



ADVANIS

for



2024 Electrical Safety Awareness Survey

March 2024



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Introduction and Summary

Advanis has been retained by Cornerstone Hydro Electric Concepts Inc. (CHEC) to conduct a 2024 Electrical Safety Awareness Survey for Centre Wellington Hydro. This survey is a required part of an LDC's Balanced Scorecard and other reporting and regulatory requirements for the Ontario Energy Board (OEB).

The complete group of participating CHEC LDCs is as follows:

1. Centre Wellington Hydro
2. EARTH Power
3. Grimsby Power
4. Lakefront Utilities
5. Lakeland Power Distribution
6. Niagara-on-the-Lake Hydro
7. Orangeville Hydro
8. Ottawa River Power
9. Renfrew Hydro
10. Rideau St. Lawrence Distribution
11. Tillsonburg Hydro
12. Wasaga Distribution
13. Wellington North Power

This report contains data specifically for Centre Wellington Hydro.

Advanis is consulting on behalf of Centre Wellington Hydro to conduct the Electrical Safety Authority's Public Awareness survey for 2024. This survey is a required part of the LDC Balanced Scorecard for reporting to the Ontario Energy Board (OEB).

This survey is comprised of 400 randomly sampled telephone interviews with Ontario residents who are 18 years or older and reside in the Centre Wellington Hydro service territory. The sample frame is stratified by age group and gender within each the territory, and the data is weighted to be representative of the adult population within the territory.

The objective of the survey is to provide an Electrical Safety Awareness (ESA) index score. This is a calculated aggregate value based on the responses of individuals to six core measures in the survey instrument.

Centre Wellington Hydro's 2024 Electrical Safety Awareness Score is 83.9%, which is not statistically different than the 2022 score of 83.7%. CWH's 2024 score is statistically the same as that of 10 other LDCs, higher than that of 1 other LDC, and lower than that of 1.

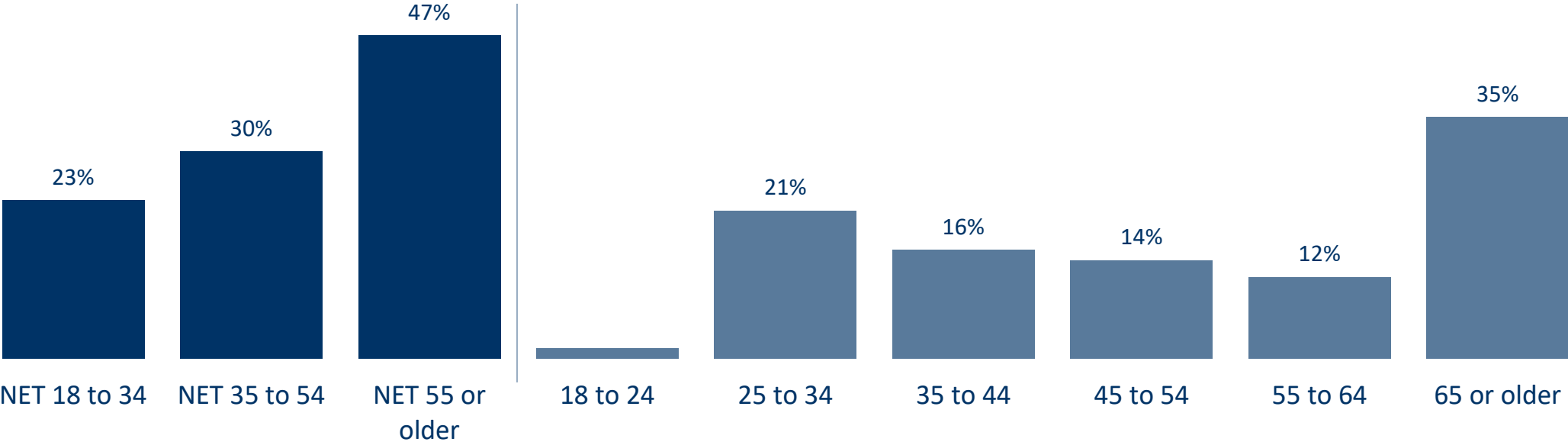
The following report shows detailed results for all core OEB questions for 2024 and compared to previous years.

Question scoring and index methodologies were prescribed by the ESA/Innovative. As such, there has been limited additional analysis provided beyond the direction provided to meet the reporting guidelines. Should you wish further analysis of the data, we would be pleased to discuss.

Customer (i.e., Survey Respondent) Profile

Age of respondent (based on A2, A2a)

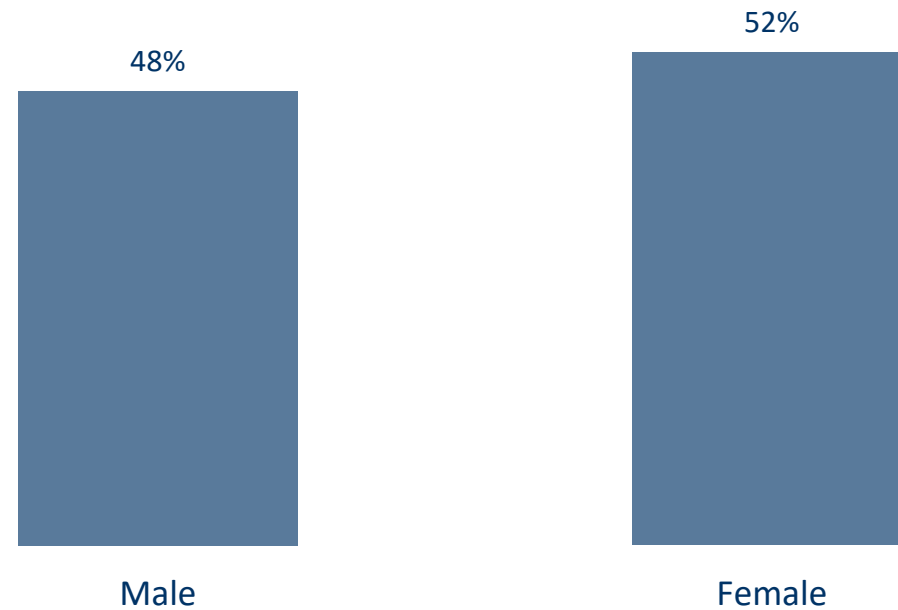
- Data is weighted to population proportions for the “NET” groups below; that is, the NET percentages below match the census data for the LDC.



Weight: Weighting individually by LDC based on gender and age
Filters: LDC: Centre Wellington Hydro, Survey year: 2024

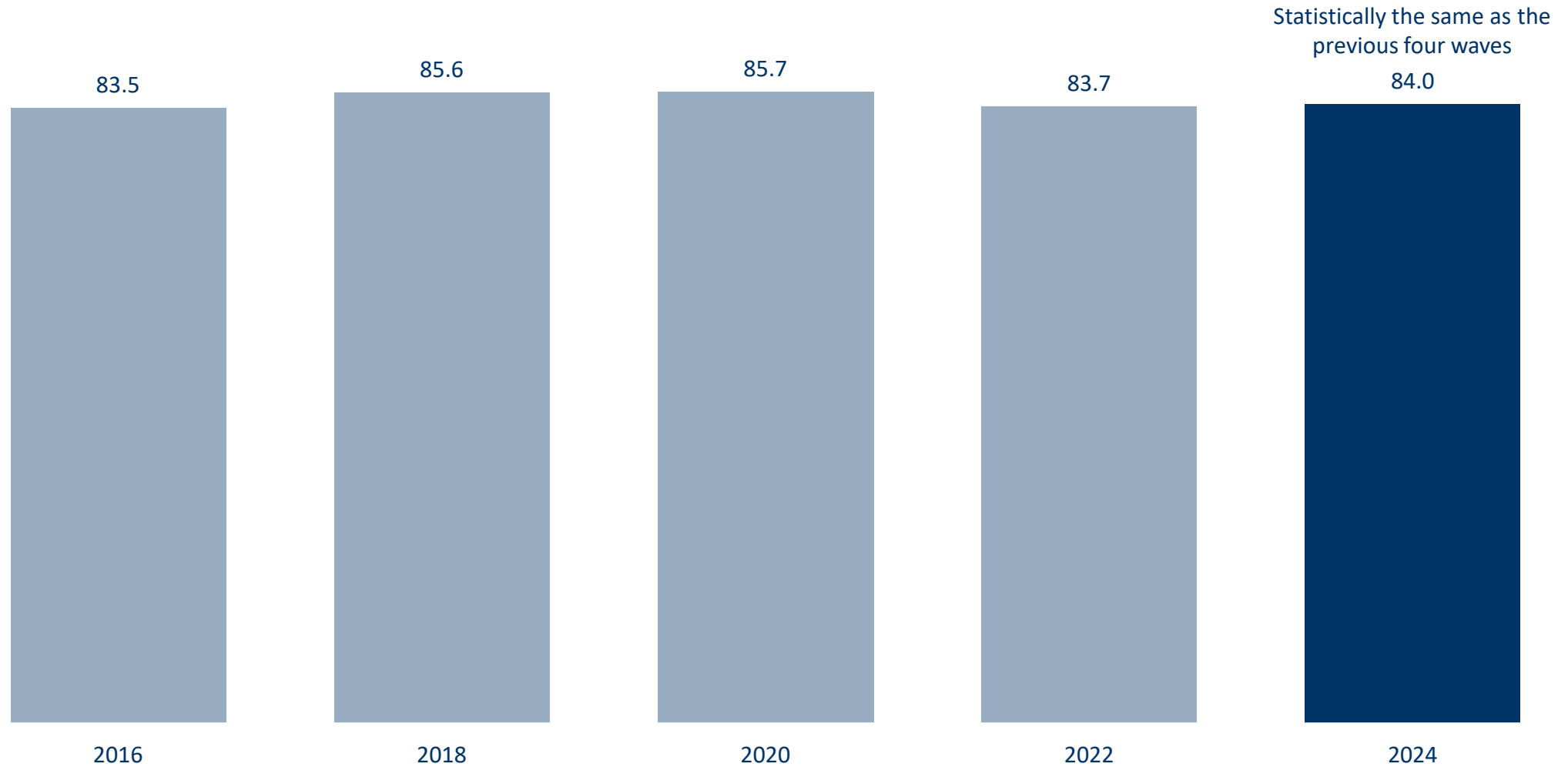
Gender

- Data is weighted to population proportions for gender; that is, the percentages below match the census data for the LDC.



