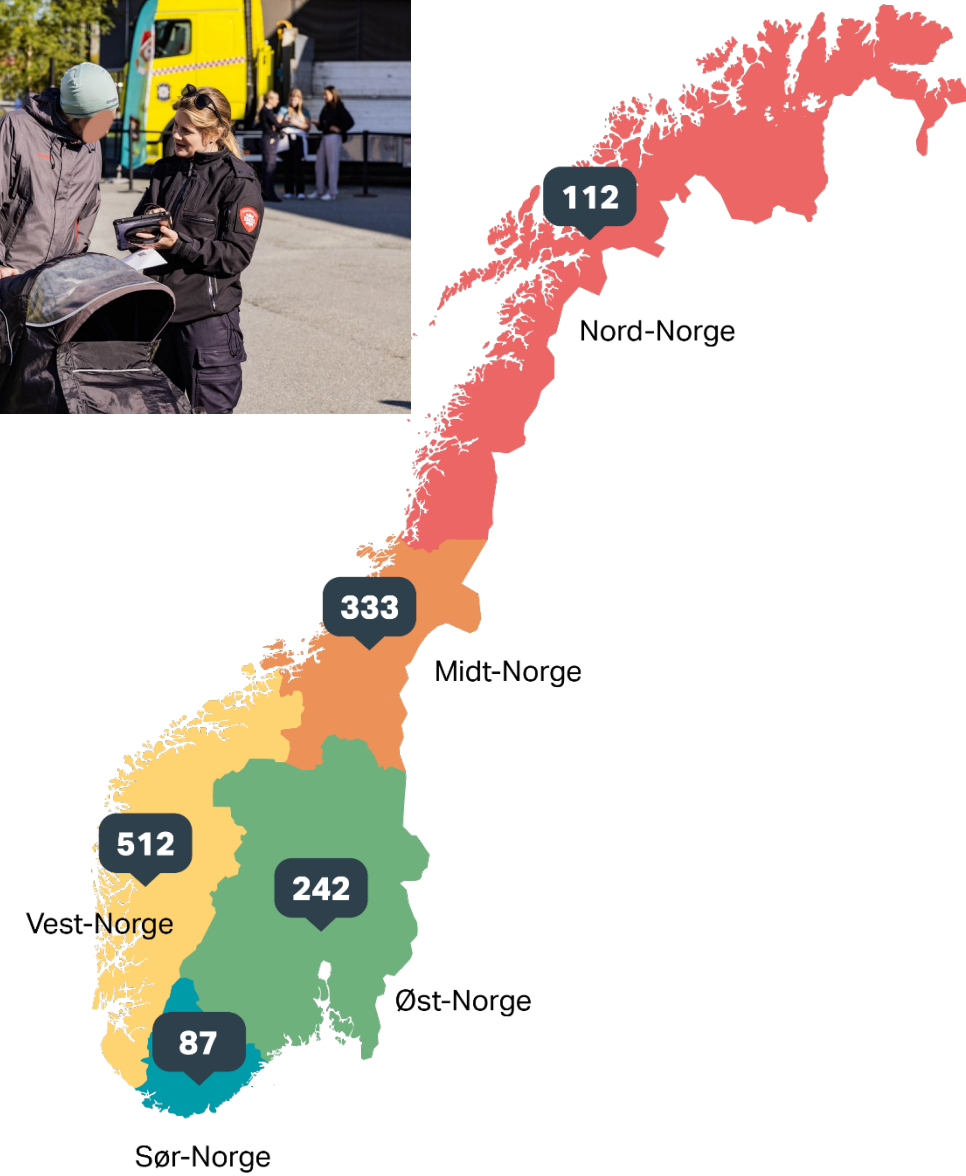
**Method**



## Survey



Survey of 8 questions carried out by these fire and rescue services



Number of respondents from around Norway



The survey was carried out at an open fire station in September 2023



A family receives information about the survey and use their own phone to answer



Grandma and daughter are in different households and answer on separate phones.



The adults answer, the children look at Bjørnis!

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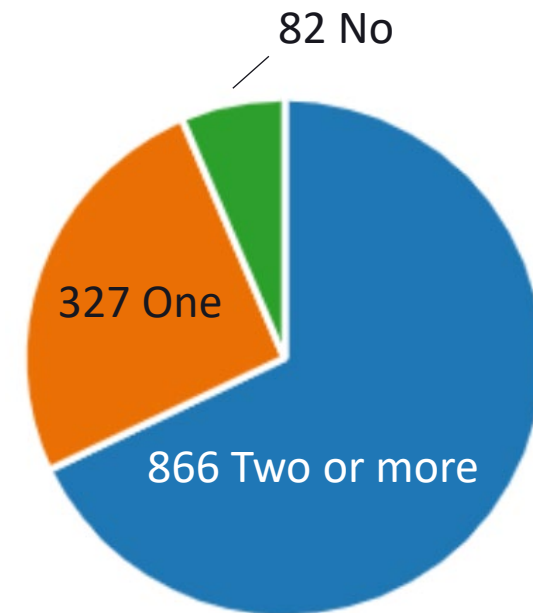
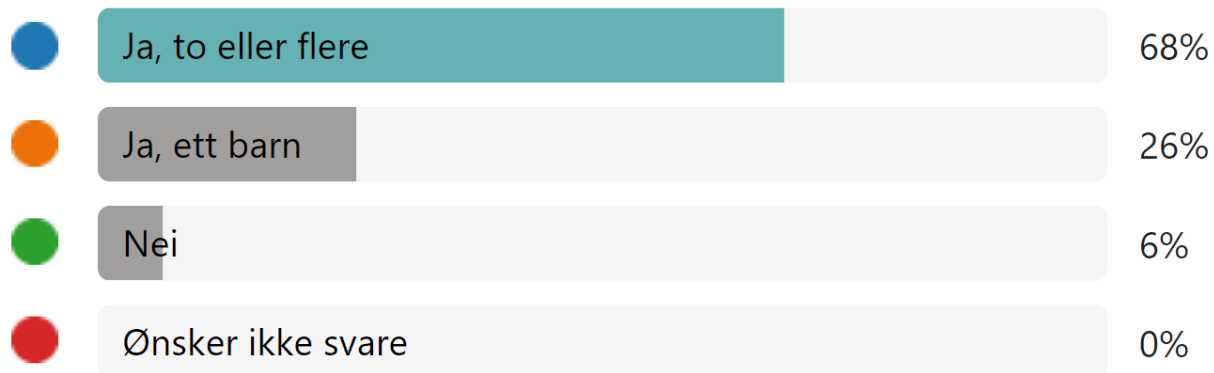
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Results



