



# Consumer Flood Risk Awareness and Insurance Study

February 2022

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# Study Purpose and Method



- Flood events and flood damage are likely to continue due to environmental and developmental effects.
- Fannie Mae is considering strategies to address this challenge and needs to understand consumer mindsets regarding flood risk and how these might differ based on risk zone.



- Explore awareness, perceived value, and attitudes surrounding flood insurance and other insurance policies.
- Explore consumers' understanding of their personal flood risk and resources.
- Determine the barriers to adopting flood insurance.
- Determine personal experiences with flooding and claim resolution.
- Determine reasons for purchasing flood insurance, value perceptions, and coverage details.
- Understand which resources/tools are most trusted to determine effective ways to best communicate flood risk.



- Online survey 15 minutes in length.
- Sample created using third-party research panel matched to addresses in FEMA flood-zones and adjacent locations.
- Survey conducted between November and December 2020.



Eligible respondents must:

- Reside in one of three areas: 100-year flood zone, 500-year flood zone, or adjacent area
- Age 18+
- No co-ops; No third floor or higher condos/apts
- Must own or pay rent

N = 3,533 as follows

- High-Risk n=1,216
- Medium-Risk n=1,597
- Adjacent n=720

*Unweighted Base Sizes*

More detailed explanation of sampling and weighting is included in Appendix



# Background Context – Flood Risk Management



## Federal and local governments are the primary managers of flood risk.

- FEMA, with local involvement, produces maps identifying flood hazards in a community.
- FEMA establishes minimum floodplain management ordinances.
- Local governments permit construction according to floodplain ordinances and develop infrastructure and land-use policies to manage flooding, often in coordination with the state.



## FEMA's maps identify flood hazards in three tiers, based on the likelihood of occurrence.

- Special Flood Hazard Areas, or the “100-year-floodplain”, are areas where there’s a 1% or greater chance every year of inundation.
- “Shaded X,” “B zones,” or “500-year-floodplain” are areas where there is a 0.2% or greater chance every year of flooding.
- “X zones” are all other areas where the risk is identified as below 0.2%.



## FEMA's maps vary tremendously in terms of availability, quality, and recency.

- FEMA’s maps do not anticipate future risk from climate change, and they are subject to local review prior to approval.
- Only 46% of the coastline and 33% of stream miles have been mapped. Most gaps are in less populated and remote areas.
- Many of the flood maps are outdated: 22% of communities’ maps are at least 10 years old; 15% are at least 15 years old.



## All GSE and government loans require flood insurance on properties in a Special Flood Hazard Area (SFHA).

- If any portion of the secured property is in an SFHA, flood insurance is required.
- Insurance coverage is required to the lesser of 100% of the replacement cost of the improvements, the balance of the loan, or the maximum available from the NFIP.
- HOAs are required to cover association buildings and the units inside. Unit owners may buy additional coverage for their unit and improvements.

# Background Context – Flood Risk Management (cont'd.)



## The NFIP is the primary provider of flood insurance in the country.

- FEMA has 90-95% of the residential flood insurance market share.<sup>1</sup>
- FEMA insures ~4 million residential structures totaling ~5 million residential units.<sup>4</sup>
- The NFIP insurance limit is \$250,000 for 1-4 unit residential properties.<sup>2</sup>
- FEMA issues 85% of its policies through private carriers, such as Allstate and USAA, instead of policies that have the FEMA name.<sup>3</sup>



## The NFIP product is limited in coverage and features compared to private options.

- Coverage maxes out at \$250,000 by statute for 1-4 unit residential buildings and \$100,000 for the contents.<sup>4</sup>
- Contents coverage is only available as Actual Cash Value – a valuation that does not reimburse depreciation.<sup>5</sup>
- NFIP policies do not provide additional living expenses, such as hotels, while a home is being repaired.<sup>2</sup>
- Average total cost of NFIP policy is \$1,080, billed yearly (included in escrow if in SFHA). Since 2015, the average total cost of an NFIP policy has increased annually approximately 5-10%.<sup>6</sup>

1. NFIP “Watermark” Financial Statements and NAIC Private Flood Premiums Market Share Reports CY 2020
2. FEMA FloodSmart Data and Policy Terms
3. Insurance Information Institute
4. FEMA Statutory Limits (42 U.S.C. §4013 (b)(2) and (3))
5. Standard Flood Insurance Policy Dwelling Form 2021
6. FEMA FloodSmart Data and Flood Insurance Purchase and Compliance Requirements (42 U.S.C. § 4012(a)(d)(1)(A))

# Background Context – Flood Zone Definitions for Survey



- **High-Risk:** A property is designated to be in a high-risk zone if its associated FEMA flood zone starts with "A" or "V." Collectively these zones are referred to as Special Flood Hazard Areas and are associated with NFIP requirements.
- **Medium-Risk:** A property is designated to be in a medium-risk zone if the property is not in a high-risk zone but has substantial risk according to available sources, namely:
  - Its associated FEMA flood zone starts with "B" or "X" (shaded) for the 500-year flood zone OR
  - If available vendor model predicts a depth of > 1 foot at 1% annual probability
    - The inclusion of this factor was added to broaden the reach of a medium-risk zone beyond FEMA's definition for survey purposes. There were 1,597 respondents identified as having medium-risk and this factor was only applicable to approximately 2% of the respondents.
- **Adjacent:** A property is designated to be in an adjacent risk zone if its distance to the nearest water body is less than 1,500 feet AND the point elevation of the property is less than 30 feet. Adjacent rating excludes properties already included in high or medium-risk. Due to the complexities of flood zone shapes, proximity to a waterbody may or may not also indicate proximity to a 100-year or 500-year flood zone.
- **Excluded** from survey population potential sample – all other properties not classified as 1-3.

# Executive Summary



## 1. Awareness of flood risk and insurance remains low for many individuals

1a

Overall awareness of flood risk is low, particularly for those in high-risk zones

1b

Individuals have poor awareness of FEMA's NFIP as well as their own individual flood insurance coverage

1c

People in medium-risk zones have an outsized perception of safety and are the least prepared based on risk profile

1d

People are not receiving enough information prior to purchasing a home, and when they do, it is from less trusted sources

## 2. People take flood risk and insurance considerations into housing decisions, which presents an opportunity to better inform them

2a

Personal experience with a flood event is not unusual and can lead to high out-of-pocket costs or even debt

2b

Flood risk negatively impacts how people think about future home purchase

2c

People are generally OK with mandatory insurance in high-risk areas

2d

The government is the most trusted source for flood risk and insurance information

# Executive Summary – Awareness of flood risk and insurance remains low for many individuals



## 1a. Overall awareness of flood risk is low, particularly for those in high-risk zones

- Overall, 84% of respondents are aware that FEMA is responsible for identifying and mapping flood risk zones. (Q#4)
- While 50% claim to have reviewed community flood maps (Q#10a), slightly under 40% of those in a high-risk zone accurately identify themselves as being in those risk zones. (Q#5)
- Despite government-supported loans being required to have flood insurance, nearly 40% in high-risk zone claim they do not have insurance because they do not live in a high-risk zone; part of the disconnect could come from the fact that insurance is often escrowed along with the mortgage payment. (Q#34)
- Additionally, risk is potentially under- and over-estimated, as about 42% in high-risk believe their risk is less than 1% and 35% believe it is over 2%. (Q#7, 8)



## 1b. Awareness of FEMA's NFIP and their own individual flood insurance coverage is poor

- There is low awareness of NFIP – only 54% in high-risk zones claim NFIP awareness, and even fewer in lower-risk areas at about 40%. (Q#22)
- Even though the NFIP is the primary source of flood insurance in the market (90-95%), only 53% believe their insurance policy is through FEMA's NFIP. Third-party brokers who provide insurance on behalf of FEMA could be a reason for the lower awareness. (Q#24)
- Also, only 44% of high-risk zone respondents, where insurance is mandatory for government-supported loans where the home is in an SFHA, claim to have flood insurance. (Q#23)
- Of those with insurance, 23% of respondents do not know what their policy covers. (Q#32)



## 1c. People in medium-risk zones have an outsized perception of safety and are least prepared based on risk profile

- Only 5% of those in a medium-risk zone correctly identify their risk designation. (Q#5)
- Only 16% in the medium-risk zone are certain they have insurance. (Q#23)
- Only 16% of the residents in the medium-risk zone acknowledge taking preventative measures against future flooding. (Q#57)
- These points highlight how those in medium-risk zones might not be aware of risks brought on by climate and sea level change.