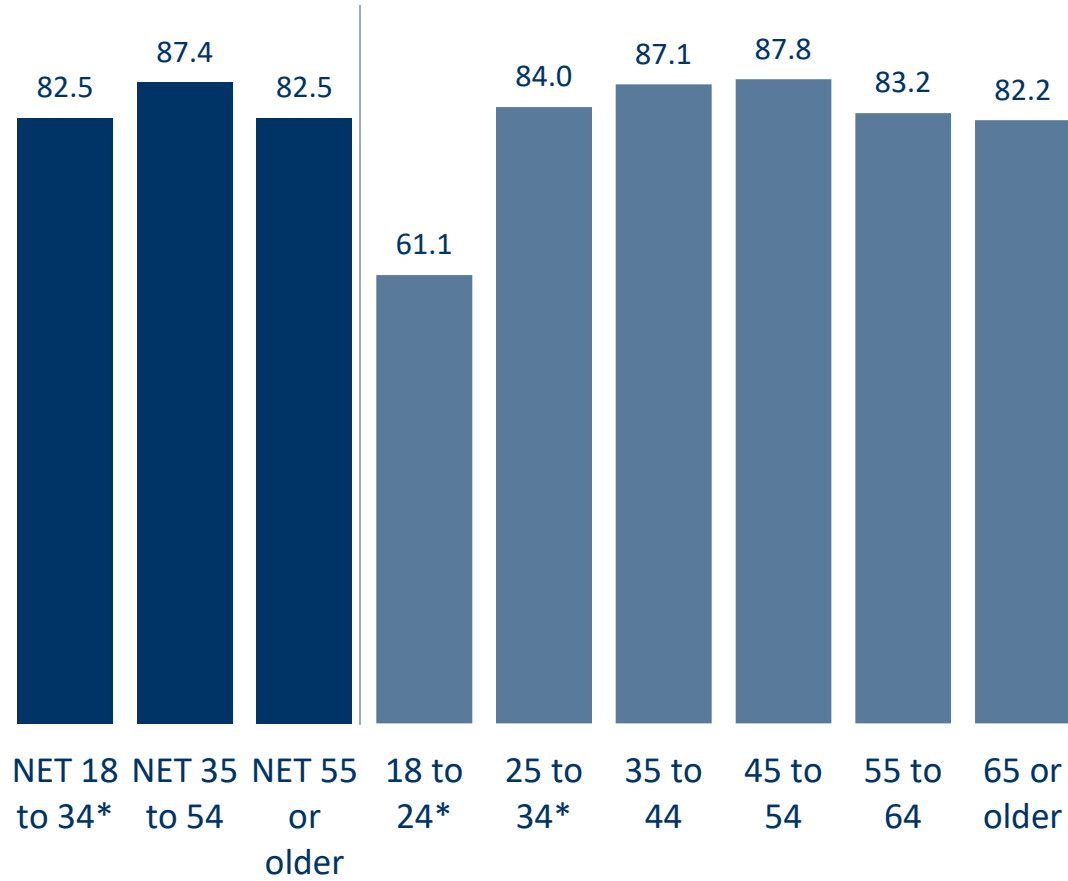
Electrical Safety Awareness Index Score – 2024 Results & Trend

Centre Wellington Hydro's Safety Awareness Index by Year

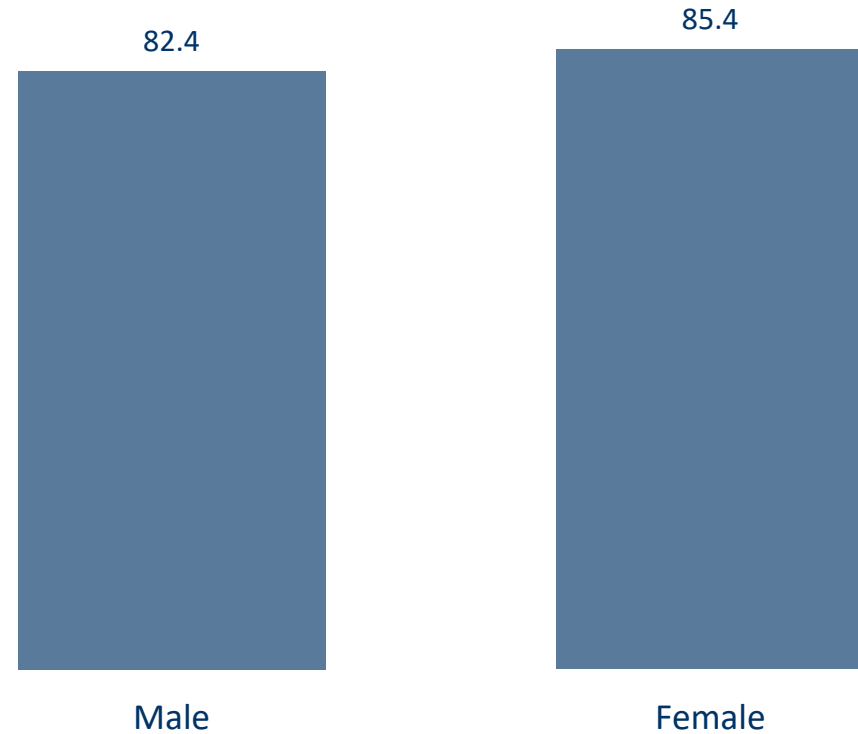


Weight: Weighting individually by LDC based on gender and age
Filters: LDC: Centre Wellington Hydro, Survey year: 2024

ESA Index Scores by Age Category



ESA Index Scores by Gender



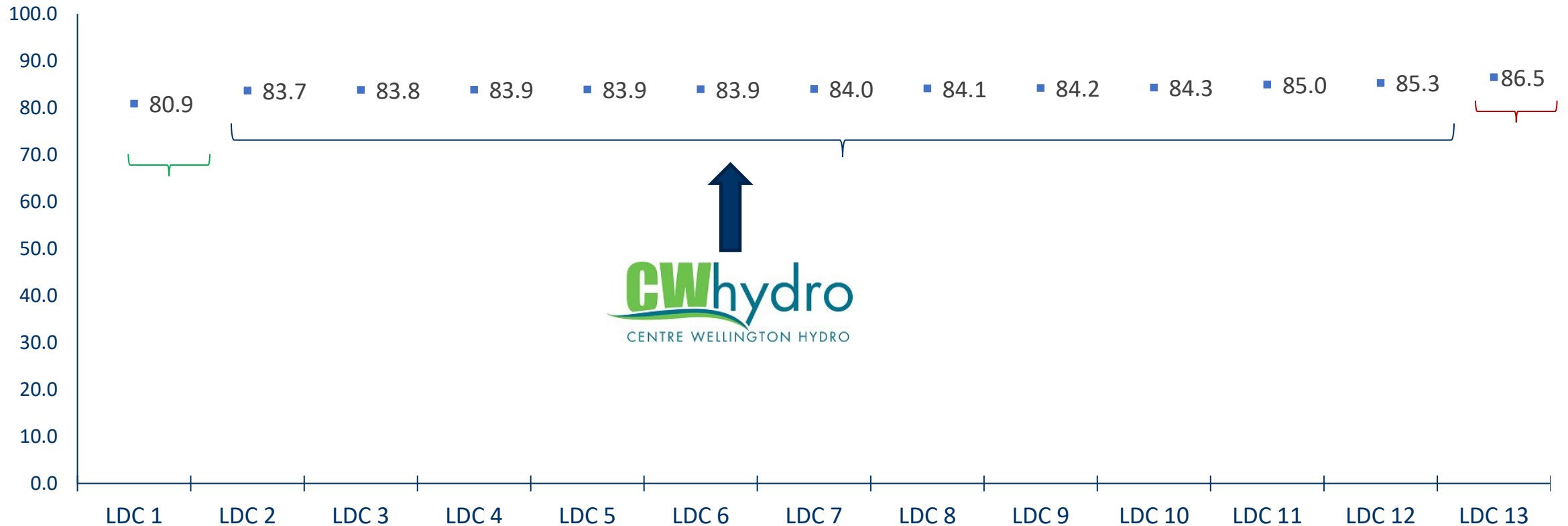
Weight: Weighting individually by LDC based on gender and age

Filters: LDC: Centre Wellington Hydro, Survey year: 2024

*Caution, small base (<=50).

Safety Awareness Index: Compared to Other CHEC Members

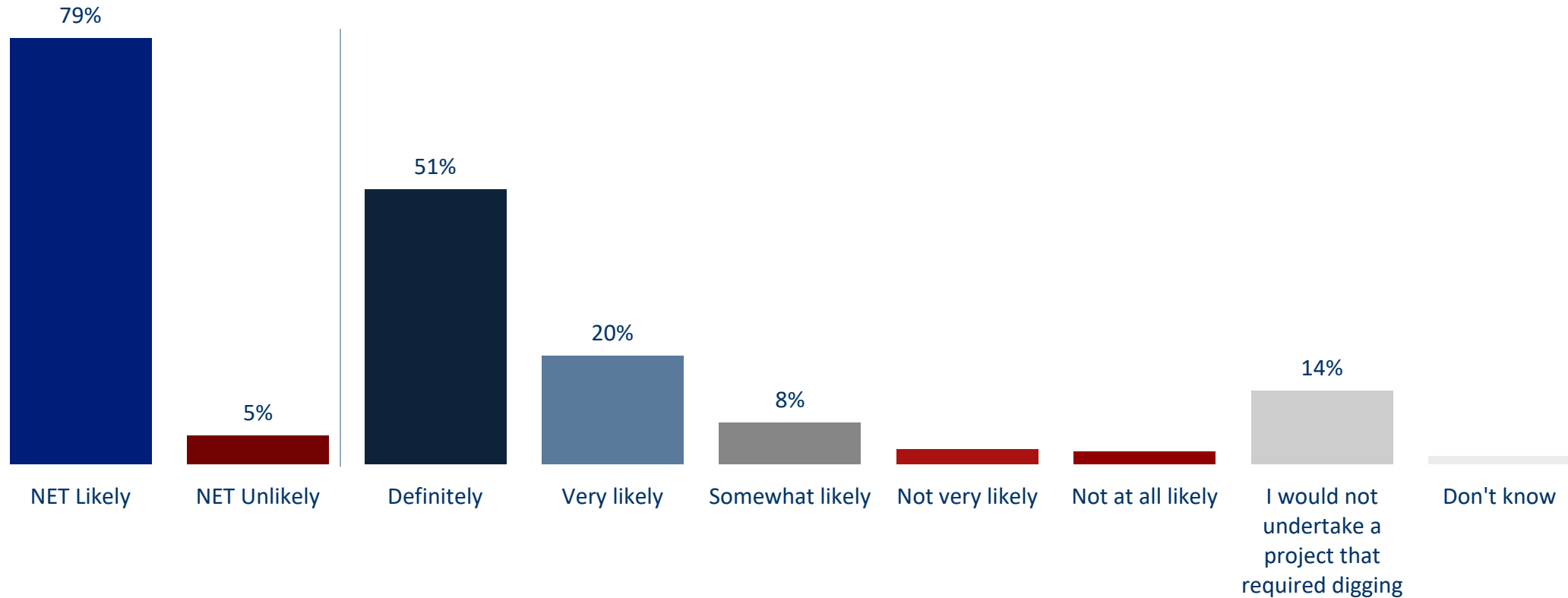
- In 2024, Centre Wellington Hydro's score of 83.9 is statistically the same as that of 10 other LDCs.
- Its score is statistically **higher** than that of 1 other LDC and **lower** than that of 1 other LDC.



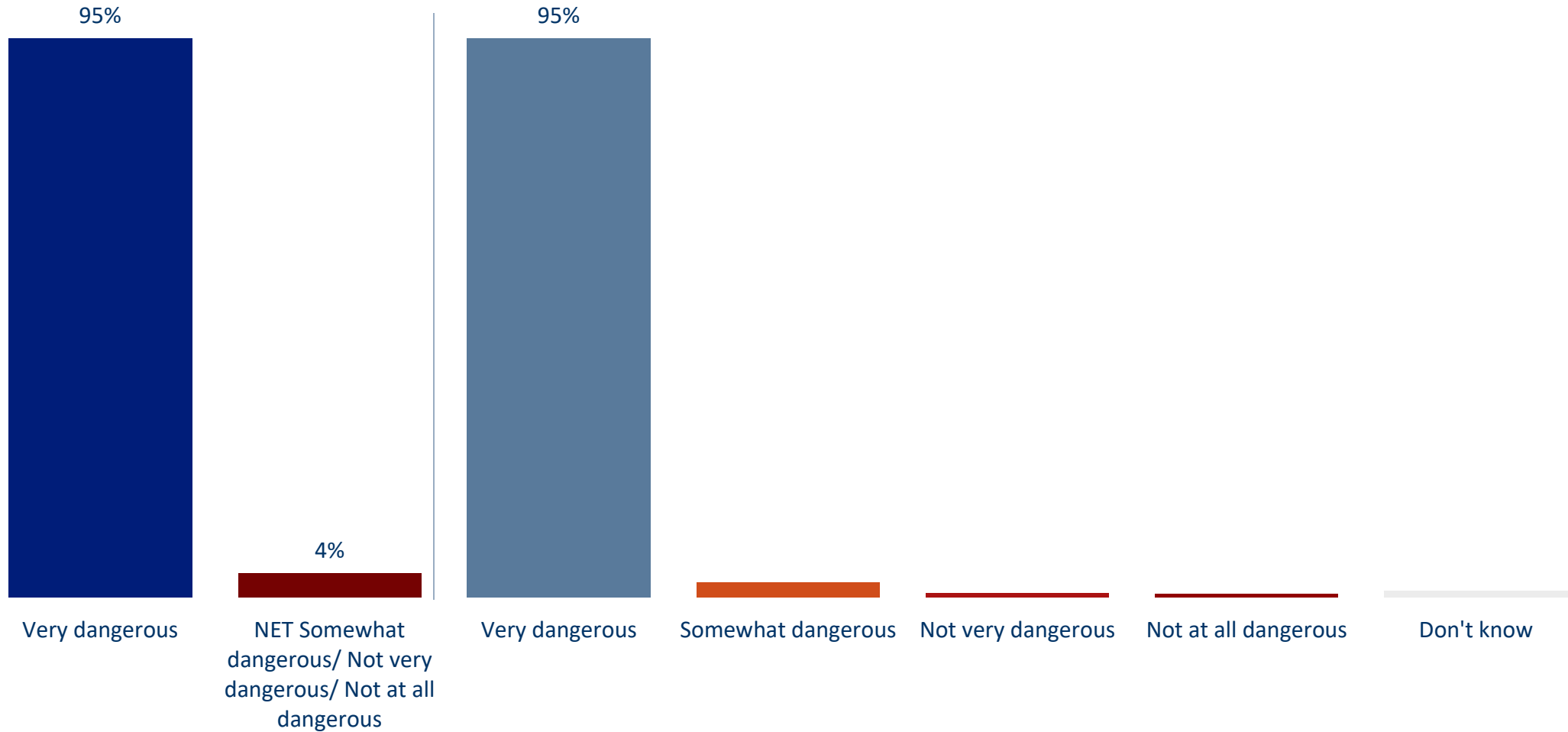
Weight: Weighting individually by LDC based on gender and age
Filters: Survey year: 2024