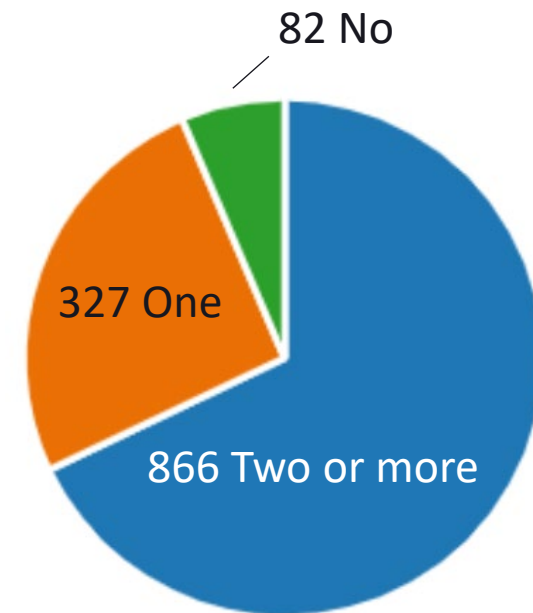
# 1. Are there children living in your household?

- Total 1275 responses

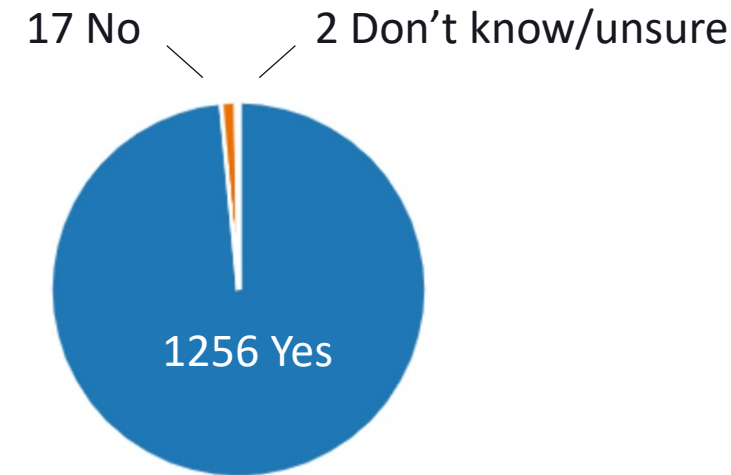
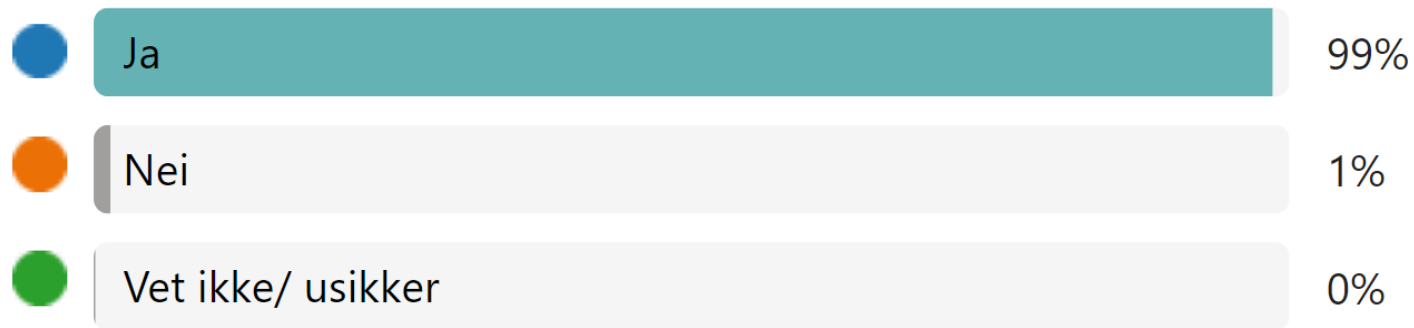


## 1. Are there children living in your household?

- Total 1275 responses
- Most (327 + 866) households with children
- Expected: open fire station, where the target group is families with children.
- In comparison, there are 626,634 households with children and a total of 2,581,721 households in Norway as of Sept 2023<sup>1</sup>