## 1d. People are not receiving enough information prior to purchasing a home, and when they do, it is from less trusted sources

- Only 31% claimed to receive flood risk information prior to moving into their home; 42% of high-risk claimed to be informed vs. only 24% in the medium-risk zone. (Q#13a)
- The top two providers of this information during the home buying process came from real estate agents (44%) and mortgage lenders (30%). (Q#13b)
- However, the mortgage lender and real estate agent were the fifth and sixth most trusted sources of that info. (Q#21a)

# Executive Summary – People take flood risk and insurance considerations into housing decisions, which presents an opportunity to better inform them



## 2a. Personal experience with a flood event is not unusual and can lead to high out-of-pocket costs or even debt

- 1-in-8 have personally experienced flooding – a little less than half of those in the past five years. About half of those experiencing floods had insurance and nearly 80% of those filed a claim. (Q#40, 42, 43)
- Average damage cost was near \$39,000 with average cost of about \$7,400 out of pocket – nearly 20% needed to borrow money. (Q#44, 45)
- Flood insurance rarely addresses all damages – only 26% report their claim payout completely covered their damages. Nearly the same amount say they had to pay a lot out of pocket. (Q#47)
- Furthermore, approximately 54% of respondents perceive the current cost of flood insurance as a reason they don't have flood insurance. (Q#34)



## 2b. Flood risk negatively impacts how people think about future home purchase

- Continuing to pay for flood insurance is becoming less attractive for some people. Despite 48% already saying they have or think they have flood insurance, 56% of people claim they 'definitely' or 'probably' would not move to where flood insurance is required. (Q#14b, 23)
- A considerable amount of people in risk zones would want to avoid high-risk zones for their future purchase. (Q#15)
- Overall, 78% of people claim they 'definitely' or 'probably' would not move to a high flood risk area. Of that, 72% of people in high-risk areas say they would not move to a high flood risk area, while 82% of medium-risk would not as well. (Q#14a)



## 2c. People are generally OK with mandatory insurance in high-risk areas

- About 67% think insurance should be mandatory for high-risk properties – and only 16% do not agree it should be mandatory. (Q#16)
- Only 25% of respondents with flood insurance say it's 'not very' or 'not at all' affordable. About 50% of the respondents believe insurance is somewhat affordable. (Q#29)
- About 31% with insurance are 'very' or 'extremely' concerned that premiums will increase in the next year. The remaining individuals are 'somewhat' to 'not at all' concerned. However, rising premiums may be a cause for concern with Risk Rating 2.0. (Q#30)
- Also, about 20% are 'extremely' or 'very concerned' about being required to have flood insurance or decreasing property values due to a high-risk designation. (Q#18a, 18b)



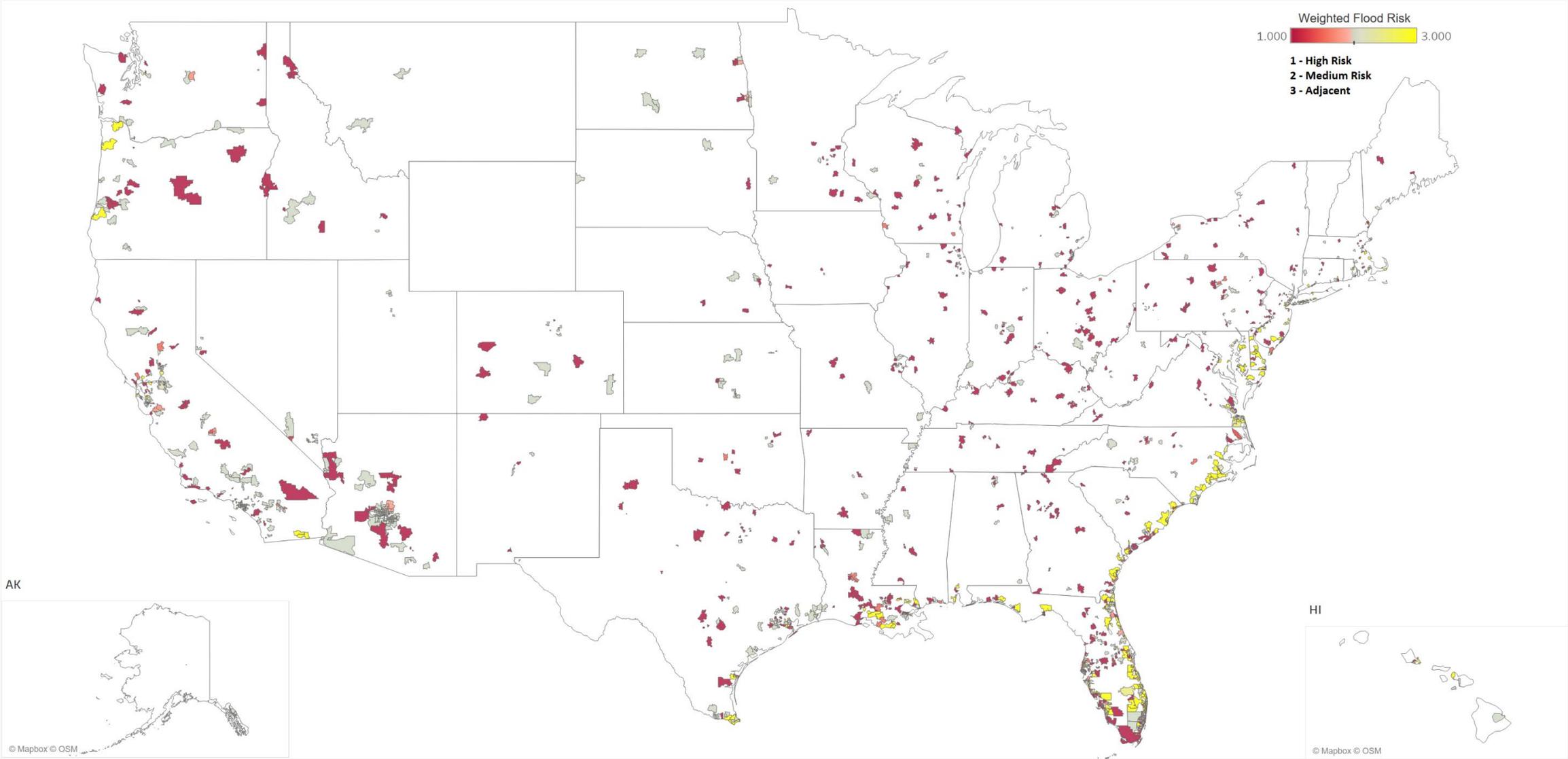
## 2d. The government is the most trusted source for flood risk and insurance information

- The government was by far the most trusted source of information at 63% relative to other sources; the next most trusted source was insurance agents at 18%. (Q#21b)
- When it comes to risk, 65% of people would trust the government the most to evaluate their property's flood risk; the next most trusted source was internet resources at 11%. (Q#20b)
- Among respondents who review community flood maps, FEMA's website (47%), local community website (32%), and their local official's office (12%) were the top three sources for that information. (Q#10a)