Core (OEB) Survey Questions – 2024 Results

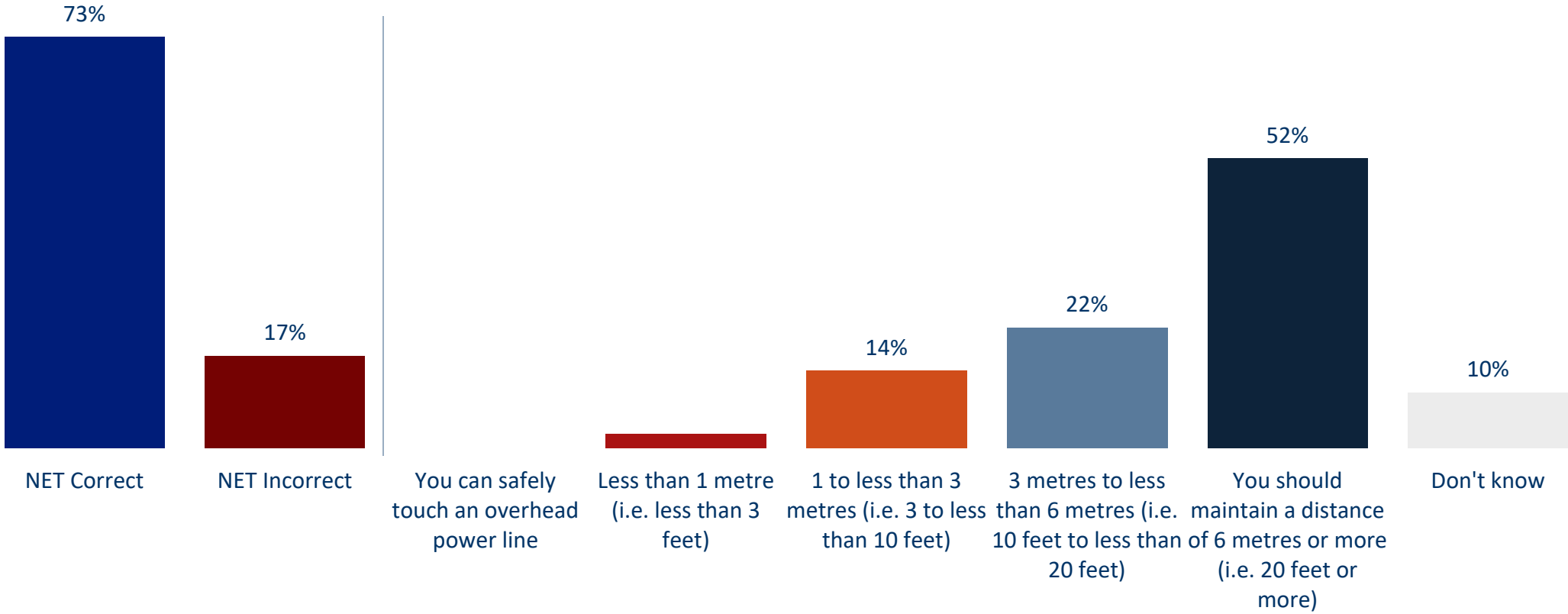
If you were to undertake a household project that required digging – such as planting a tree or building a deck – how likely are you to call to locate electrical or other underground lines?



How dangerous do you believe it is to touch - with your body or any object - an overhead power line?



When undertaking outdoor activities, how closely do you believe you can safely come to an overhead power line with your body or an object?



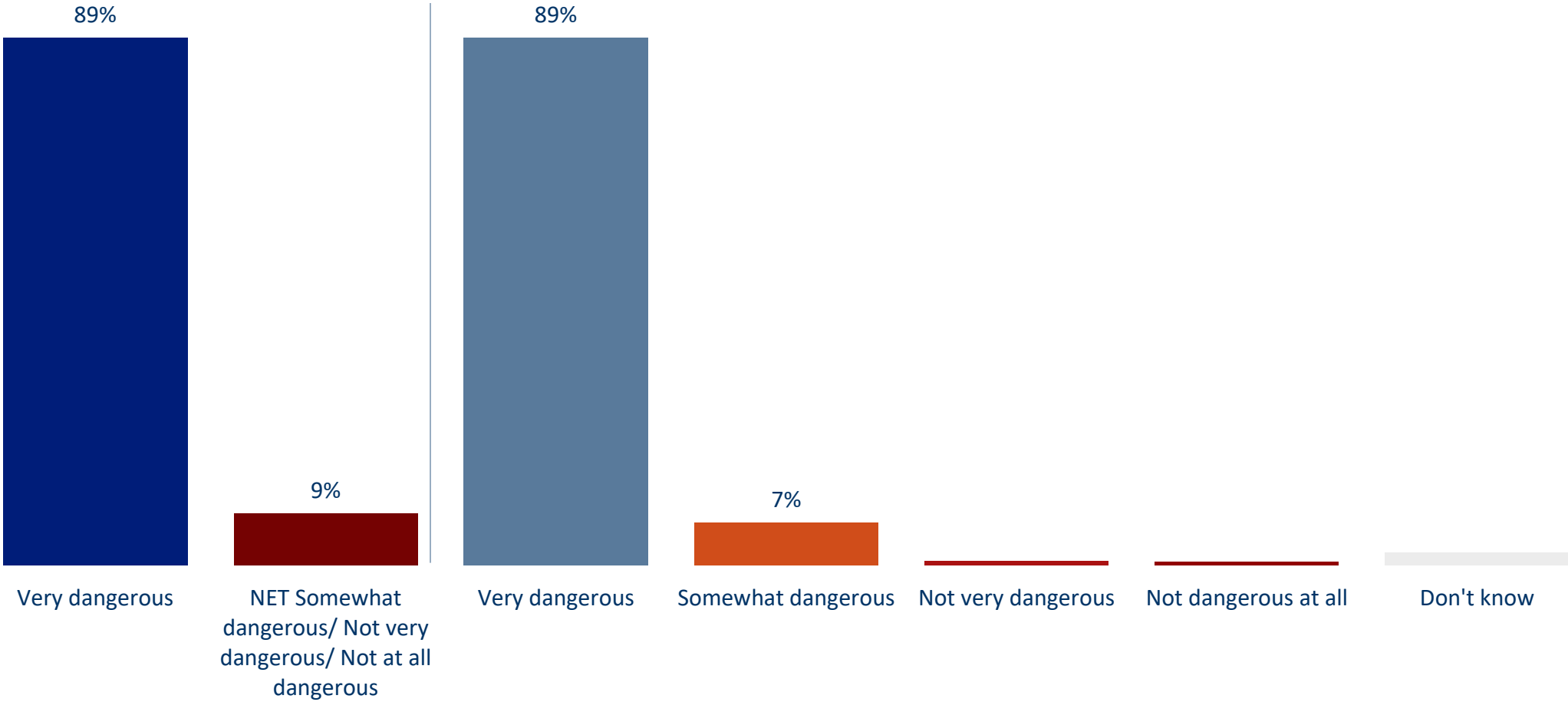
When undertaking outdoor activities, how closely do you believe you can safely come to an overhead power line with your body or an object?

Weight: Weighting individually by LDC based on gender and age

Filters: LDC: Centre Wellington Hydro, Survey year: 2024

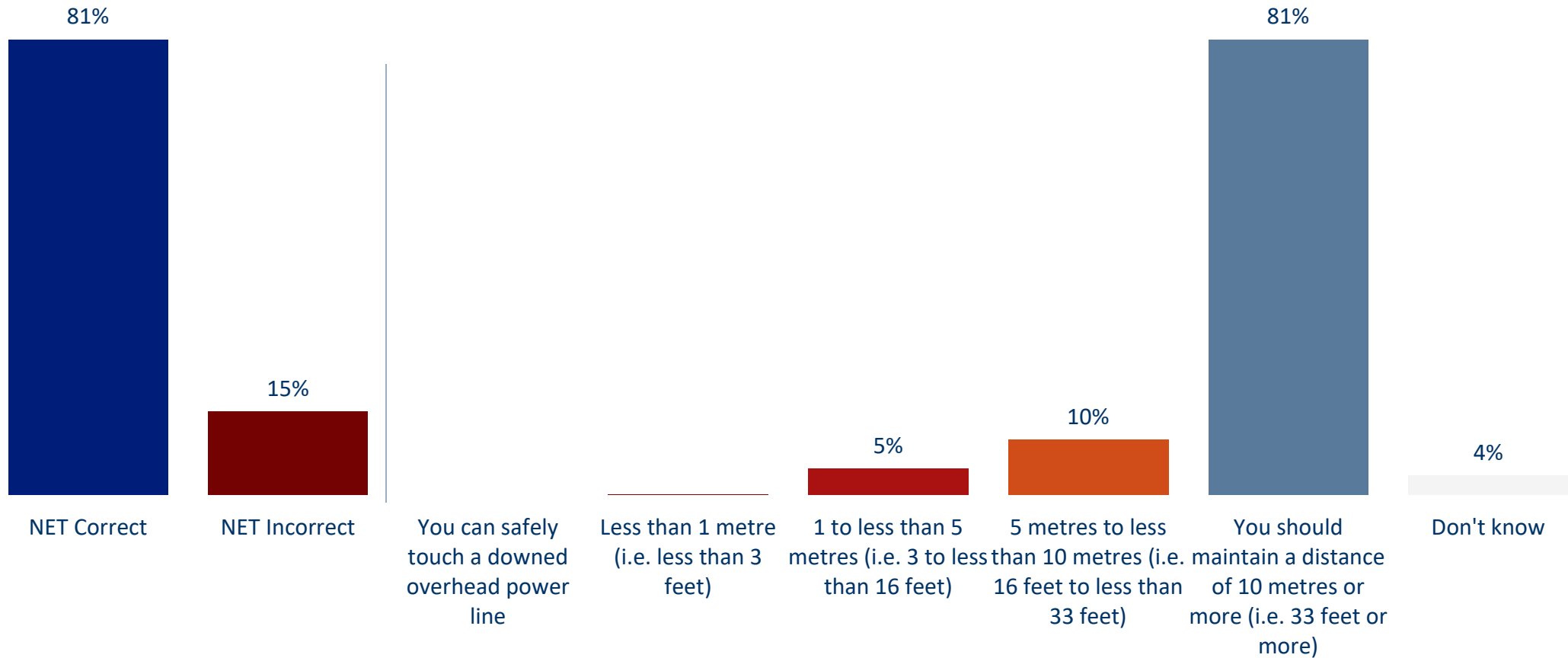
Base Size: 400

How dangerous do you believe it is to try to open, remove contents, or touch the equipment inside locked electrical utility equipment?