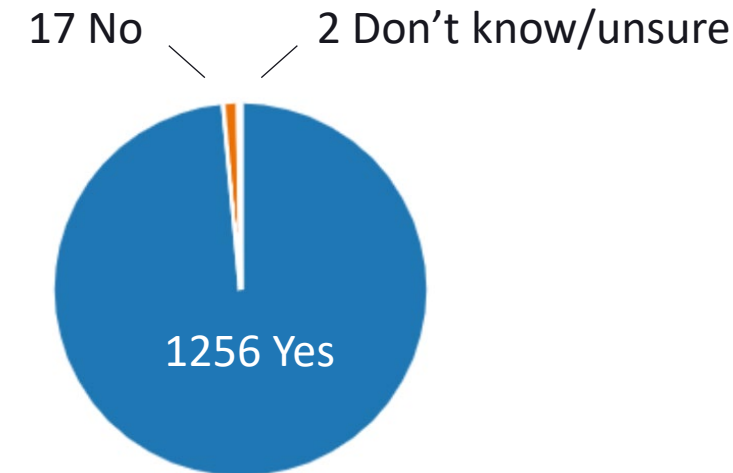


## 2. Do you and any children in the household know who “brannbamsen Bjørnis” is?

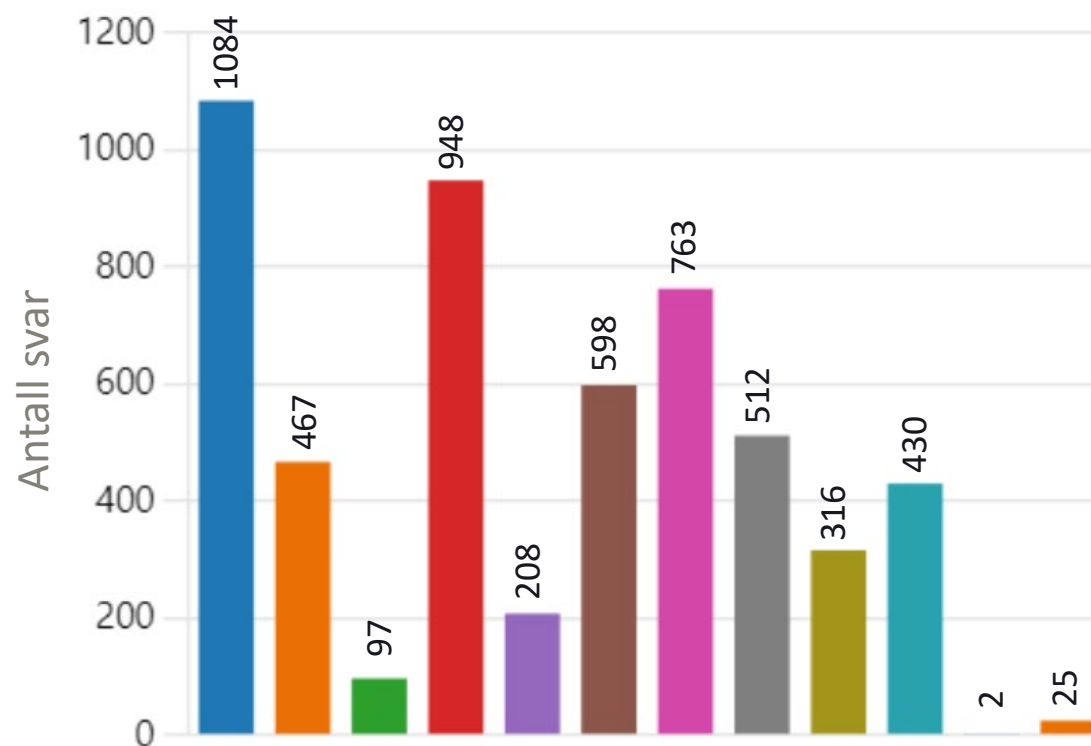
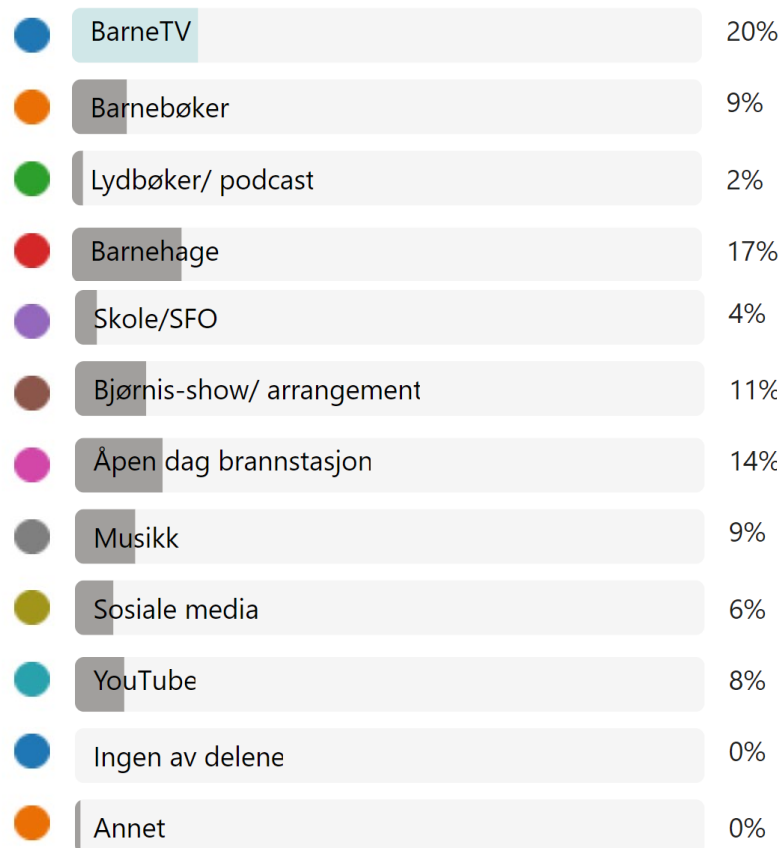


## 2. Do you and any children in the household know who “brannbamsen Bjørnis” is?

- Bjørnis is a national fire superstar.
- Of the 17 who answered No, there were 6 without children in the household, and 11 with children in the household.