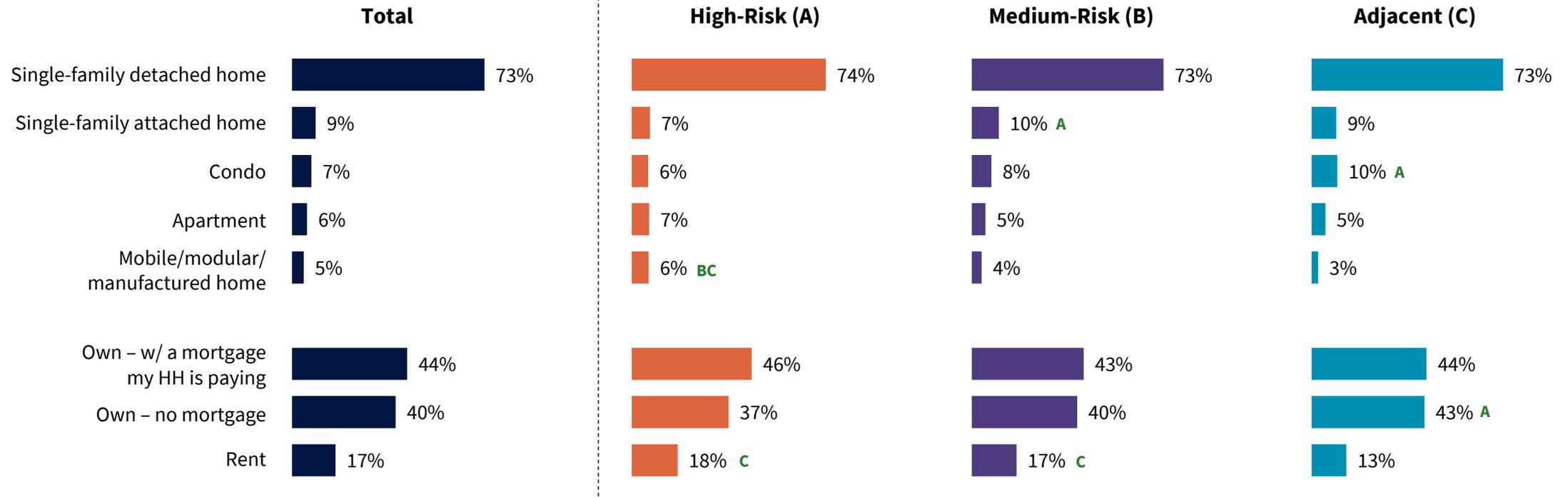


# Respondent Information

# Respondent Distribution by Flood Zone



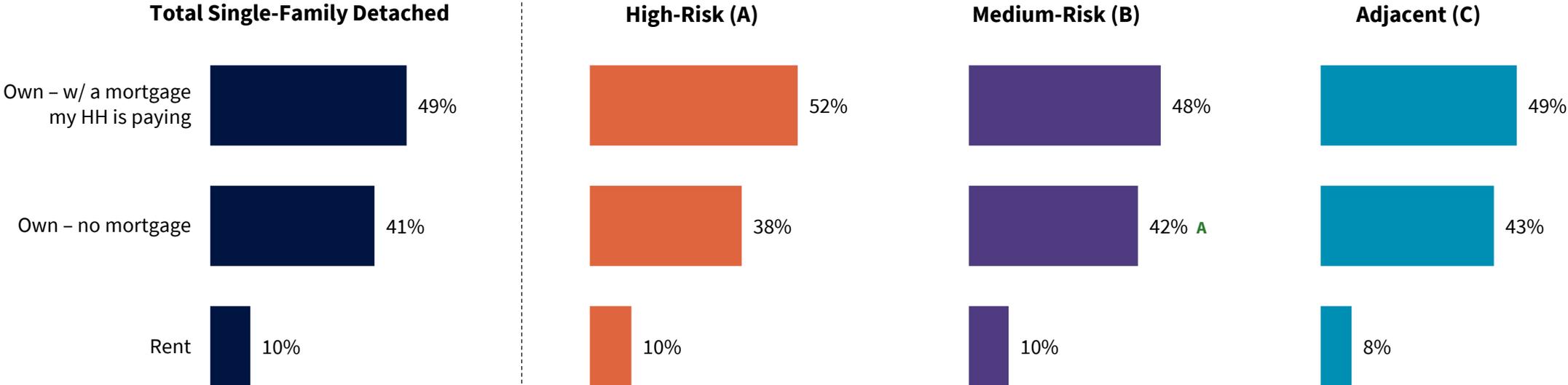
# Participant Dwelling and Homeownership Profile



Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)  
 S6a. Which of the following best describes the type of home you currently live in?  
 S9. Do you own or rent your primary residence?

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Participant Profile for Single-Family Detached Homes



Base: Total (n=2814); High (n=1014); Medium (n=1200); Adjacent (n=600)  
 S9. Do you own or rent your primary residence?

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total



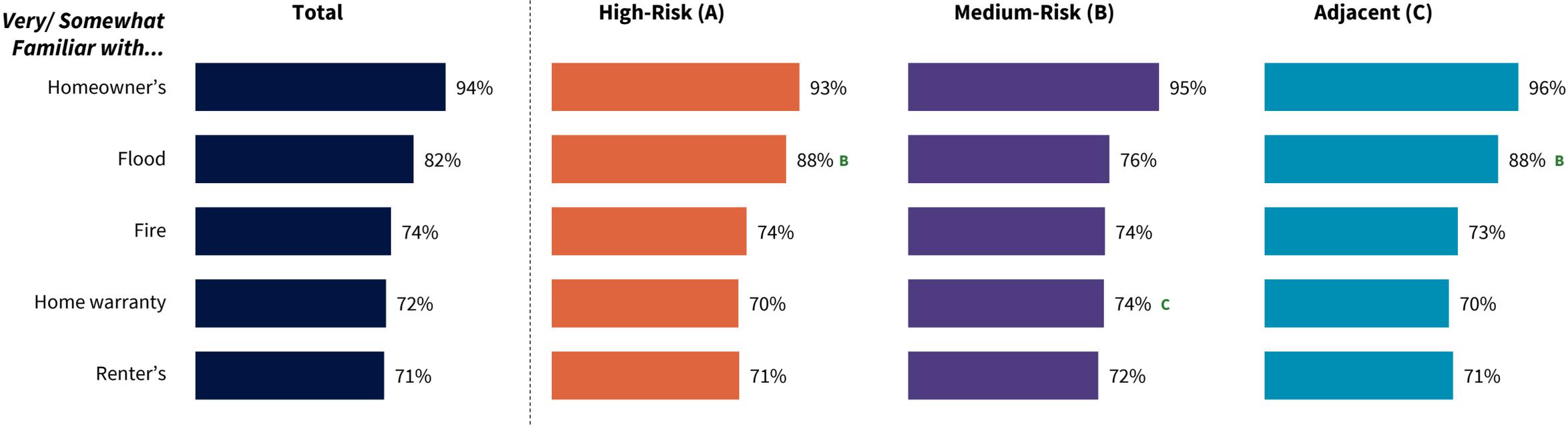
# Flood Insurance Familiarity

# Familiarity with Types of Insurance



Interestingly, those in medium-risk zones are the least familiar with flood insurance.

*Very/ Somewhat Familiar with...*



Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)  
 Q1. How familiar are you with the following types of insurance? (3 pt. scale)

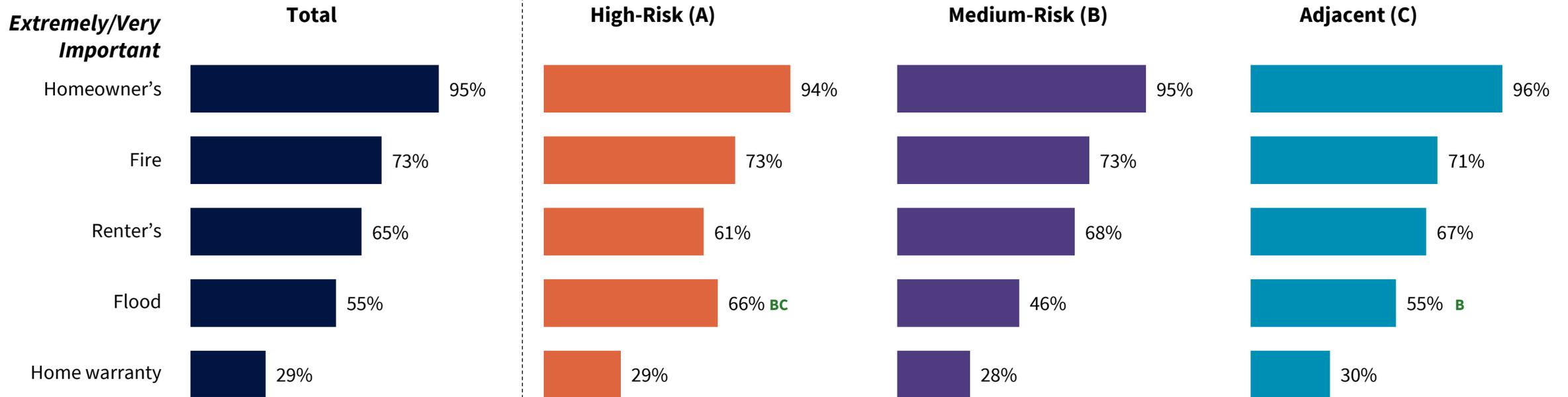
**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Importance of Insurance Types



Two-thirds of those in high-risk zones believe flood insurance is important.