Weight: Weighting individually by LDC based on gender and age
Filters: LDC: Centre Wellington Hydro, Survey year: 2024
Base Size: 400

How closely do you believe you can safely come to a downed overhead power line, such as a downed line caused by a storm or accident?



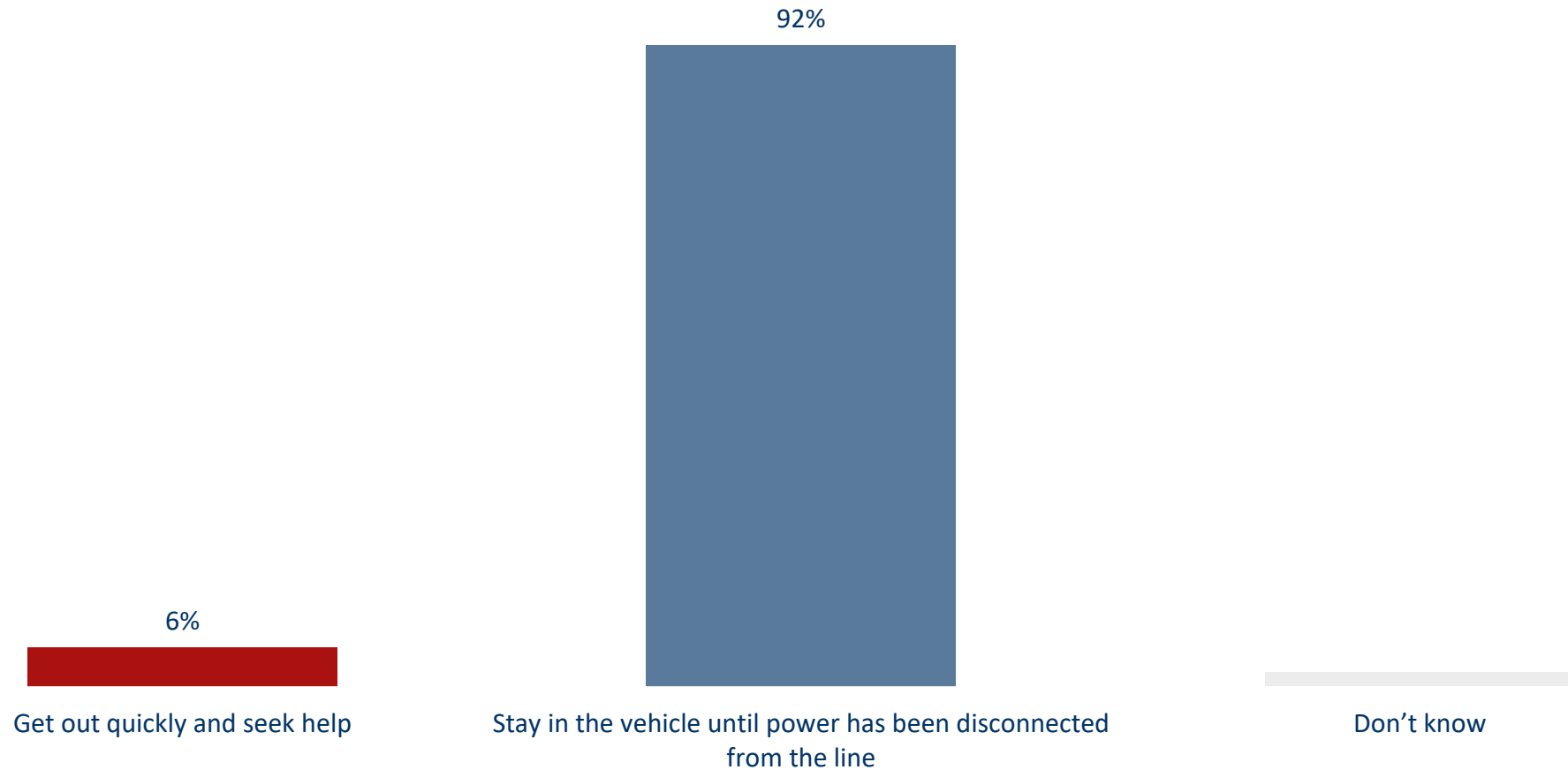
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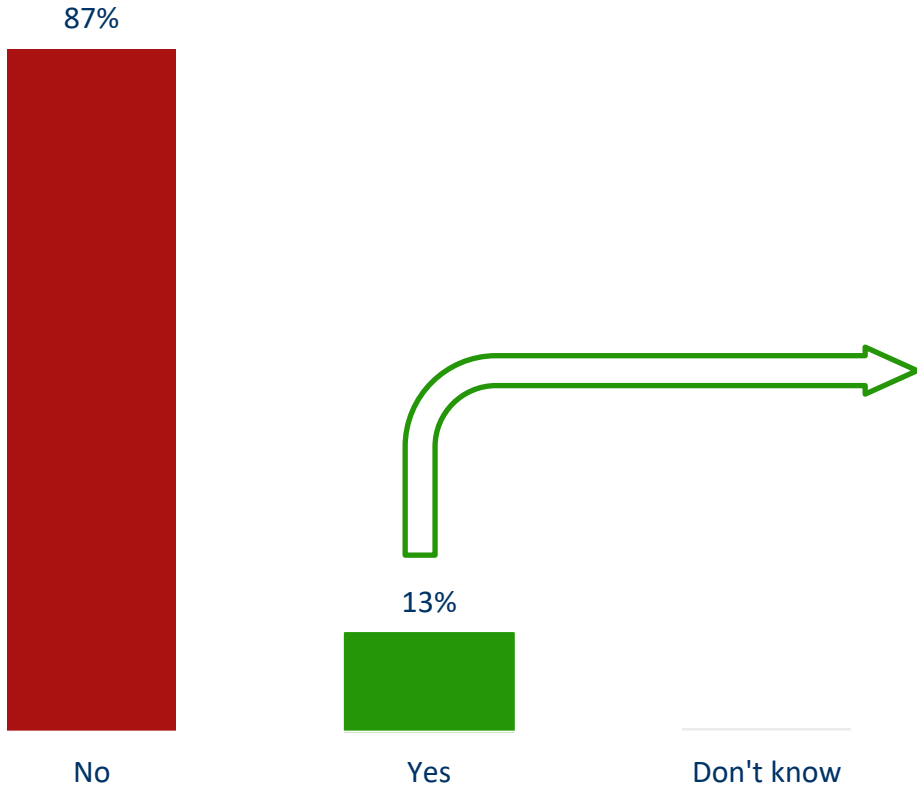
Filters: LDC: Centre Wellington Hydro, Survey year: 2024

Base Size: 400

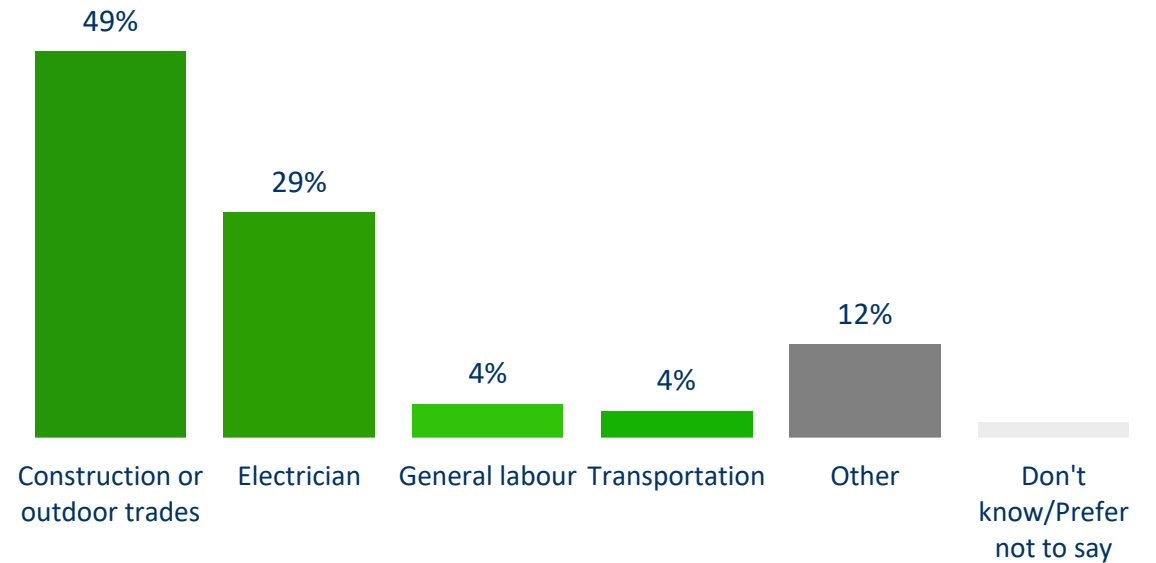
If you were in a vehicle – such as a car, bus, or truck – and an overhead power line came down on top of it, which of the following options do you believe is generally safer?



Does your job regularly cause you to come close to energized power lines?

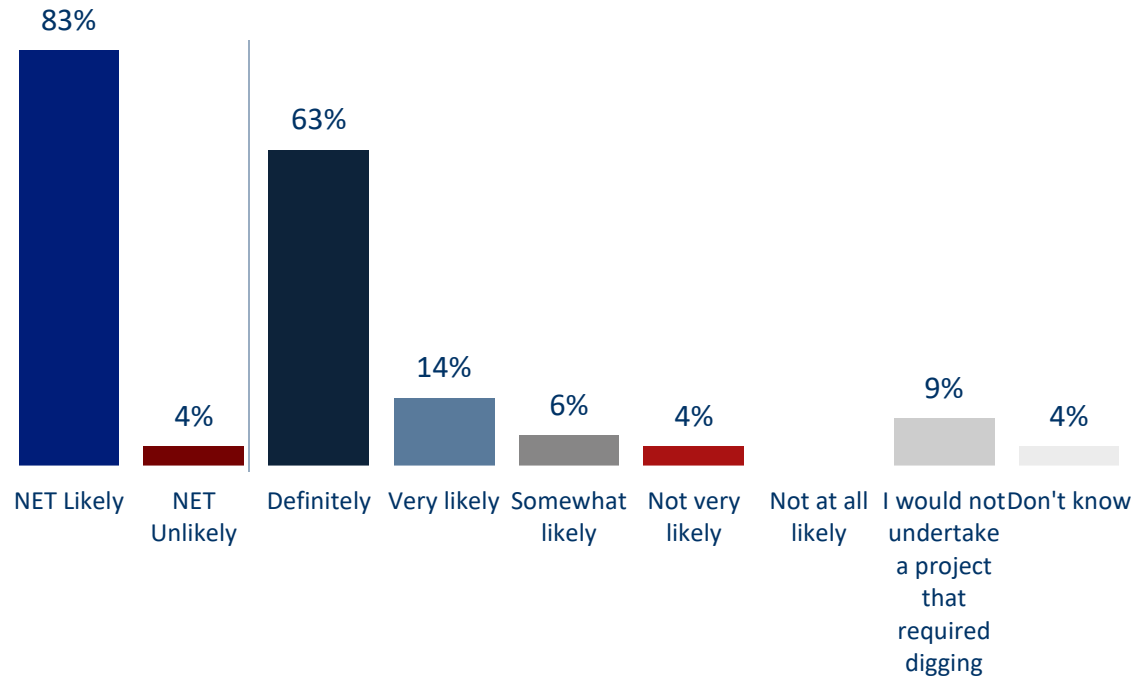


*Do you work in any of the following fields?
[Among those with a job featuring close contact to energized power lines]*