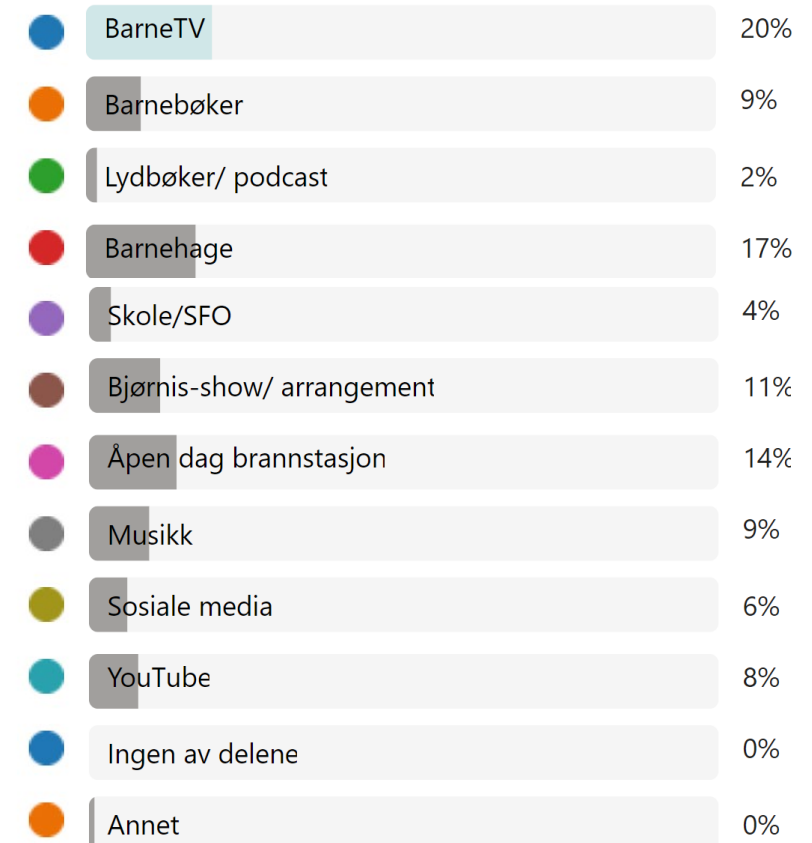


### 3. Where have you met/seen Bjørnis? (fill in all that apply)

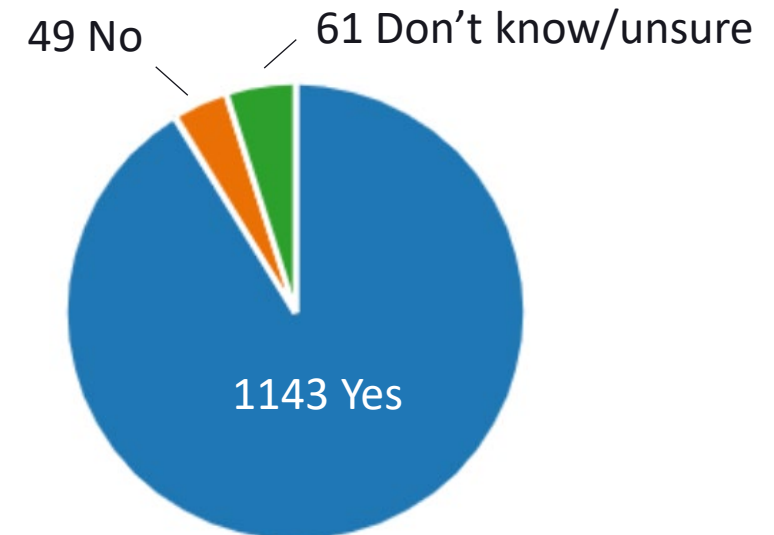
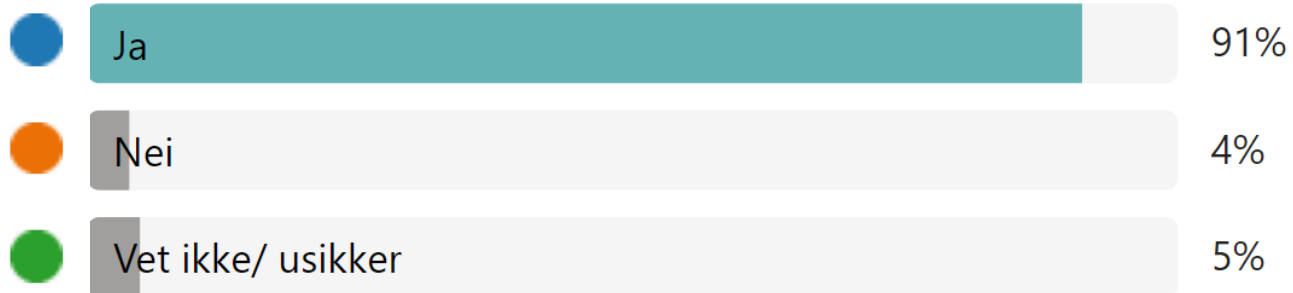


### 3. Where have you met/seen Bjørnis? (fill in all that apply)

- A total of 5450 ticks
- 25 free text answers: Visits by Bjørnis at home, through grandchildren, through work, knows someone who works in the fire service, comforting teddy bear in case of an accident, puzzles, restaurant (Egon).



#### 4. Have you (adults and possibly children) received a reminder or learned something new about fire safety from Bjørnis?

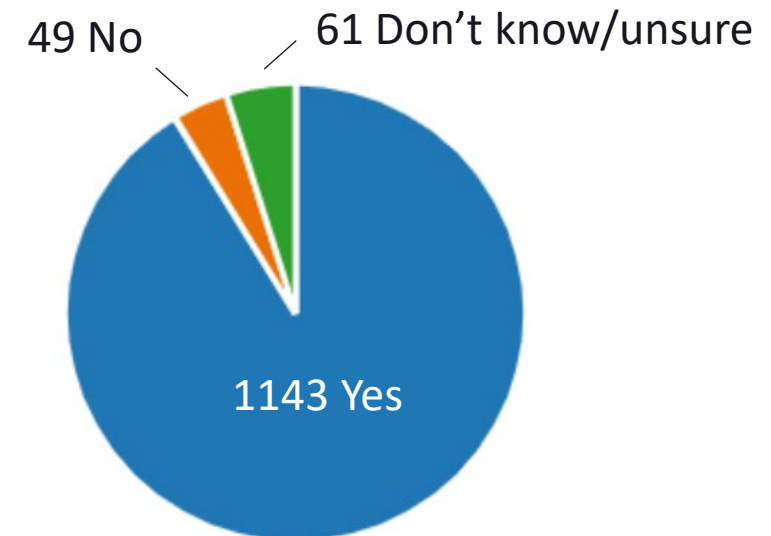


## 4. Have you (adults and possibly children) received a reminder or learned something new about fire safety from Bjørnis?

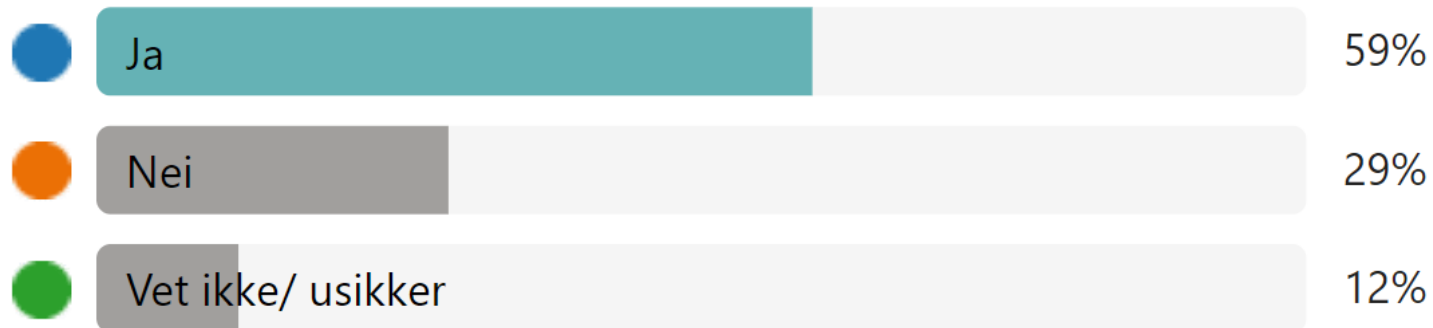
- A large majority\* have received a reminder or learned something new from Bjørnis.
- Examples of No:
  - Already high awareness before Bjørnis
  - Know who Bjørnis is, but haven't learned anything concrete

We have learned EVERYTHING from Bjørnis!

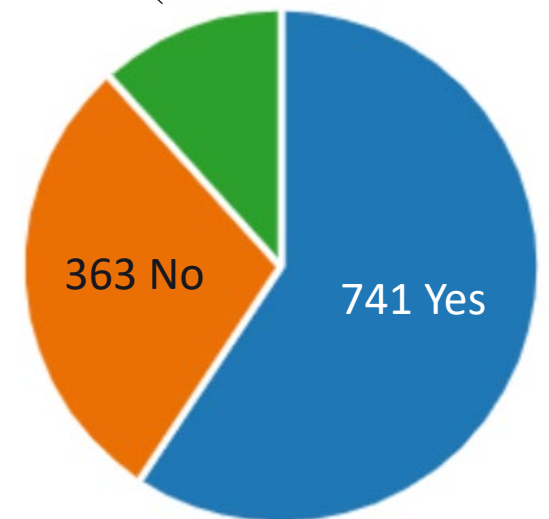
I can say that even before I answer, that I am absolutely sure that he has had an effect