Over one-third of those familiar with but without having flood insurance believe that it is indeed important



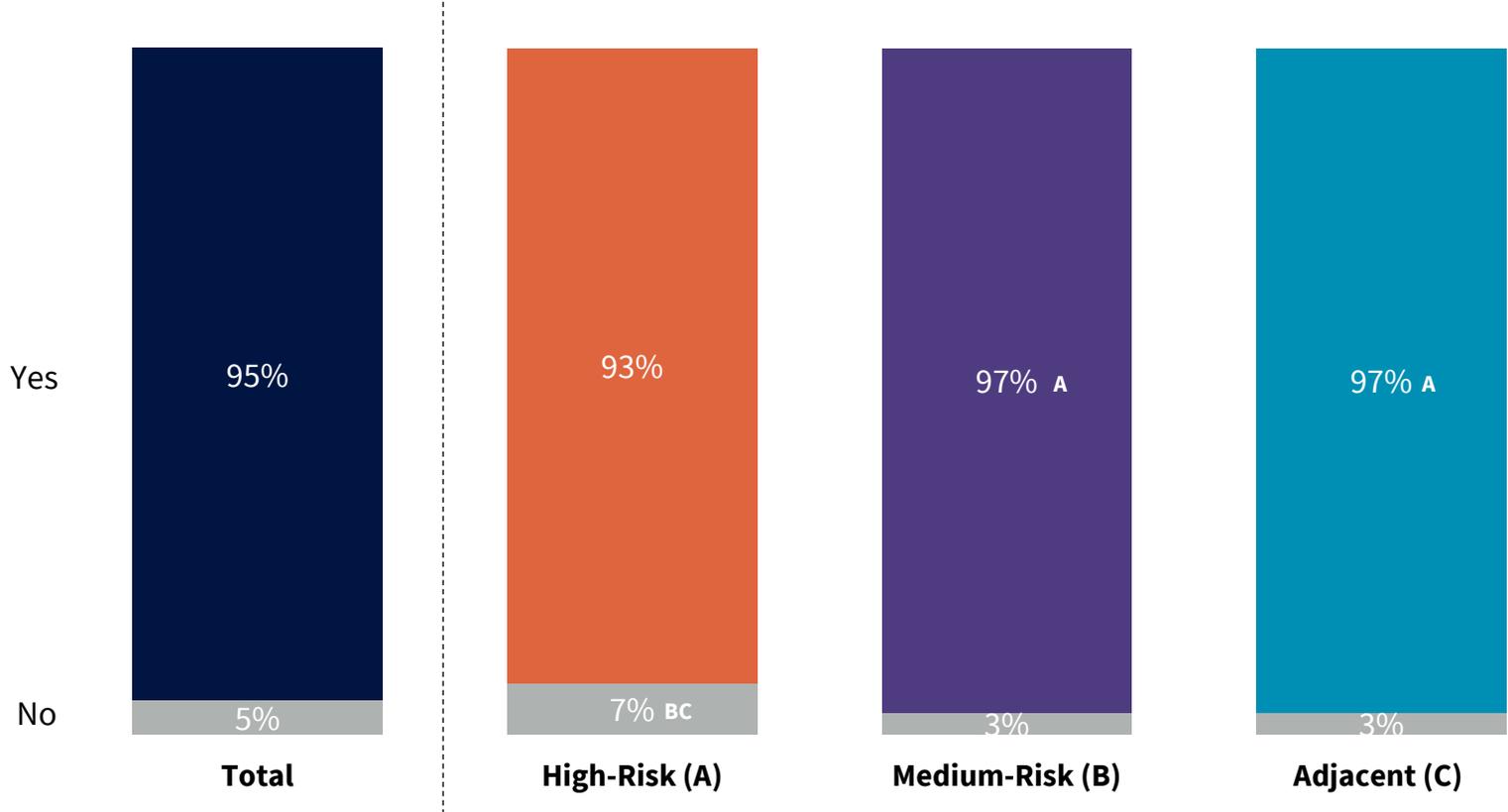
Base: Varies based on being very/somewhat familiar with type; responses n≥30 are shown  
 Q2. How would you rate the importance of each of the following types of insurance? (5 pt. scale)

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Currently Have Homeowners Insurance



Nearly all homeowners have homeowners insurance.



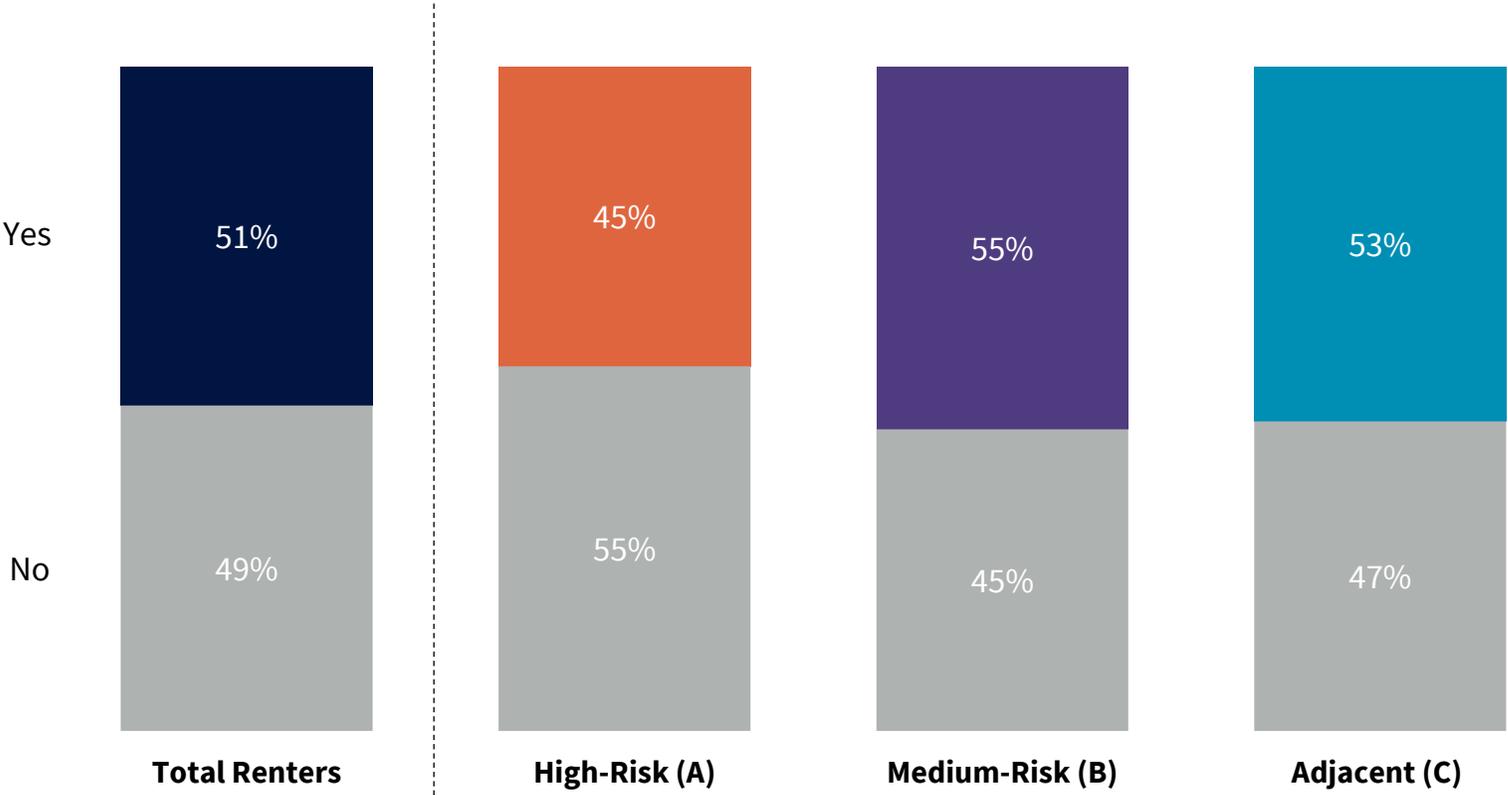
Base: Homeowners, Total (n=3001); High (n=1023); Medium (n=1352); Adjacent (n=626)  
Q3. Do you currently have [homeowner's / renter's] insurance?

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

# Currently Have Renters Insurance



Interestingly, it appears that renters in the high-risk zone are a bit less likely to have renters insurance.