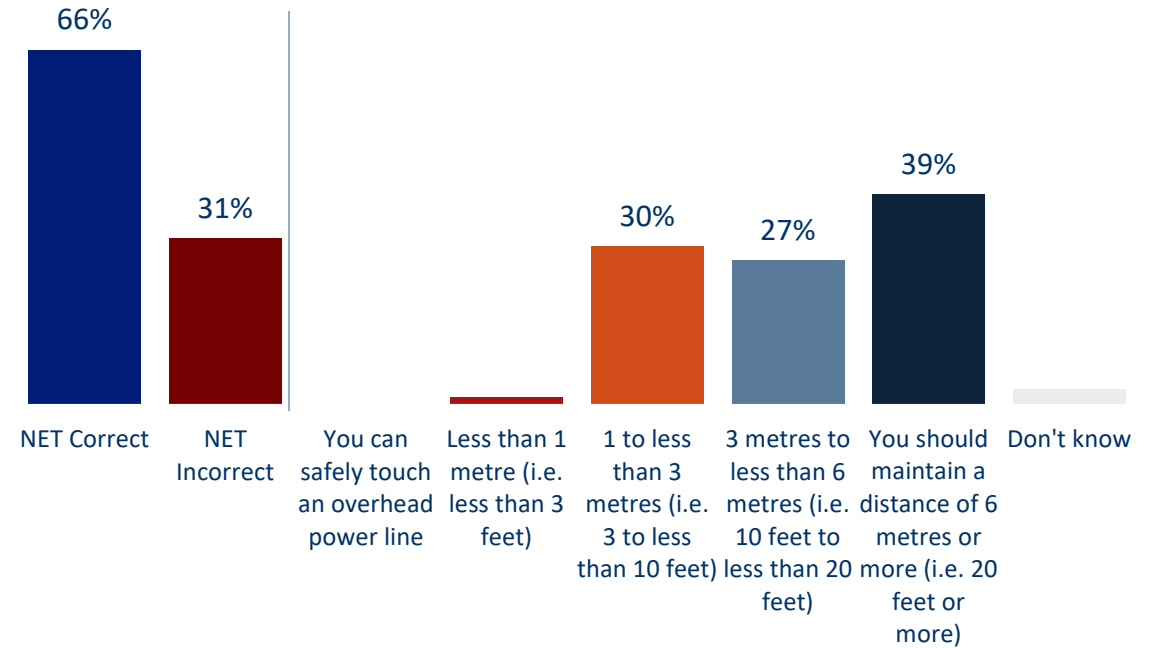


All of these charts focus on those whose job regularly causes them to come close to energized power lines (i.e., 13% of people surveyed, as shown on previous slide)

If you were to undertake a household project that required digging – such as planting a tree or building a deck – how likely are you to call to locate electrical or other underground lines?



When undertaking outdoor activities, how closely do you believe you can safely come to an overhead power line with your body or an object?



If you were to undertake a household project that required digging – such as planting a tree or building a deck – how likely are you to call to locate electrical or other underground lines?

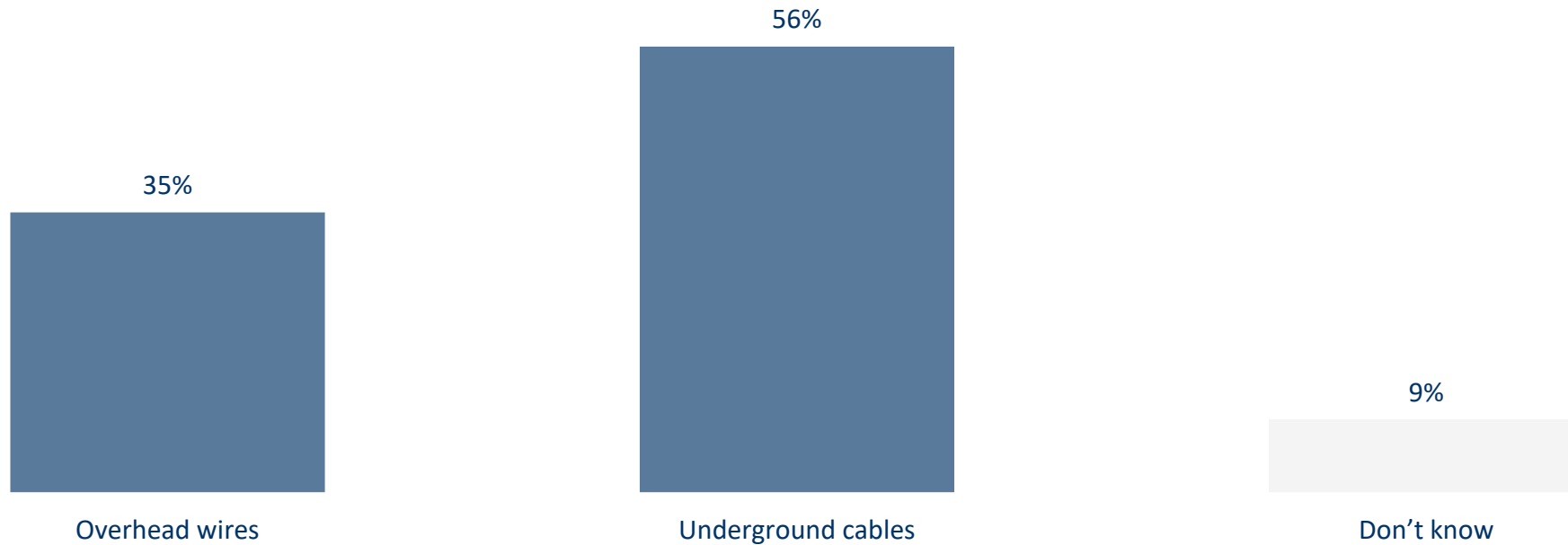
Weight: Weighting individually by LDC based on gender and age

Filters: LDC: Centre Wellington Hydro, Survey year: 2024, Does your job regularly cause you to come close to energized power lines?: Yes

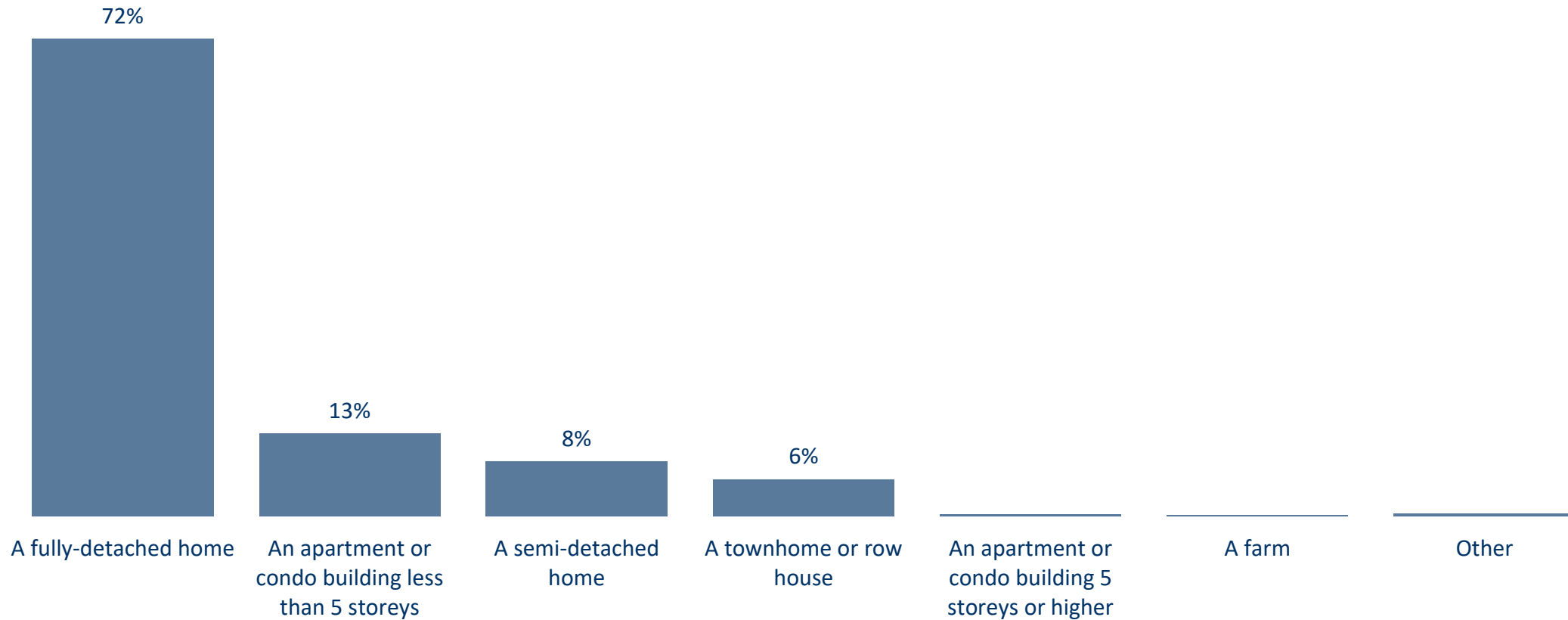
Base Size: 36

*Caution, small base (<=50).

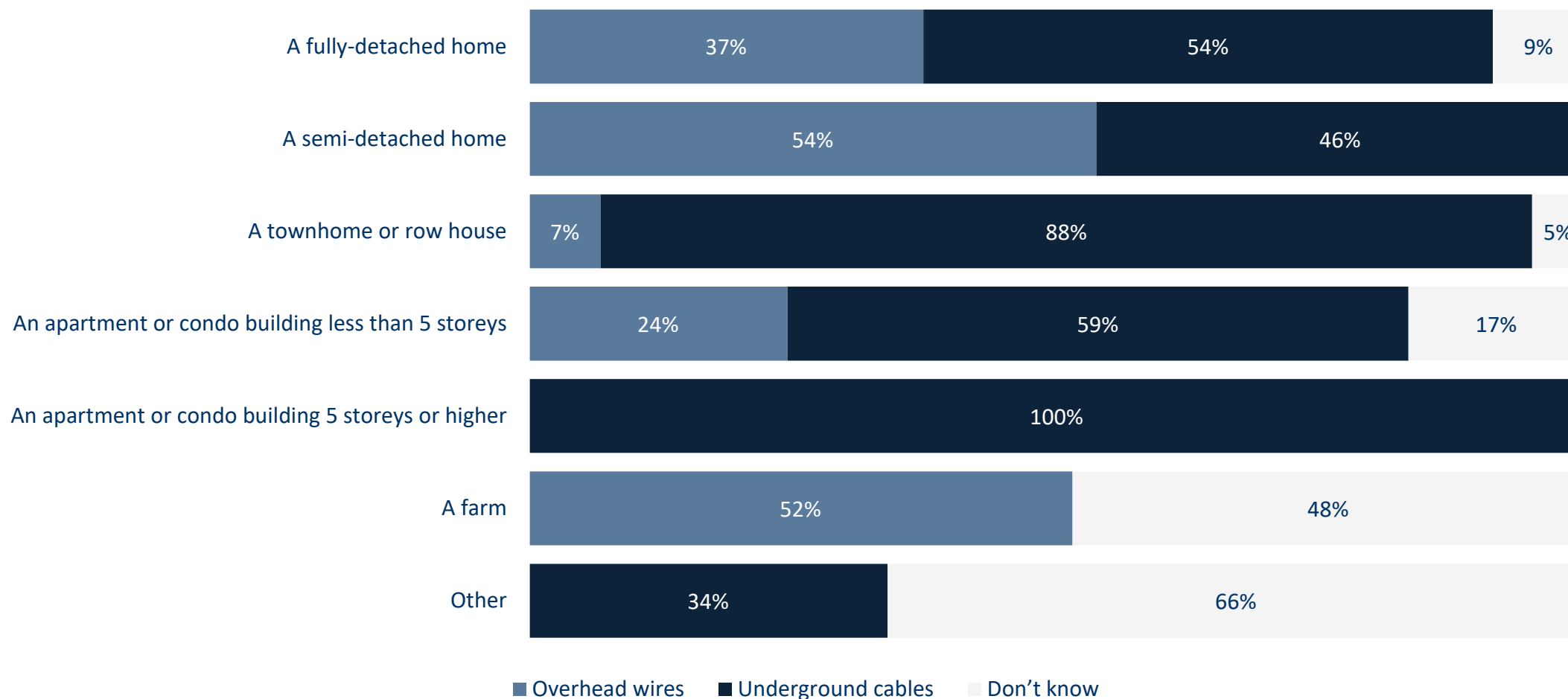
Does your primary residence receive electricity through overhead wires or underground cables?



How would you describe your primary residence?



Does your primary residence receive electricity through overhead wires or underground cables?