## 5. Have you done anything about fire safety in your household (house, cabin, boat+) because of Bjørnis?



146 Don't know/unsure

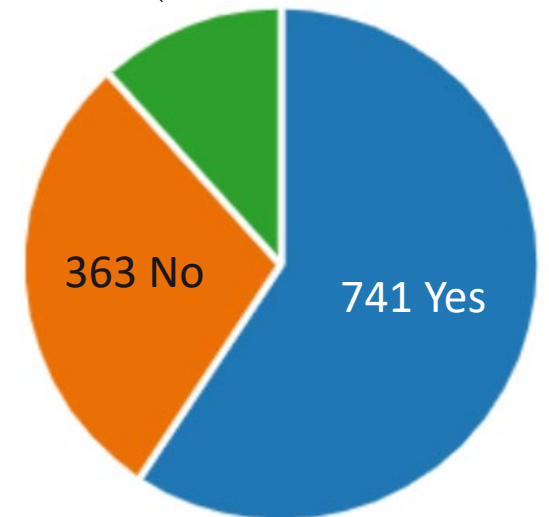


## 5. Have you done anything about fire safety in your household (house, cabin, boat+) because of Bjørnis?

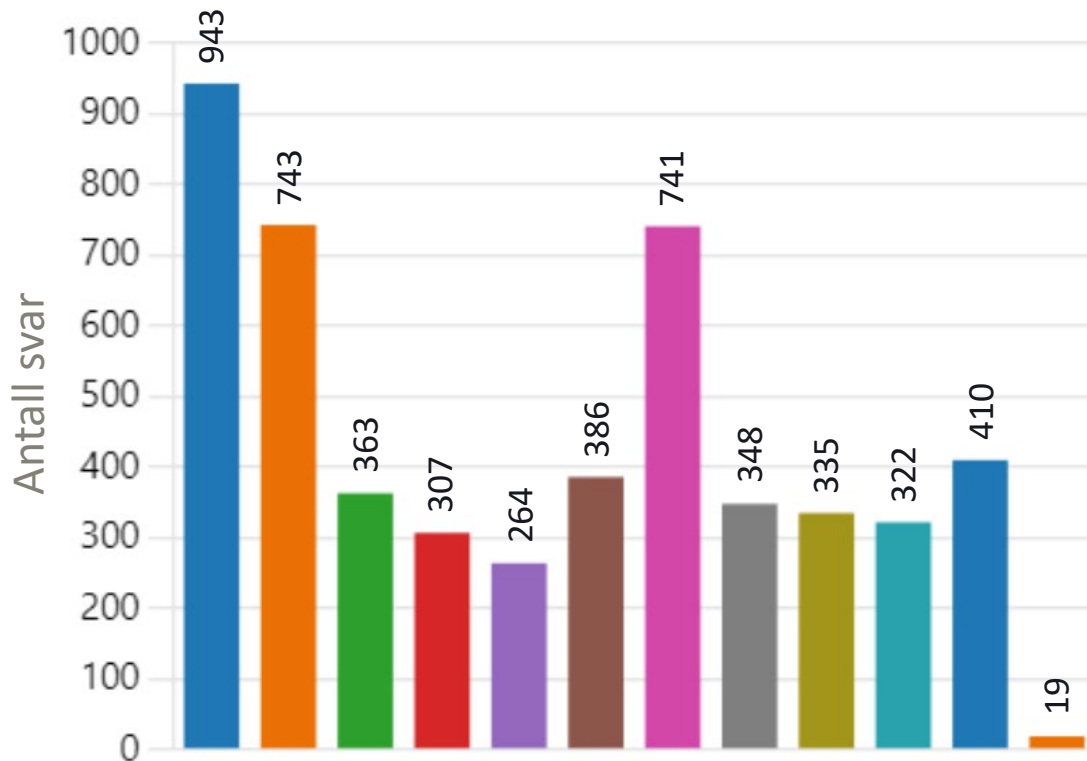
- Yes: A little over half
- A third have not made any changes
- One in ten are unsure

Have learned a lot about batteries, pipe fires/paper, pulling out mobile phone chargers at night

146 Don't know/unsure



## 6. Have you done any of the following in your household (house, cabin, boat+) because of Bjørnis? (Fill in all that apply)



## 6. Have you done any of the following in your household (house, cabin, boat+) because of Bjørnis? (Fill in all that apply)

- A total of 5181 ticks
- 94% of respondents ticked one or more measures
  - Note the increase from 59% who answered yes and 12% who answered don't know/unsure to question 5
- 6% of respondents ticked 0 measures
  - Note the reduction from 29% who answered no to question 5



## 6. Have you done any of the following in your household (house, cabin, boat+) because of Bjørnis? (Fill in all that apply)

- Most common:
  - Talked about fire safety (18%)
  - Become familiar with the emergency number (14%)
  - Checked smoke detectors (14%)
- Least common:
  - Fire drills (5%)



## 6. Have you done any of the following in your household (house, cabin, boat+) because of Bjørnis? (Fill in all that apply)

- What did children and adults say to us?

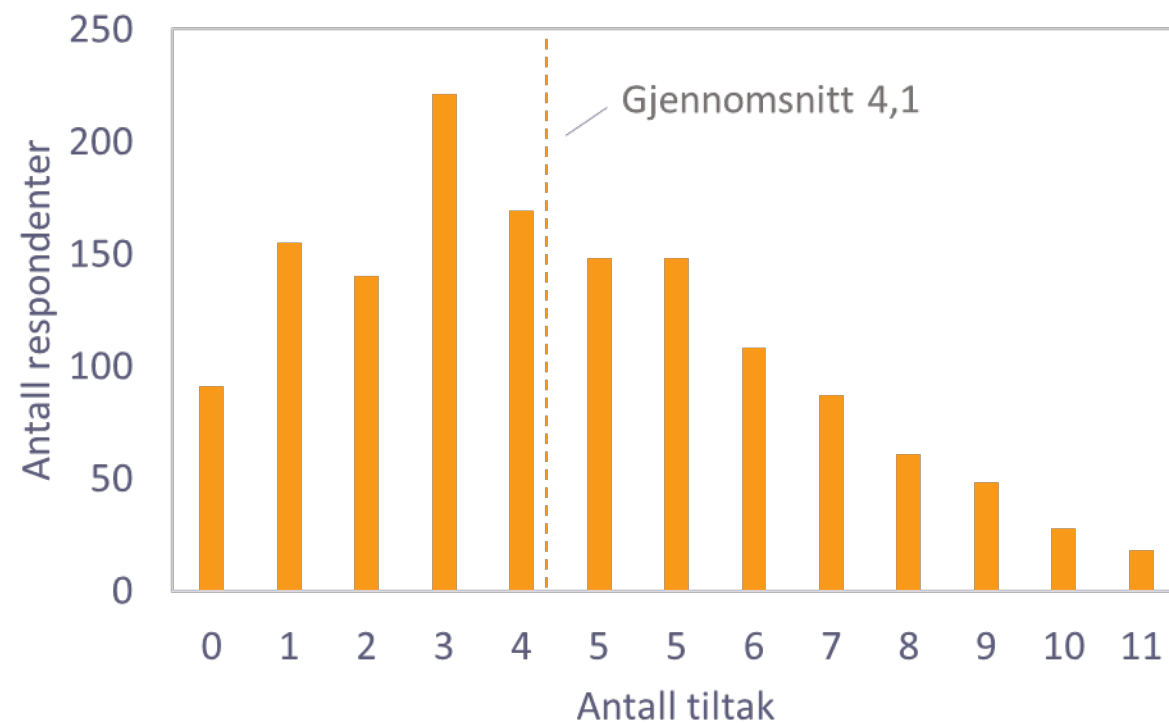
Now when I read the list in the survey, I suddenly became aware of everything that Bjørnis has done for fire safety at our home. Bjørnis is actually completely gold!