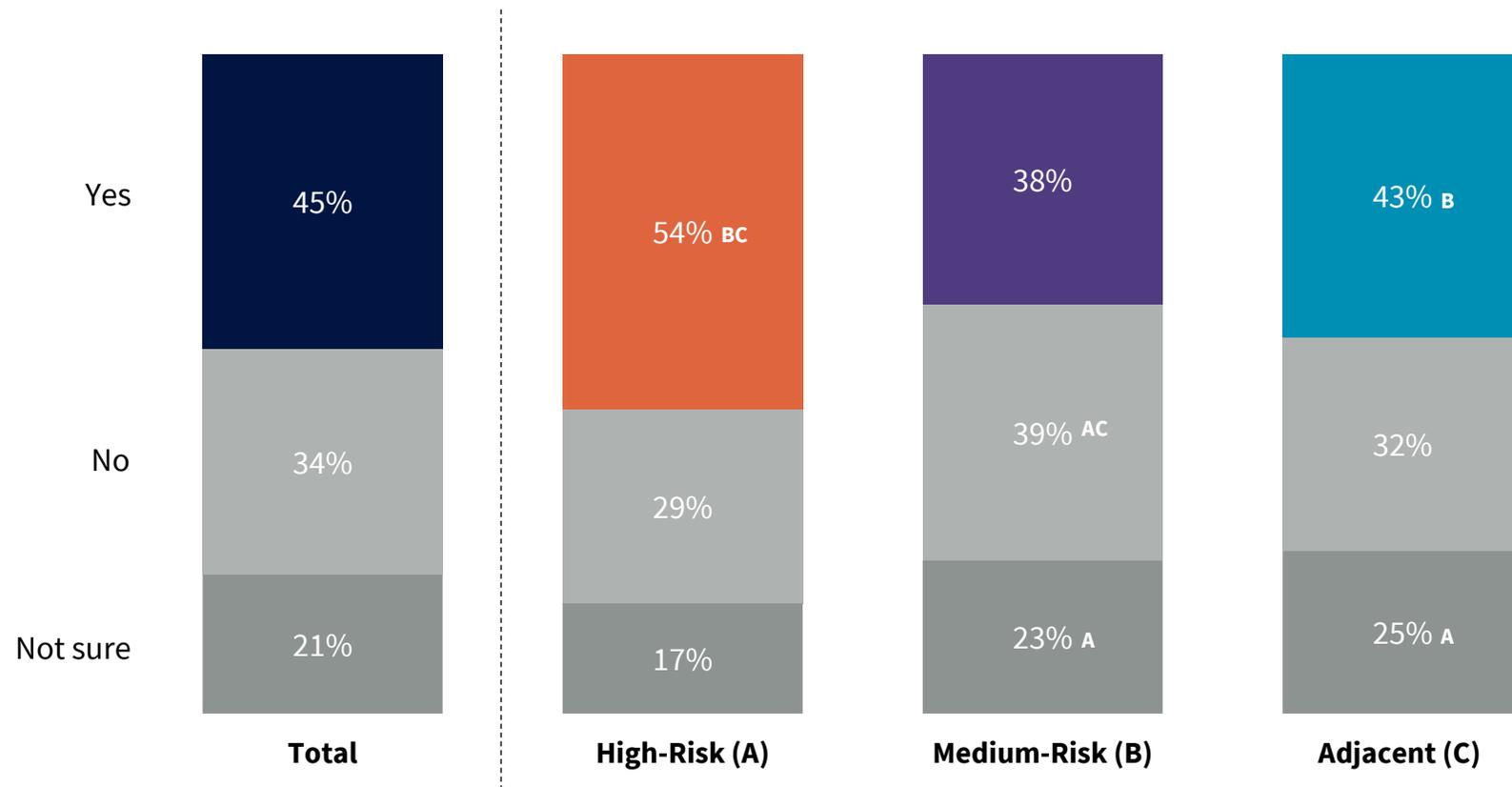
Base: Renters, Total (n=477); High (n=170); Medium (n=224); Adjacent (n=83)  
Q3. Do you currently have [homeowner's / renter's] insurance?

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

# Aware of National Flood Insurance Program (NFIP)



There is moderate awareness of the NFIP in the high-risk zone and it is even lower in the other zones.



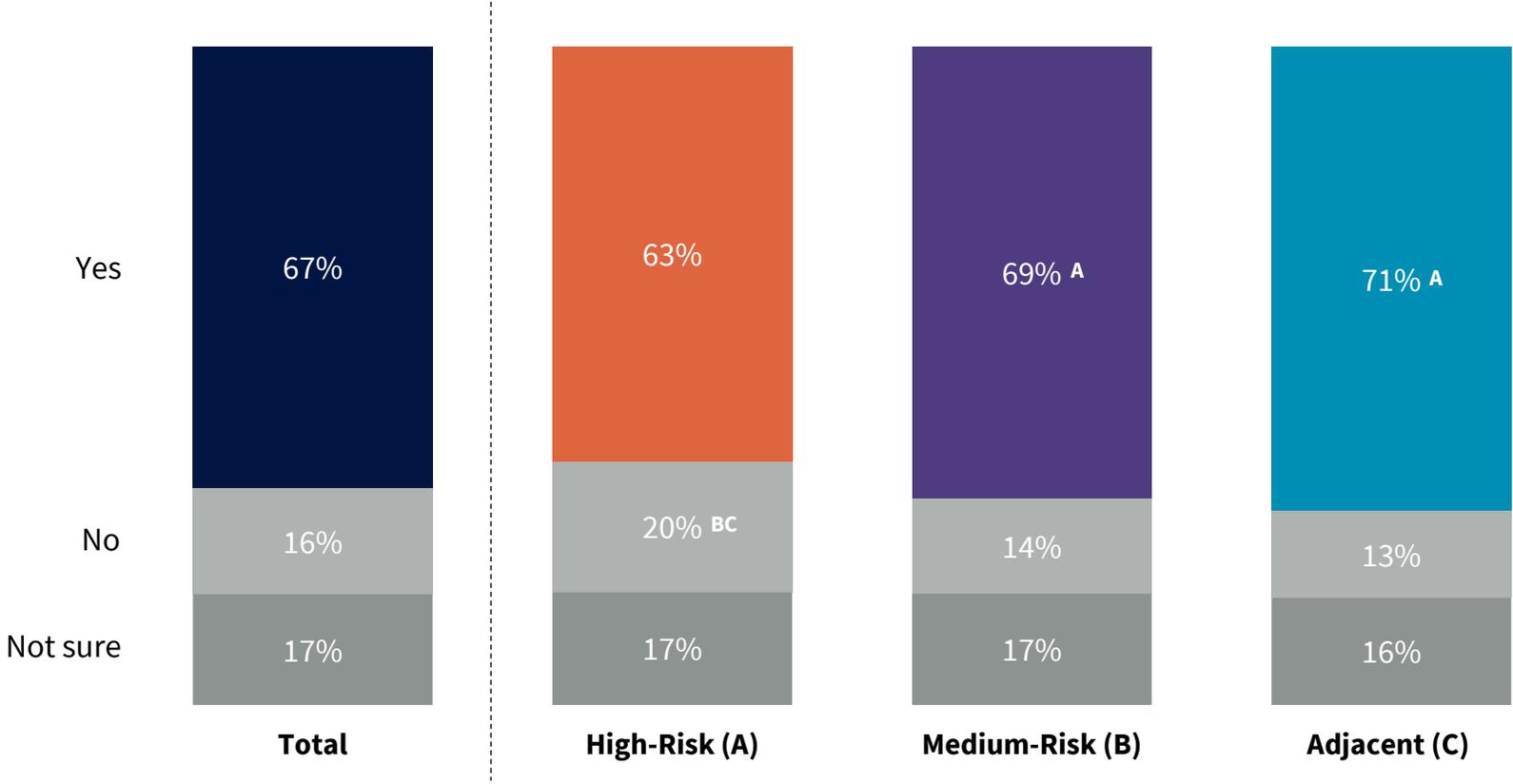
Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)  
Q22. Are you aware of the National Flood Insurance Program (NFIP), which is administered by FEMA?

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

# Should Flood Insurance Be Mandatory?



Most acknowledge that flood insurance is necessary and should be mandated. Interestingly, the least likely to agree are in high-risk.