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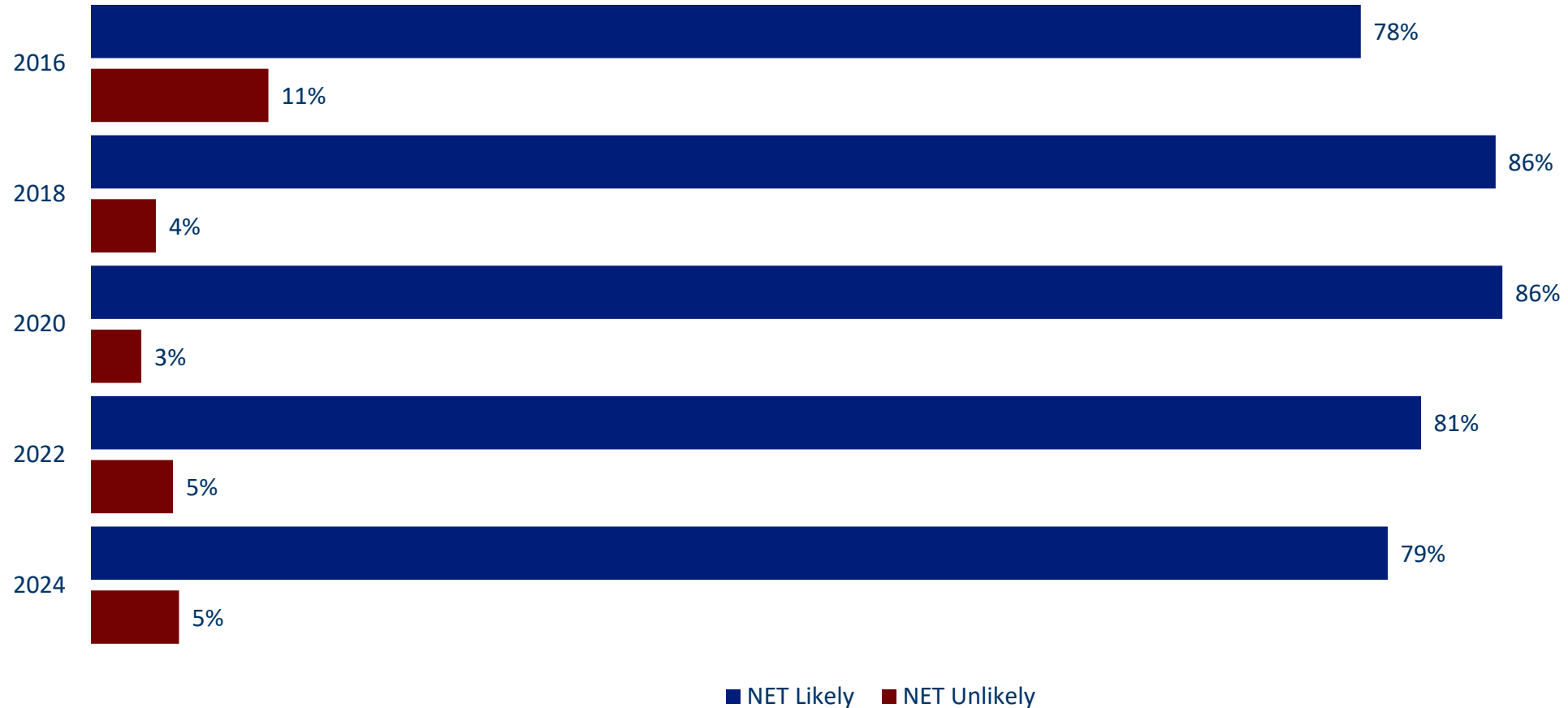
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Filters: LDC: Centre Wellington Hydro, Survey year: 2024

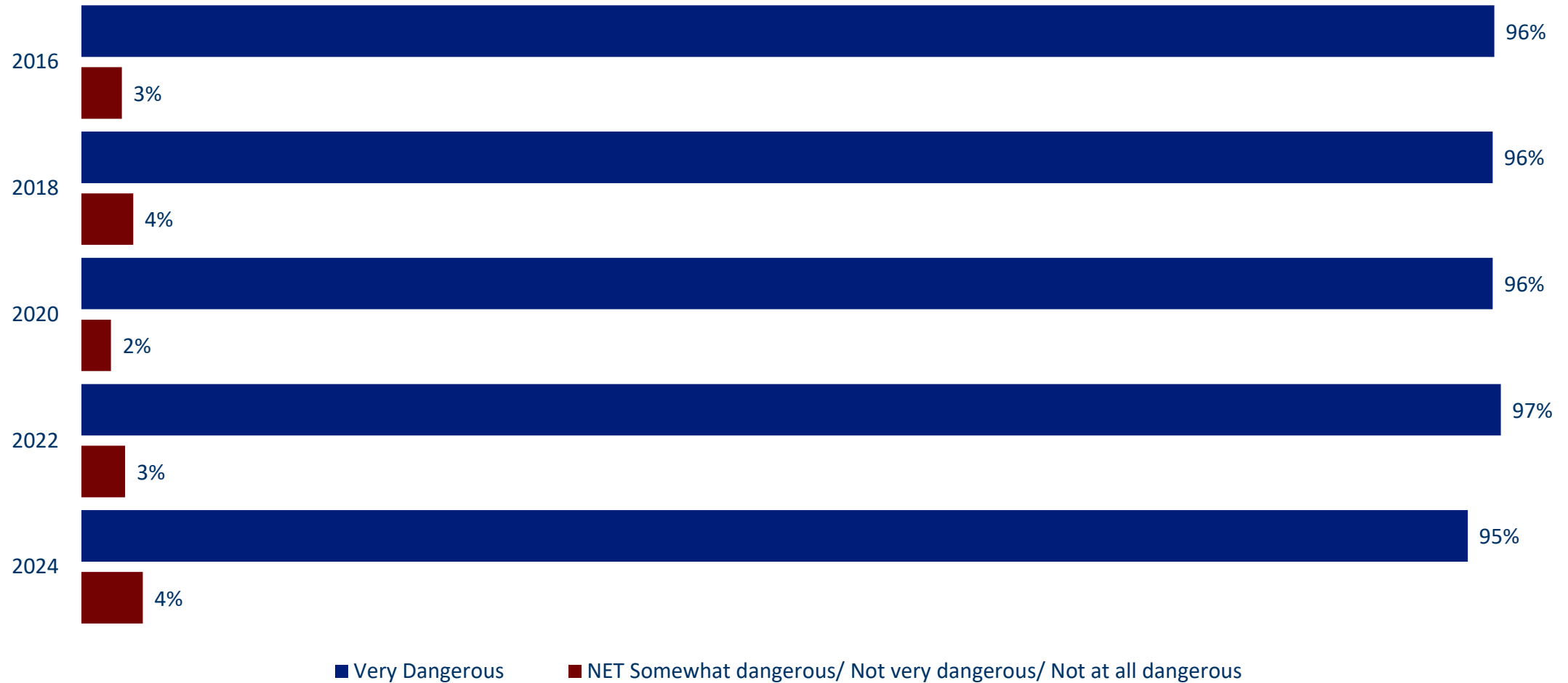
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Core (OEB) Survey Questions – Trend over Time

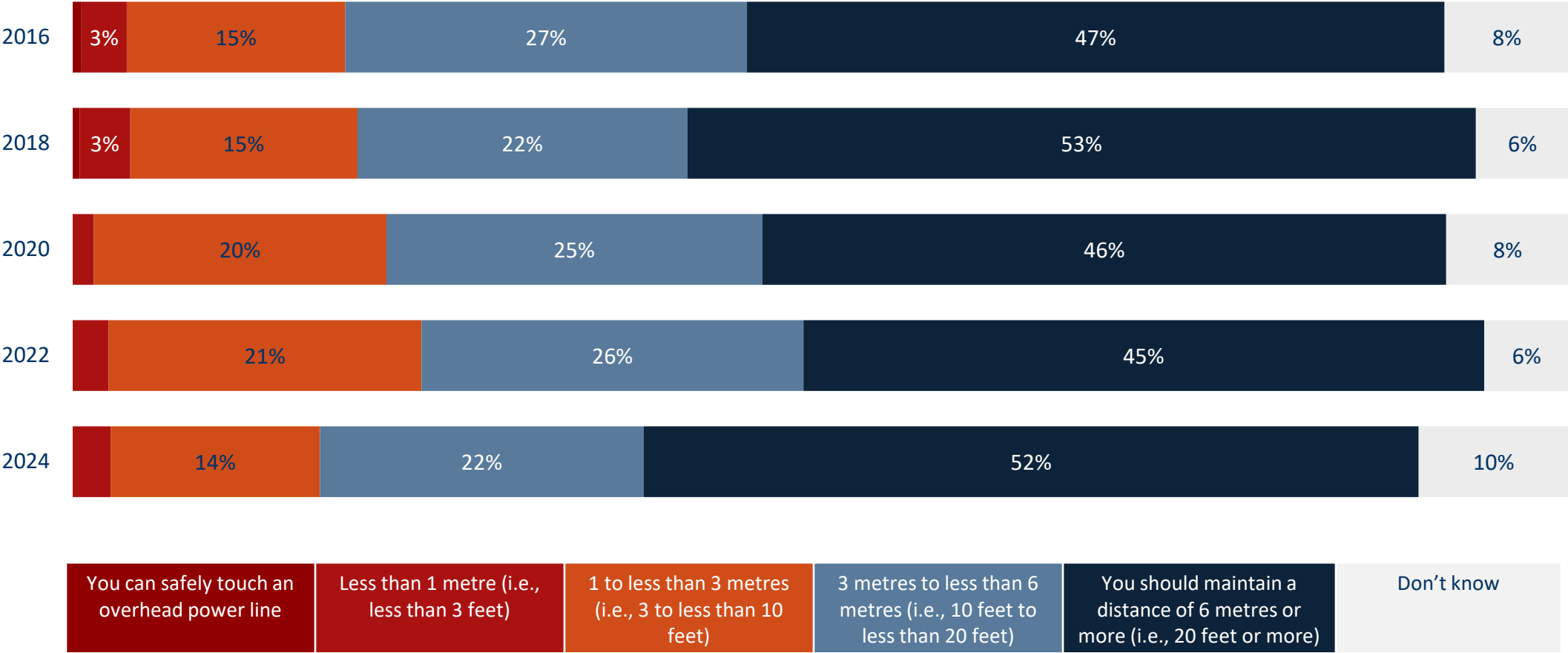
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When undertaking outdoor activities, how closely do you believe you can safely come to an overhead power line with your body or an object?