Because of Bjørni's episode about damaged electronics, the 7-year-old has given us a hard time: "Look dad, that cable needs to be changed!"

After I saw the episode about the pipe fire last weekend at the cabin, I threw all the cardboard out, rather than burning it.

**Each household has carried out  
an average of 4.1 measures**

A total of over  
5181 measures  
carried out!



## What does this mean nationally?

Over 5,000 measures  
carried out in a group  
with 1,193  
households with  
children

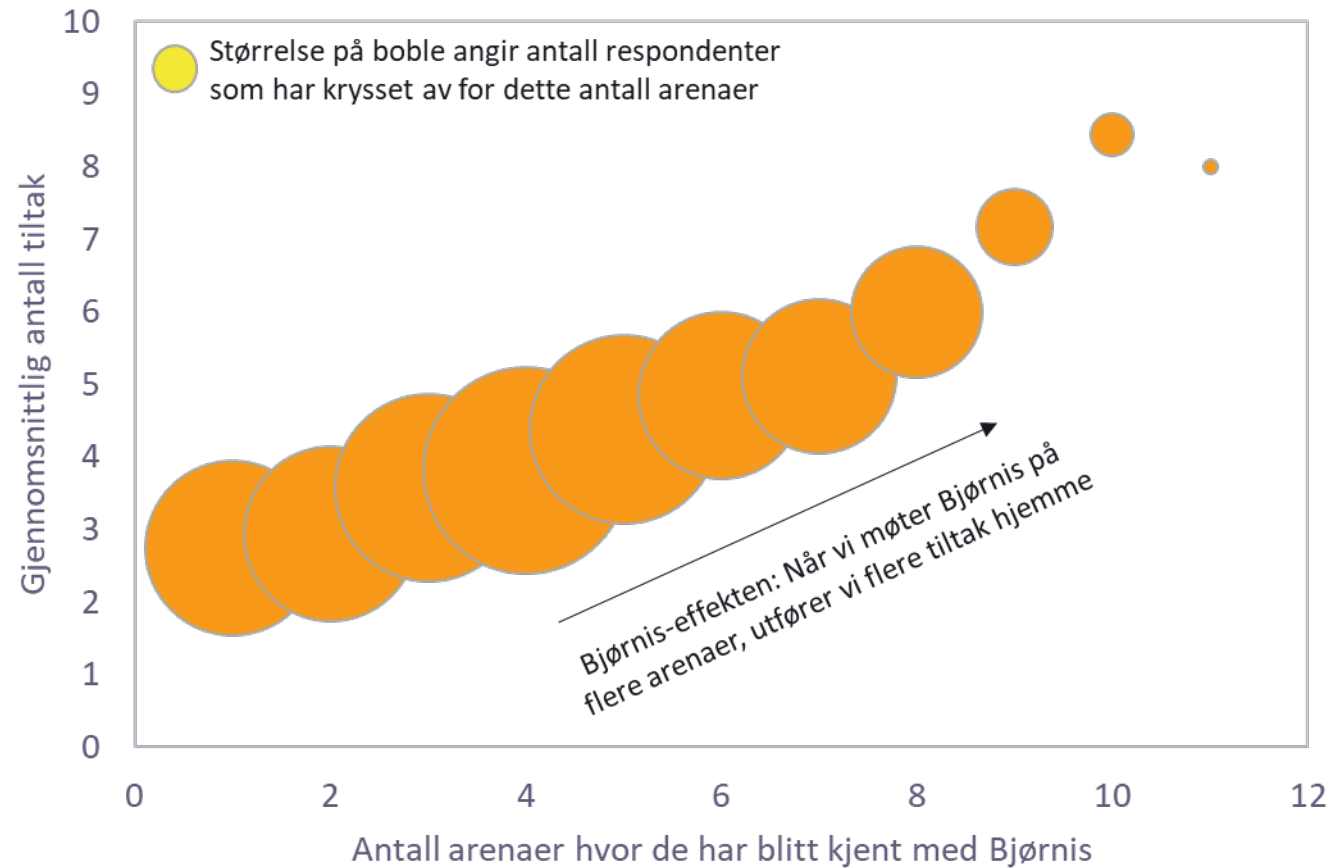
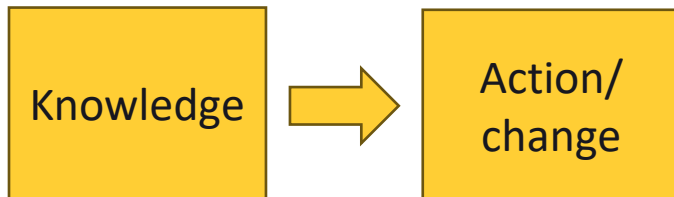


A great many\*  
measures carried out  
throughout Norway  
because of Bjørnis!

\*There are 626,634 households with children in Norway<sup>1</sup>, but our sample is not representative.

## The number of arenas matters

- Meeting Bjørnis in several arenas: implementing more measures
- Repetition helps
- Also the case in other communication of fire safety [1]



Resultatene er beregnet slik: Antall respondenter som har krysset av for kun 1 arena ble summert og antall tiltak utført av denne gruppen ble summert, deretter ble gjennomsnittet beregnet og presentert her. Tilsvarende for antall respondenter som hadde oppgitt to arenaer etc. Resultatene kan være påvirket av tiden hver respondent brukte på å svare, hvis noen for eksempel hadde det travelt, kunne de ha gjort en rask avkryssing på spørsmålene, og kun krysset av for noen få arenaer og noen få tiltak. Størrelsen på datasettet gjør likevel at vi er trygge på at hovedtrekkene er korrekte.