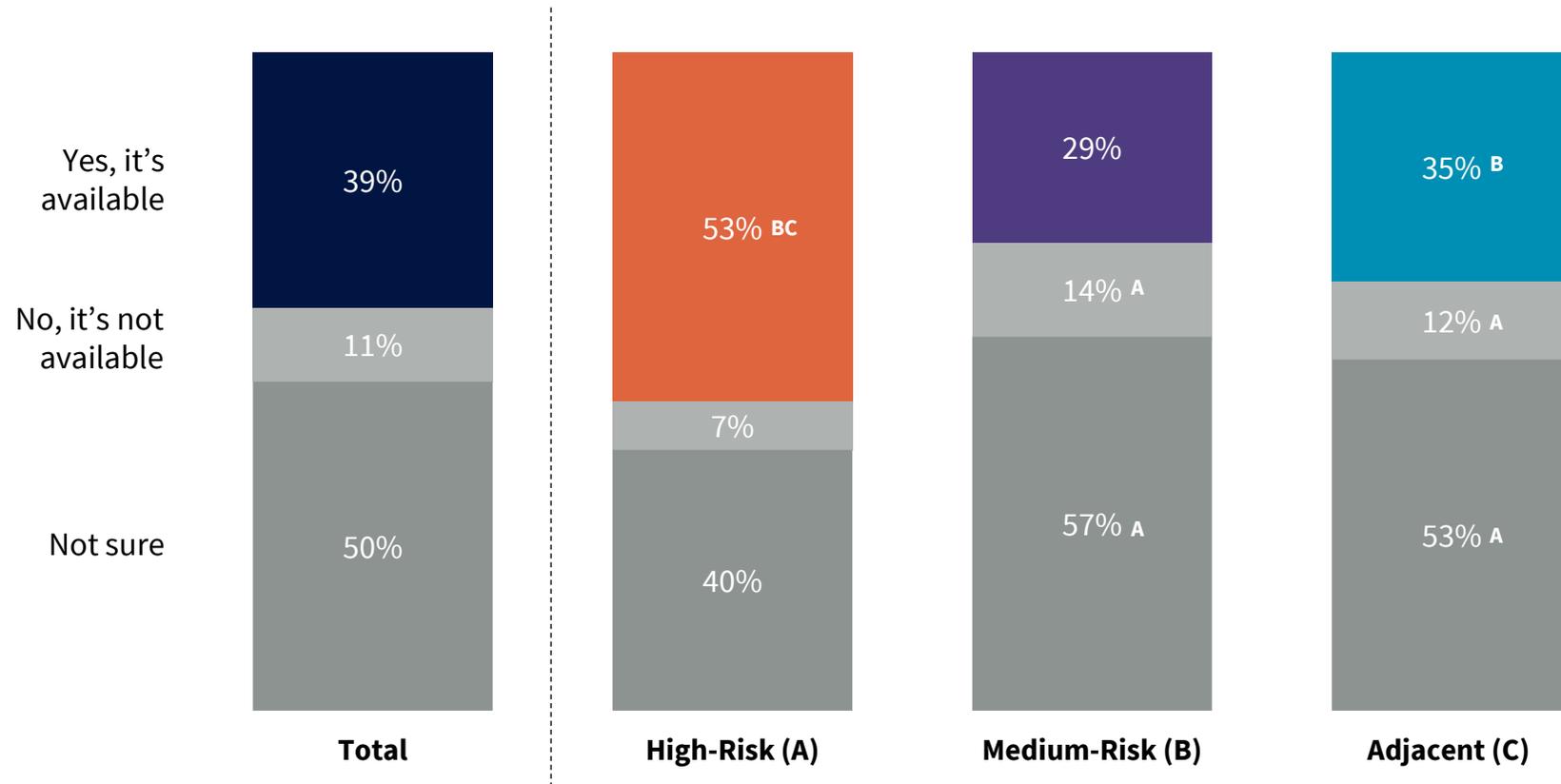
Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)  
Q16. Do you think people should be required to have flood insurance if they live in a high-risk flood zone?

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

# Federal Flood Insurance Availability



There is high uncertainty as to whether federal flood insurance is available. High-risk are most informed.



Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)

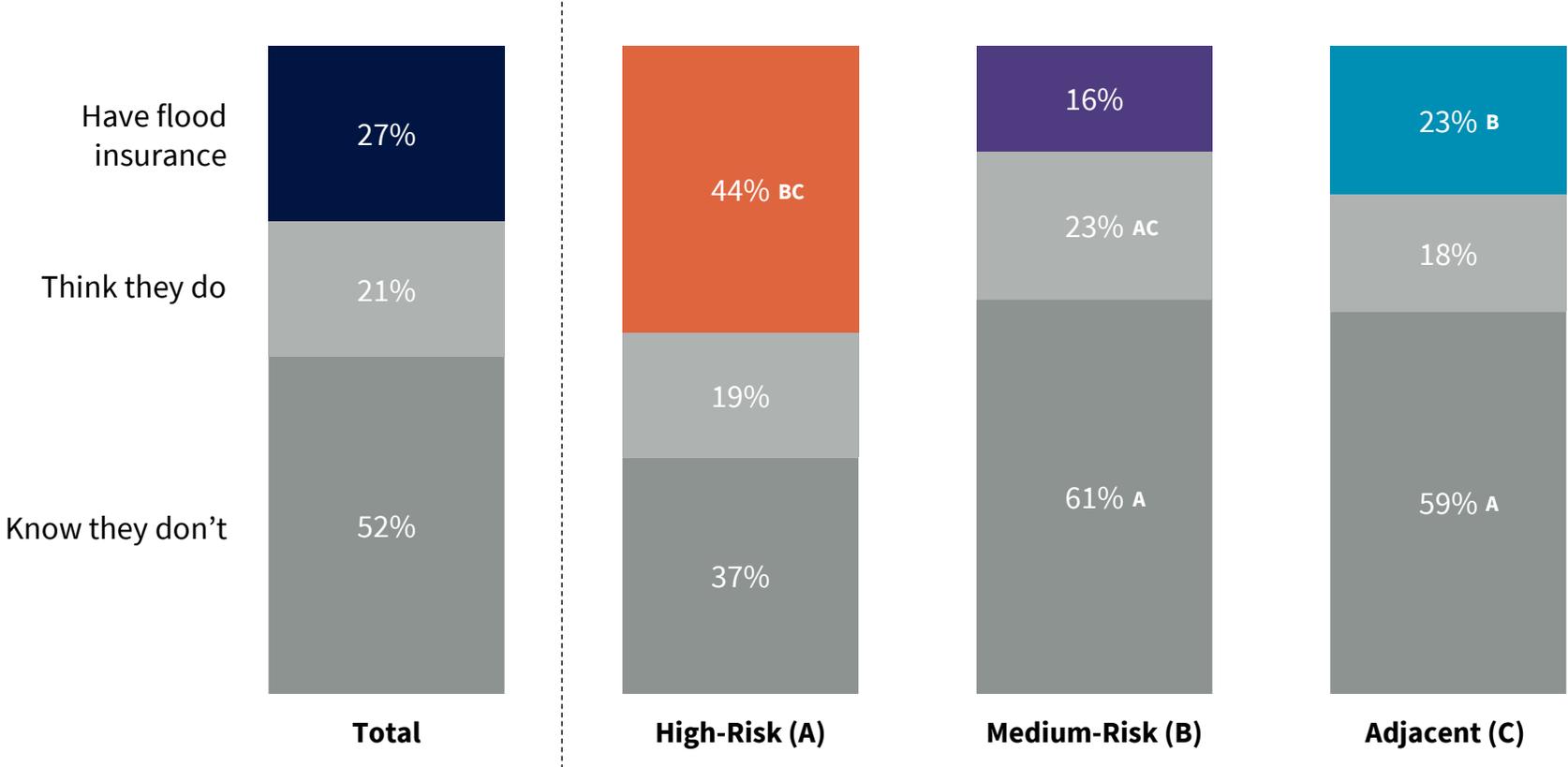
Q17. To the best of your knowledge, is federal flood insurance available for your residence?

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

# Current Flood Insurance Situation – by Flood Zone



....as to be expected, those in high-risk areas are far more apt to have flood insurance.