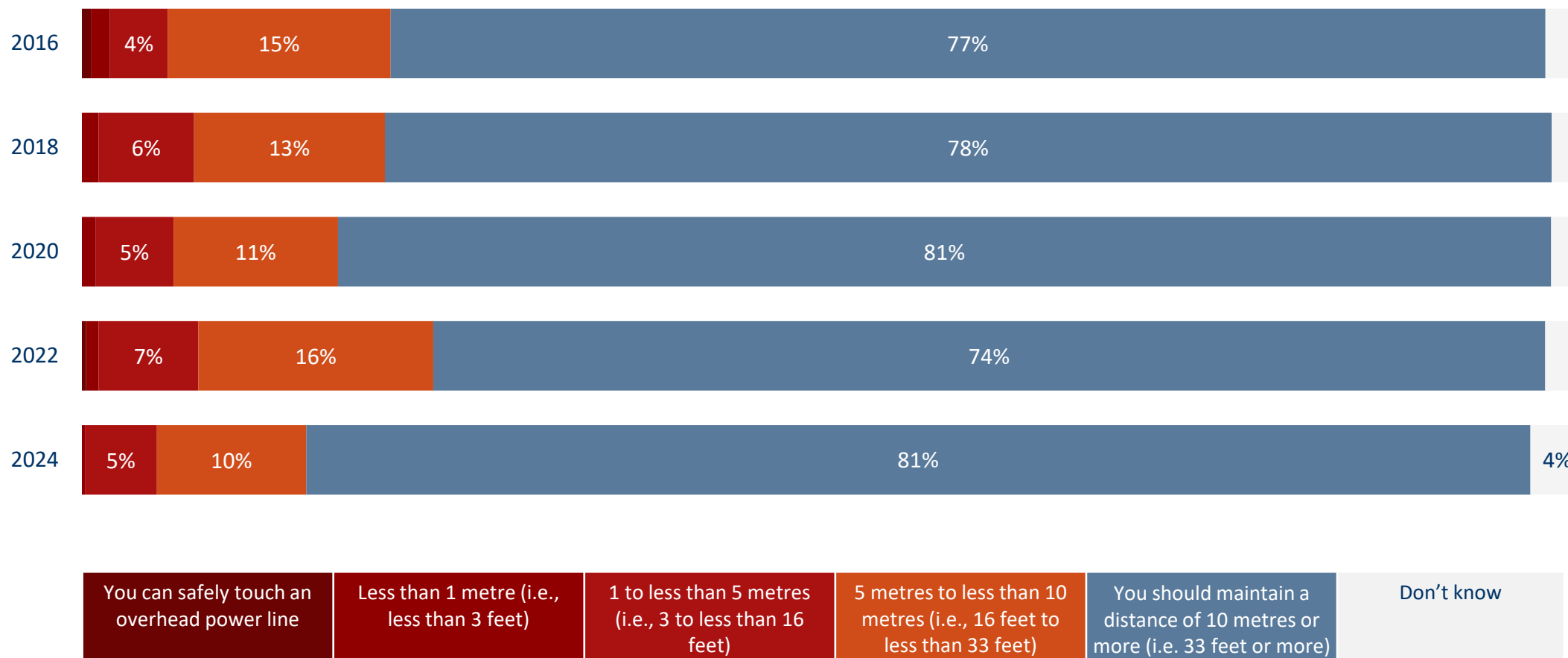


Weight: Weighting individually by LDC based on gender and age
 Filters: LDC: Centre Wellington Hydro

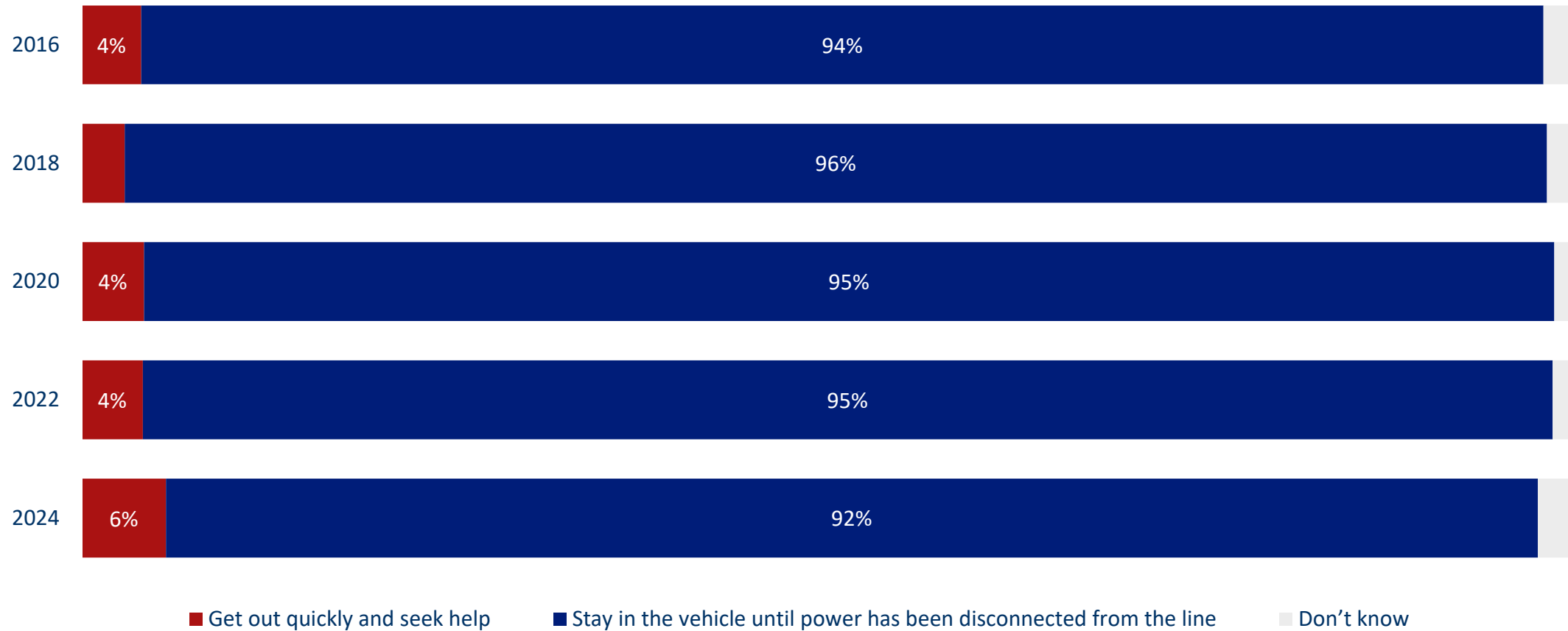
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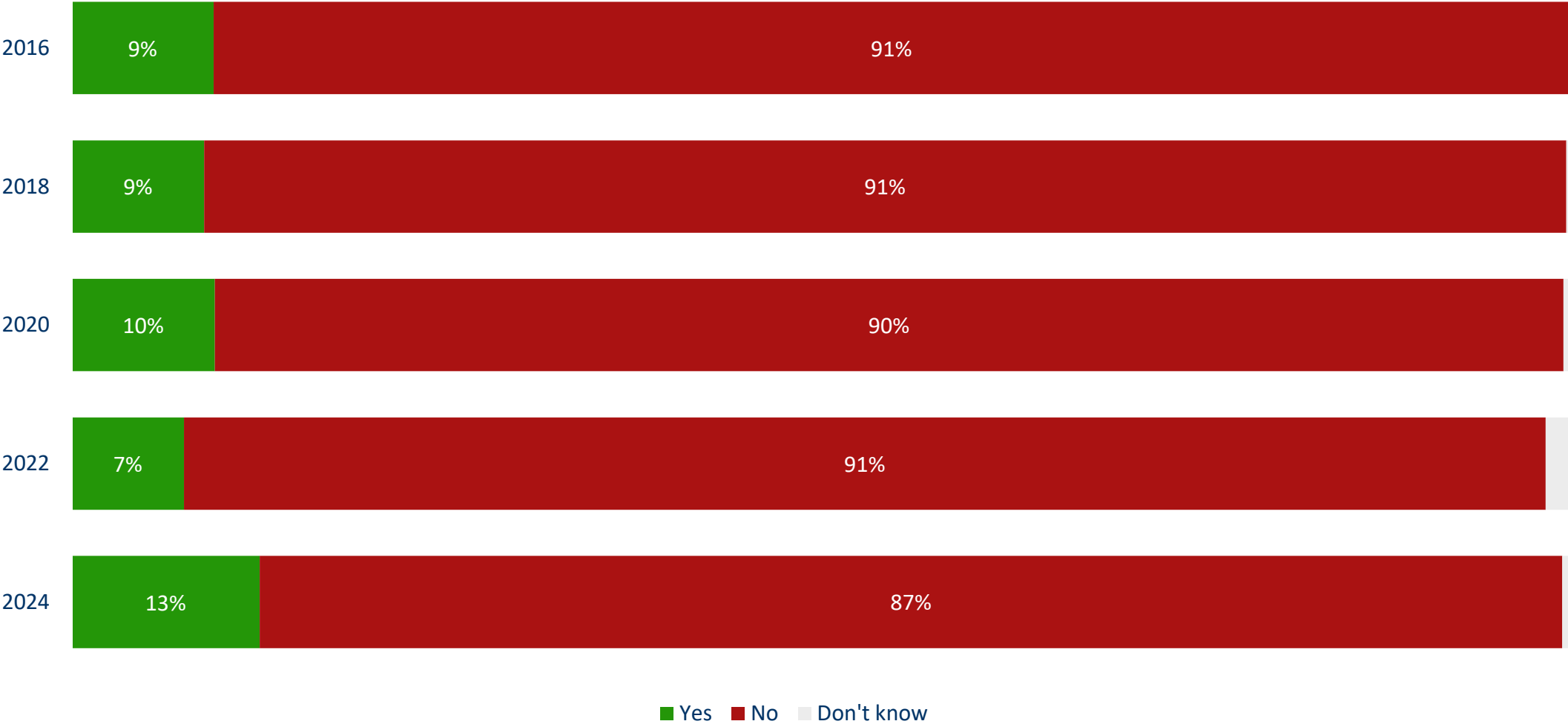
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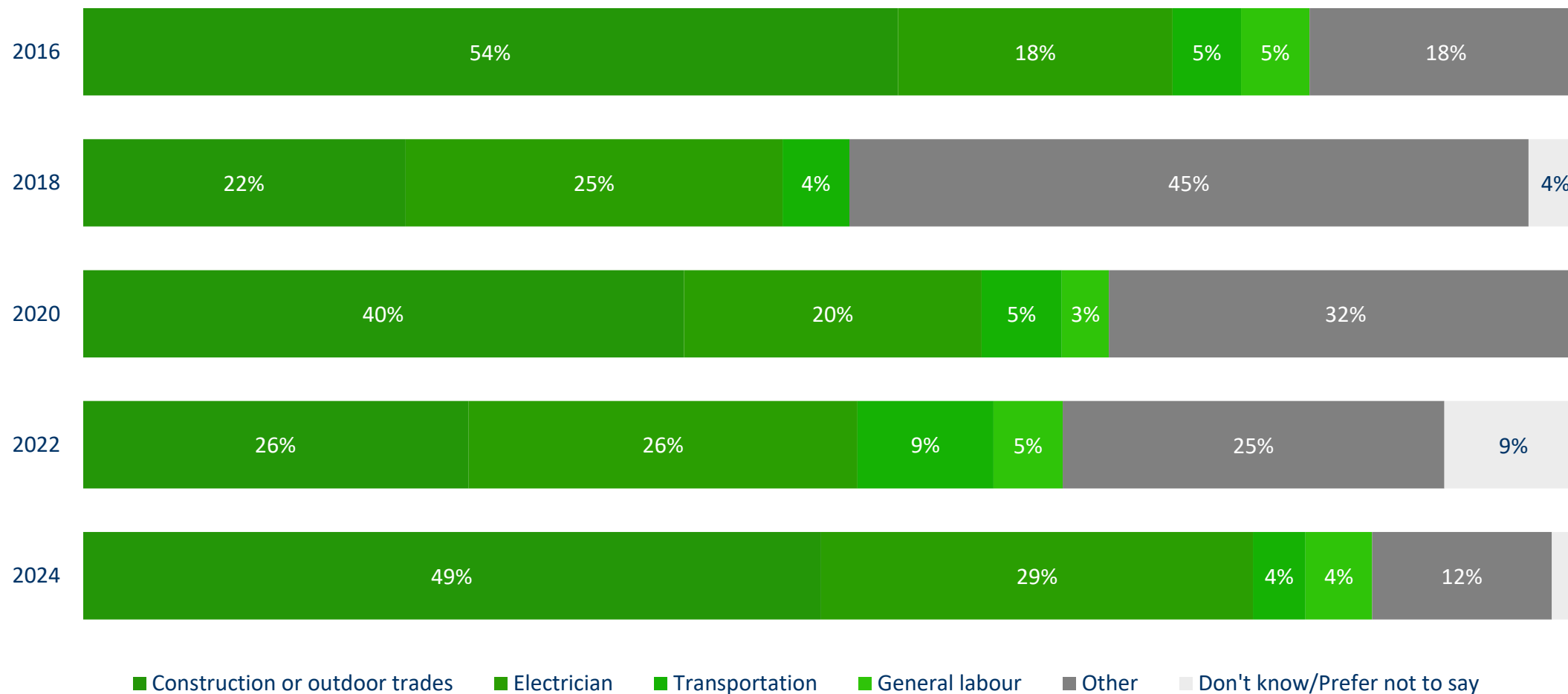


Does your job regularly cause you to come close to energized power lines?