[1] R. F. Mikalsen, J. S. Fjærestad, M. Vold, og I. J. Fjellanger, "Kommunikasjon av brannsikkerhet," Trondheim, Norge, FRIC rapport 4.3-2023.08, 2023.

## The type of arena is not important

- **No clear trend** in which arenas people have ticked off, and the number of measures they have carried out at home.
- No need to focus on just one particular arena.

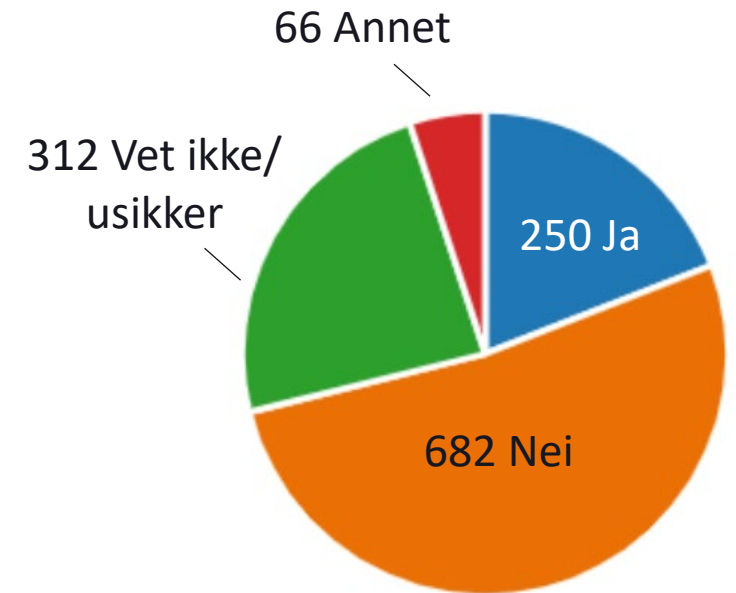
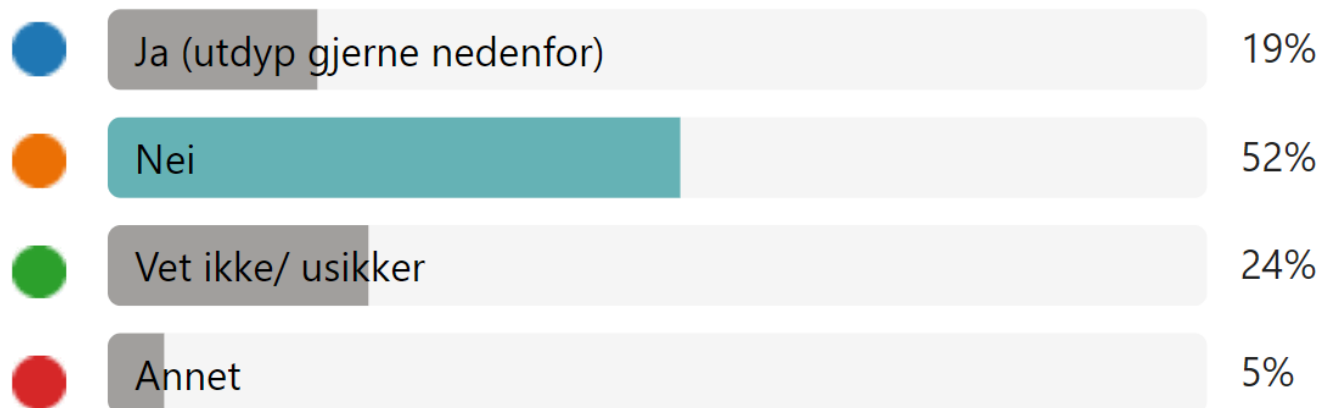
3. Hvor har dere blitt kjent med/sett Bjørnis?

- BarneTV
- Barnebøker
- Lydbøker/ podcast
- Barnehage
- Skole/SFO
- Bjørnis-show/ arrangement
- Åpen dag brannstasjon
- Musikk
- Sosiale media
- YouTube
- Ingen av delene
- Annet

Resultatene er beregnet slik: Antall respondenter som har svart arena A (feks BarneTV) ble summert, og antall tiltak utført av respondentene som hadde krysset av for arena A ble summert. Gjennomsnittet ble sammenlignet med gjennomsnittet for alle respondenter. Det var ingen arenaer som var pekte seg vesentlig ut.

En respondent kan krysse av for én eller flere arenaer, og det er derfor avhengigheter i datasettet som ikke er studert i detalj.

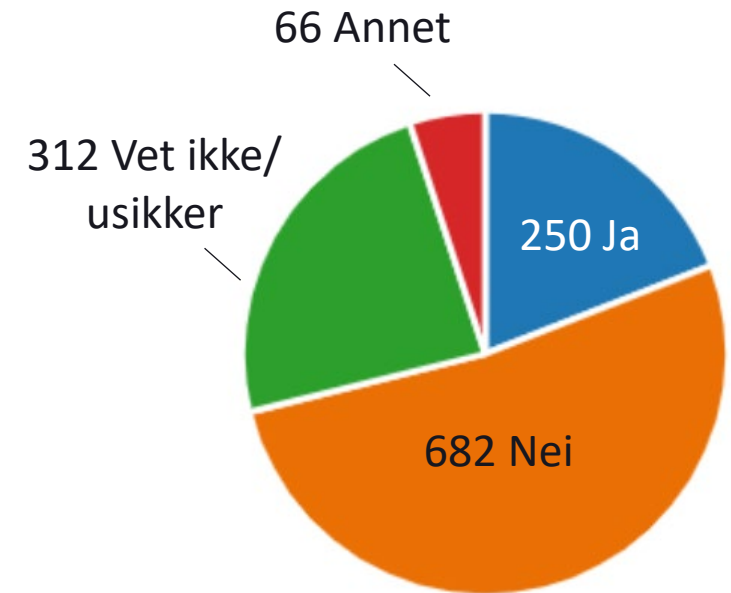
## 7. Have you done anything about the fire safety of someone outside your household (grandparents/others) because of Bjørnis?



## 7. Have you done anything about the fire safety of someone outside your household (grandparents/others) because of Bjørnis?

- Half (52%) have not done anything about fire safety in other households.
- A quarter (24%) are unsure.
- One in five (19%) has done something with other households

Free text answers: many of these are older. Many older people have physical or cognitive risk factors.  
Bjørnis as a preventive measure **can** therefore lead to increased fire safety in people with risk factors → **But room for improvement**



## What do the children say about the grandparents?

Grandpa says he has stopped burning paper in the fireplace, but he still does it, only when the children are not there.

The 4-year-old has taught his grandfather not to make fires with cardboard and paper

Have spoken to grandpa about the charging cable by his bed, it is open (broken) and Bjørnis says *no no no* to that. But Grandpa doesn't listen!