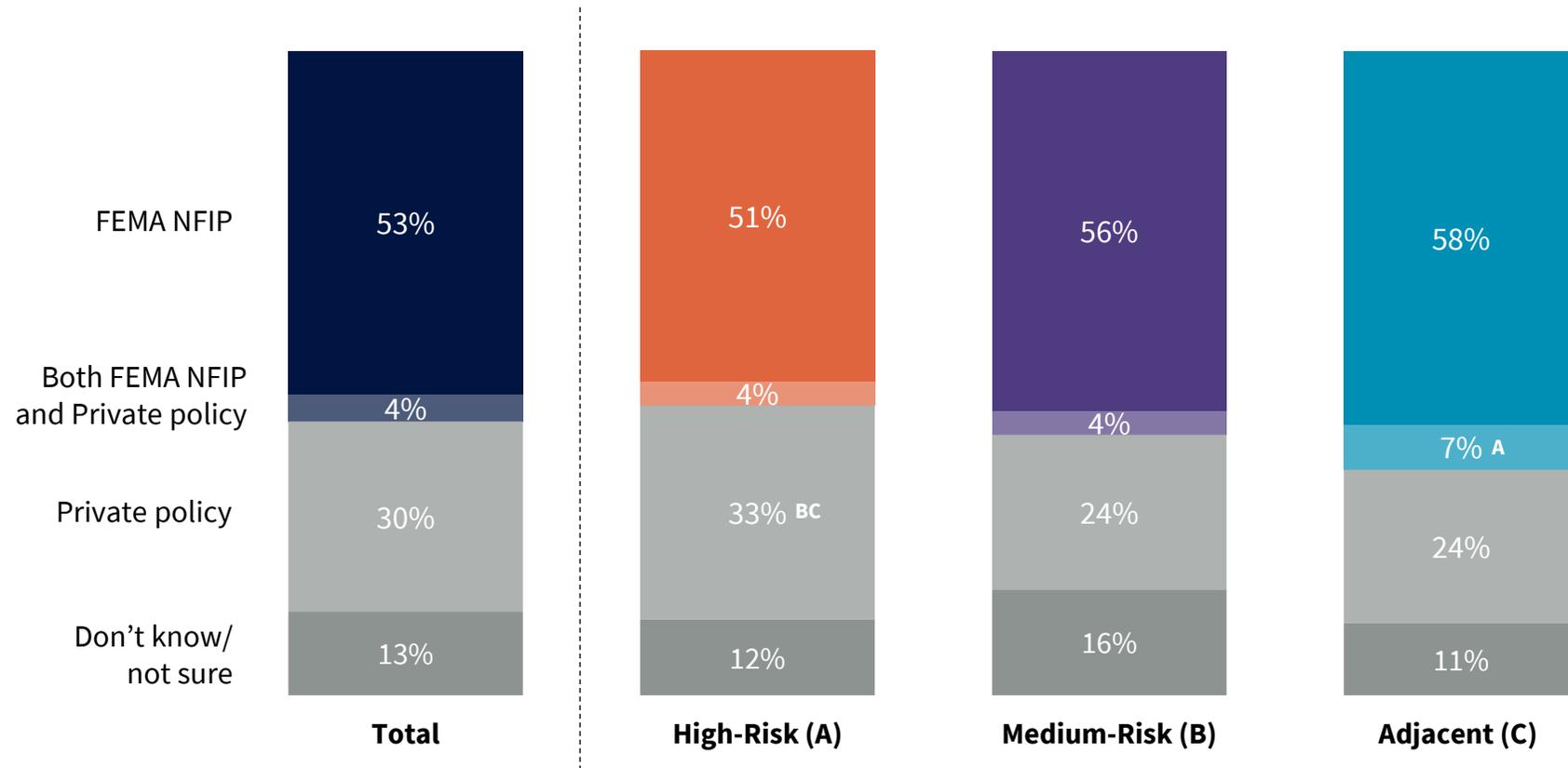
Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)  
 Q23. Which of the following statements describes your current situation regarding flood insurance?

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Type of Flood Insurance Policy



About half the respondents claim NFIP as their provider while private policies also contribute a significant portion of the market.



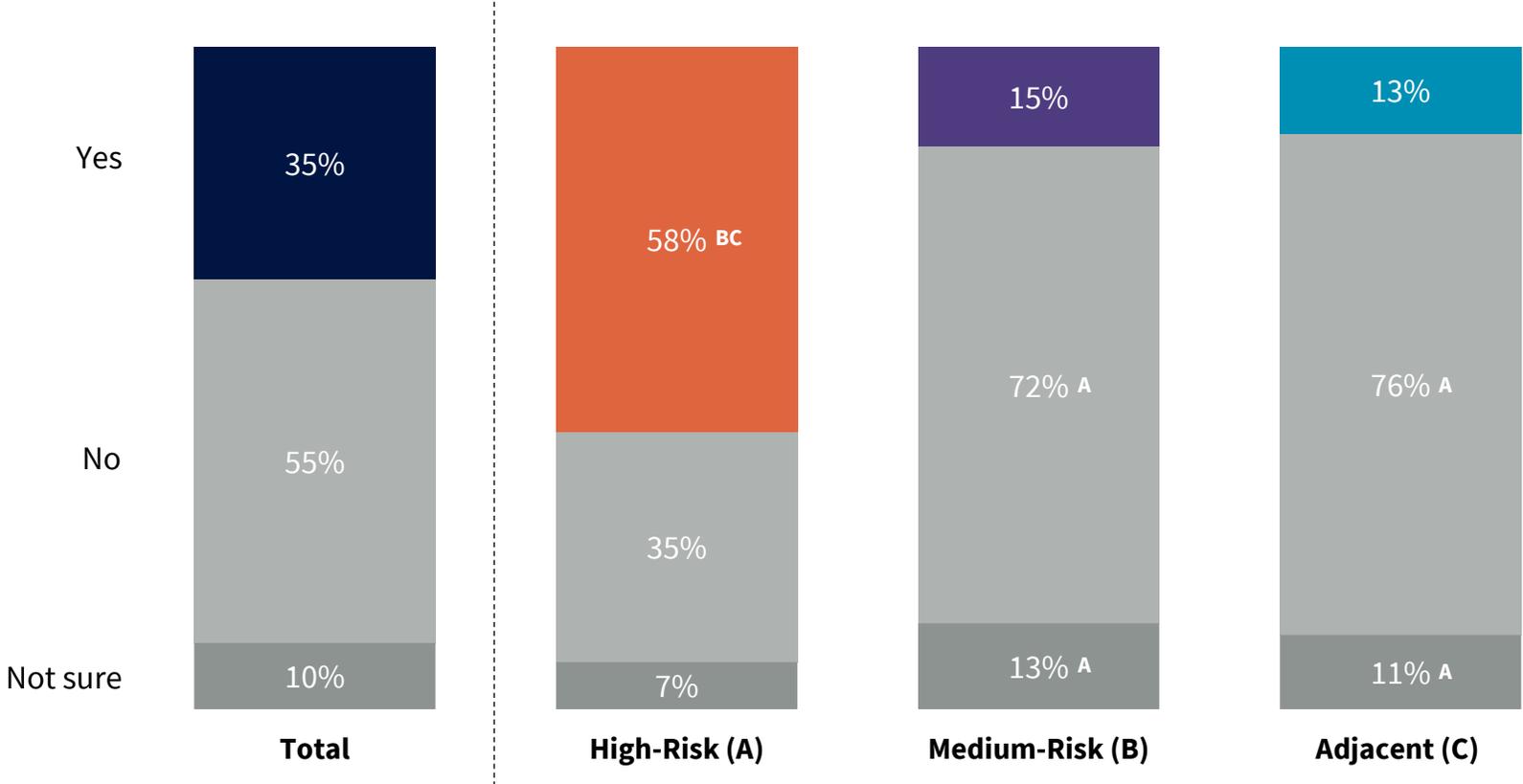
Base: Have separate flood insurance policy, Total (n=1007); High (n=586); Medium (n=247); Adjacent (n=174)  
 Q24. Do you know if you have a FEMA National Flood Insurance Program flood insurance policy or a private flood insurance policy?

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Requirement of Flood Insurance Among Those Having It



The majority of those with flood insurance, but by far not all, of those in the high-risk area believe their insurance is required.



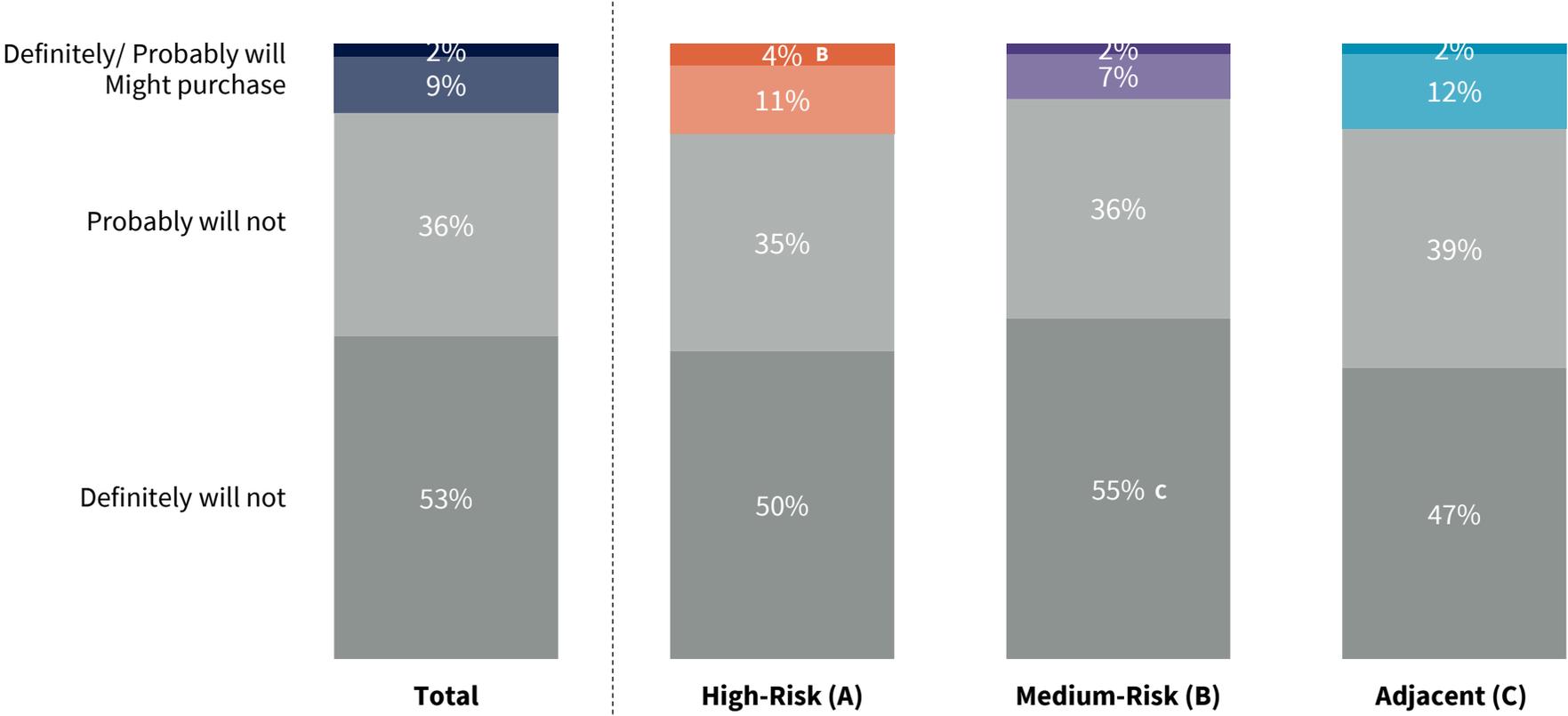
Base: Homeowners, have/think have flood insurance, Total (n=1510); High (n=715); Medium (n=522); Adjacent (n=273)  
 Q31. Are you required to have flood insurance through your mortgage provider?