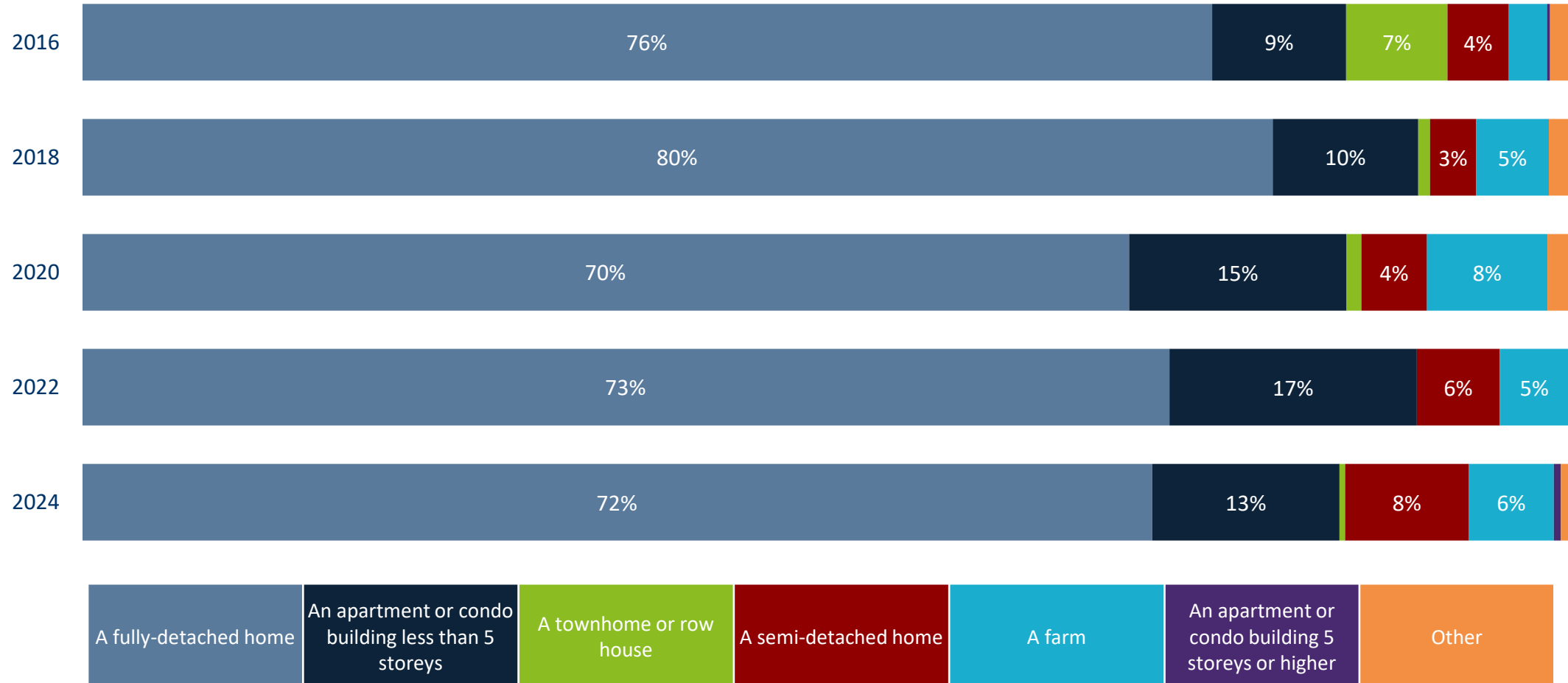
Weight: Weighting individually by LDC based on gender and age
Filters: LDC: Centre Wellington Hydro

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[Among those with a job featuring close contact to energized power lines]*



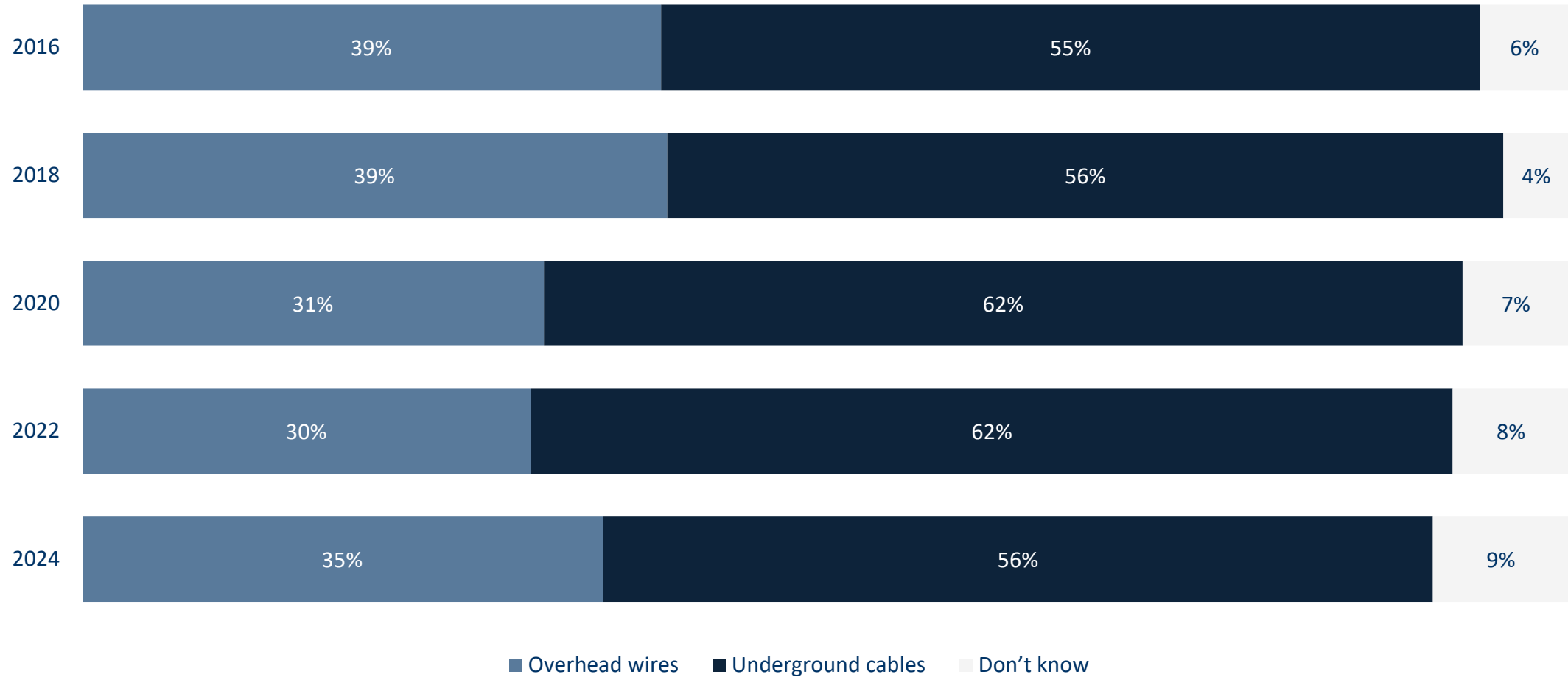
Weight: Weighting individually by LDC based on gender and age
 Filters: LDC: Centre Wellington Hydro
 *Caution, small base (<=50).

How would you describe your primary residence?



Weight: Weighting individually by LDC based on gender and age
 Filters: LDC: Centre Wellington Hydro

Does your primary residence receive electricity through overhead wires or underground cables?



Methodology

Methodology Summary

Commissioned by	Centre Wellington Hydro
Sample size	400 randomly selected customers
Margin of error	±4.9 percentage points, 19 times out of 20
Survey mode	Random telephone survey of customer base, CATI data collection
Survey sample	Residential customer list provided by Centre Wellington Hydro
Time of calling	5PM-8PM Weekdays, 10AM-5PM Saturdays, plus callbacks scheduled per respondent
In-field dates	January 8 - February 28, 2024
Language	English only
Survey author	Innovative Research/Ontario Energy Board
Question Order	Core (OEB) questions then LDC-specific questions
Question Wording	Questions shown in report largely as asked; exact questionnaire available upon request
Survey Company	Advanis Gary.Offenberger@advanis.net

Methodology Details (1/3)

Target Respondents

The respondents of the survey were Ontario residents who reside within LDC's service territory(ies). Target areas were determined based on a list of postal codes provided by LDC. Service territories were determined based on customer lists provided by the LDC.

Sampling Methodology

This survey is comprised of randomly selected interviews with Ontario residents who are 18 years or older and reside in the required service territory. The sample frame is stratified by age group and gender within each the territory, and the data is weighted to be representative of the adult population within the territory.

To minimize low response:

- Sample was loaded in batches to ensure the sample was fully utilized before moving onto fresh sample records;
- Calls were made between the hours of 5pm and 8pm ET; and
- Call backs were scheduled and honored between the hours of 9am and 8pm ET.

Sample Size and Statistical Reliability

Sample sizes were set according to the *Component A Public Awareness of Electrical Safety Measure for Licensed Electricity Distributors*, prepared by the Ontario Energy Board (OEB) on November 25, 2015:

A minimum sample size of n=400.

Distributors with 3000 to 4999 customers, n=300.

Distributors with <3000 customers, n=200.

Since each LDC has a finite population, we used the specific population sizes (i.e., the number of sample records received from each LDC) in the calculation of margin of error. Doing so is more accurate, and results in a narrower margin of error than if we simply assumed large (infinite) population for each.

Methodology Details (2/3)

Questionnaire

The survey instrument was provided by the Ontario Energy Board (OEB) developed in conjunction with Innovative Research. The survey consisted of an introduction, electrical safety, and demographic questions. Electrical safety questions include likelihood to “call before you dig”, impact of touching a power line, proximity to overhead power line, danger of tampering with electrical equipment, proximity to downed power line, and actions taken in vehicle in contact with wires. Additional questions were provided individually by some LDCs. These questions are not required as part of the survey and, as outlined in the methodology guideline, were asked after all the standard and required questions.

Quality Control

- Advanis trained its interviewers to understand the study’s objectives;
- Detailed call records are kept by the automated CATI system, and are supplemented by output files to SPSS for productivity analysis (i.e., not subject to human error);
- The survey was soft launched in LDCs that had the most available sample, and the data was then checked before calling began in full for each;
- 100% of all surveys are digitally recorded for potential review (see next bullet);
- Advanis’ Quality Assurance team listened to the actual recordings of five-ten percent of completed surveys and compared the responses to those entered by the interviewer to ensure that responses from respondents are properly recorded;
- Team Supervisors conduct regular more formal evaluations with each interviewer, in addition to nightly monitoring of each interviewer on their team;
- Project Managers closely monitored the progress of data collection, including call record dispositions;
- All data code is reviewed by a more senior researcher;
- All report output is reviewed by a more senior researcher; and
- All values in the report are reviewed by another team member to ensure accuracy.

Methodology Details (3/3)

Analysis of Findings & Data Weighting

Results were weighted to match the proportion of the general population residing in LDC's service territory based on StatsCan's 2021 census data.

The Public Awareness of Electrical Safety Index Scores have been highlighted and were calculated as described below, based on instructions in the Scorecard Methodology and Implementation Guide. The "response values" referenced in the description below were also determined and provided by the survey authors.

Data analysis and cross-tabulation have been conducted using Advanis' proprietary Online Reporting Environment software.


Specific values of the number of sample records, estimated population proportions, and final weighted sample counts within LDC are provided on the next slide.

The sum of the regional population proportions within an LDC may not equal 100% due to rounding.

All section points bound between 0 and 1

Likelihood to "call before you dig"	0 to 1pts
Impact of touching a power line	0 to 1pts
Proximity to overhead power line	0 to 1pts
Danger of tampering with electrical equipment	0 to 1pts
Proximity to downed power line	0 to 1pts
Actions taken in vehicle in contact with wires	0 to 1pts

Step 1 Add all section values for individual survey respondents = **Individual Respondent's Cumulative Score**



Step 2



Divide **Individual Respondent's Cumulative Score** / 6 "core" sections = **Respondent Standardized Score**

Step 3



Summation of all **Respondent Standardized Scores** / n-size = **Raw Index Score**

Step 4



Raw Index Score x 100 = **Public Safety Awareness Index Score** (Bound between 0-100%)



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