11 year old

Maybe we should have a chat with grandfather about this, after this?

Mum of 11 year old

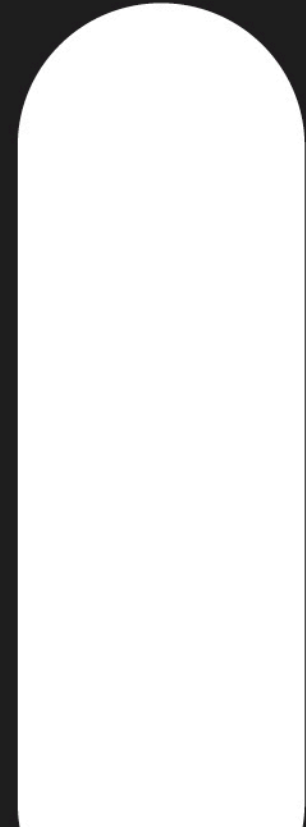
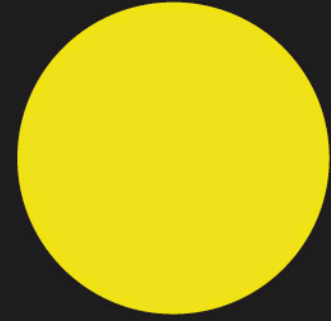


Children and adults had many examples to share.

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# Summary and conclusion





## Summary part 1

- This study has been carried out as part of project 4-3 Fire safety measures for homes in the Fire Research and Innovation Center (FRIC) in collaboration with the Foundation Brannbamsen Bjørnis
- The aim is to document and quantify the preventive effect of Bjørnis for fire safety in Norwegian households
- A survey has been conducted with a total of 1,275 responses among participants at visiting day at fire stations (“åpen brannstasjon”) throughout the country in September 2023



## Summary part 2

The study shows that:

- Both children and adults have learned a lot about fire safety from Bjørnis, and the knowledge has come in handy for those around the child
- The Bjørnis effect: When we meet Bjørnis in several arenas, we improve several things with fire safety at home
- Many Norwegian households with children have improved fire safety because of something they have learned from Bjørnis
  - Each household among the respondents has carried out an average of 4.1 measures: most have talked about fire safety, become familiar with the emergency number and checked smoke alarms
  - Among 1,193 households with children, more than 5,000 measures have been carried out
  - That means a great many measures carried out throughout Norway to improve fire safety in the home because of Bjørnis
- Fire safety has also been improved to some extent outside the child's household
  - One in five of those questioned has taken measures at the home of grandparents or others outside the household
  - Bjørnis as a preventive measure can therefore also work for people with risk factors (elderly with reduced cognitive or physical abilities)

## Conclusion

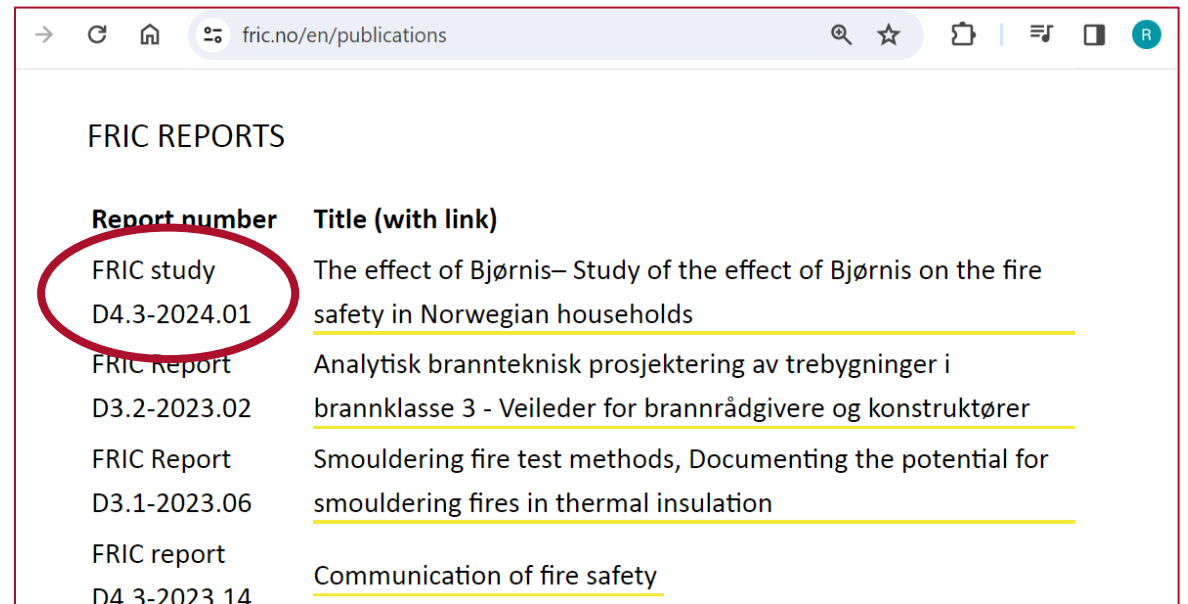
This FRIC study shows that Bjørnis has led to a **clear and documentable** improvement of fire safety in Norwegian homes.



## Thank you:

- Stiftelsen Brannbamsen Bjørnis for initiative and cooperation.
- Petter Grytten Almklov, Professor at the Department of Sociology and Political Science at NTNU for input to the survey.
- The FRIC partners who have participated and given input, especially thanks to DSB for reviewing the final version.
- All fire and rescue services that have given input to the study.
- All fire and rescue services that have taken part in carrying out the survey.
- Respondents who have answered the survey.
- International colleagues who have given input about Bjørnis' colleagues around the world.

## The whole study is located here:



The screenshot shows a web browser window with the URL [fric.no/en/publications](http://fric.no/en/publications). The page displays a list of FRIC reports under the heading "FRIC REPORTS". The first report, "FRIC study D4.3-2024.01", is circled in red. Its title is "The effect of Bjørnis– Study of the effect of Bjørnis on the fire safety in Norwegian households".

Report number	Title (with link)
FRIC study D4.3-2024.01	<a href="#">The effect of Bjørnis– Study of the effect of Bjørnis on the fire safety in Norwegian households</a>
FRIC report D3.2-2023.02	<a href="#">Analytisk brannteknisk prosjektering av trebygninger i brannklasse 3 - Veileder for brannrådgivere og konstruktører</a>
FRIC Report D3.1-2023.06	<a href="#">Smouldering fire test methods, Documenting the potential for smouldering fires in thermal insulation</a>
FRIC report D4.3-2023.14	<a href="#">Communication of fire safety</a>

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