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Likelihood to Purchase Flood Insurance Next Year



Interestingly, likelihood to purchase flood insurance over the next year is relatively consistent at a low level.



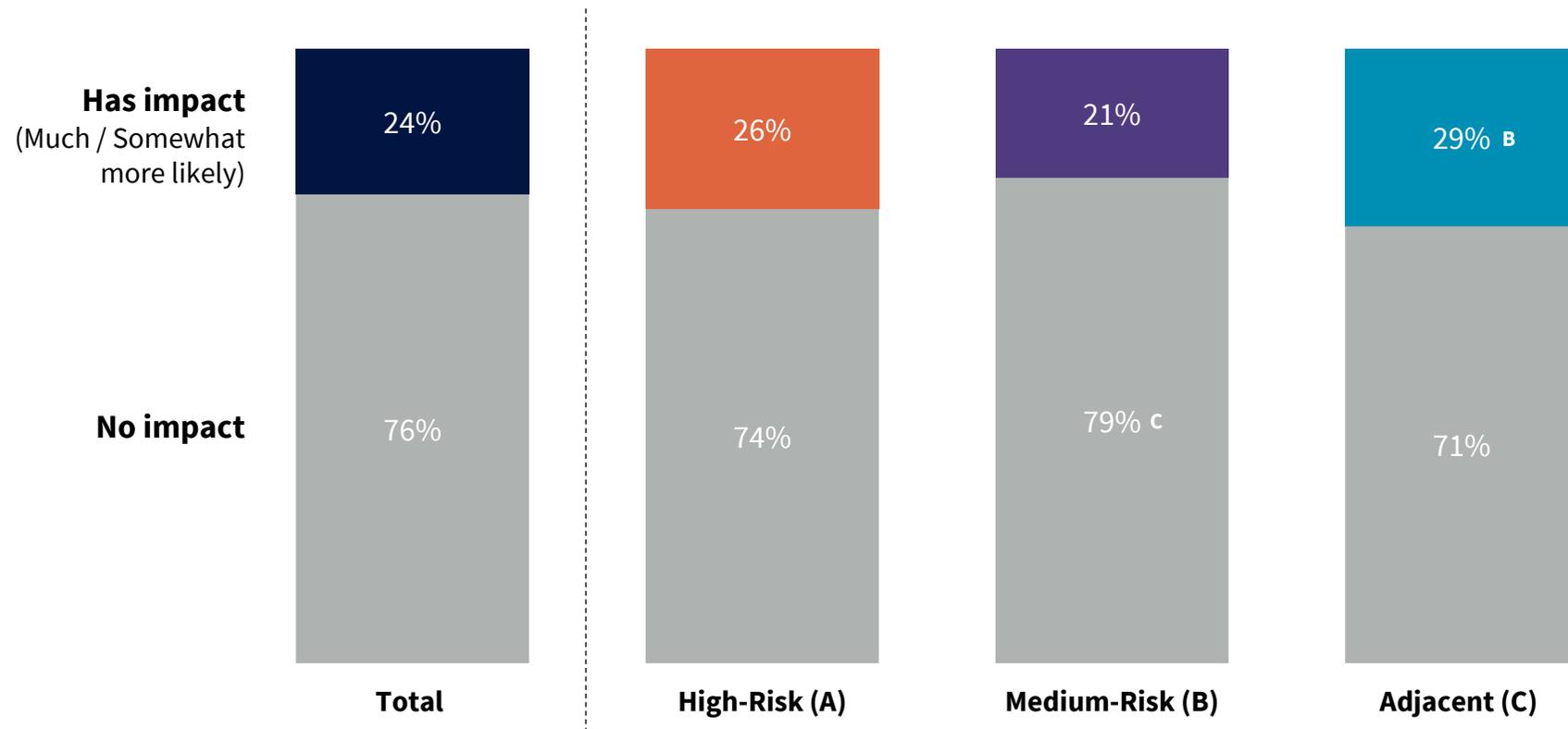
Base: Do not have flood insurance, Total (n=1843); High (n=427); Medium (n=1001); Adjacent (n=415)  
 Q35. How likely are you to purchase flood insurance in the next year?

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Impact of More Options on Purchase Likelihood



Having more insurance company options would not appear to motivate more to purchase flood insurance.



Base: Definitely/probably/might not likely purchase flood insurance, Total (n=1809); High (n=413); Medium (n=988); Adjacent (n=408)

Q36. What impact, if any, would having more insurance company options in your area have on your likelihood to purchase flood insurance in the next year?

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

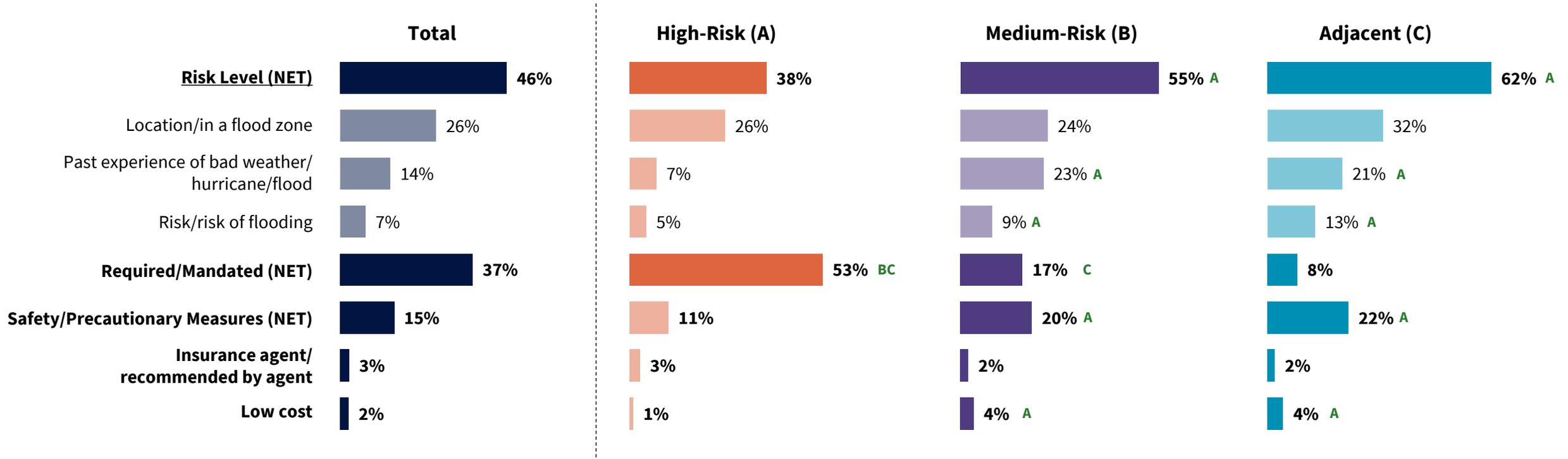


# Flood Insurance Motivators/ Barriers

# Motivators for Purchasing Flood Insurance



Unless mandated, Risk Level is the strongest motivator for purchasing flood insurance.



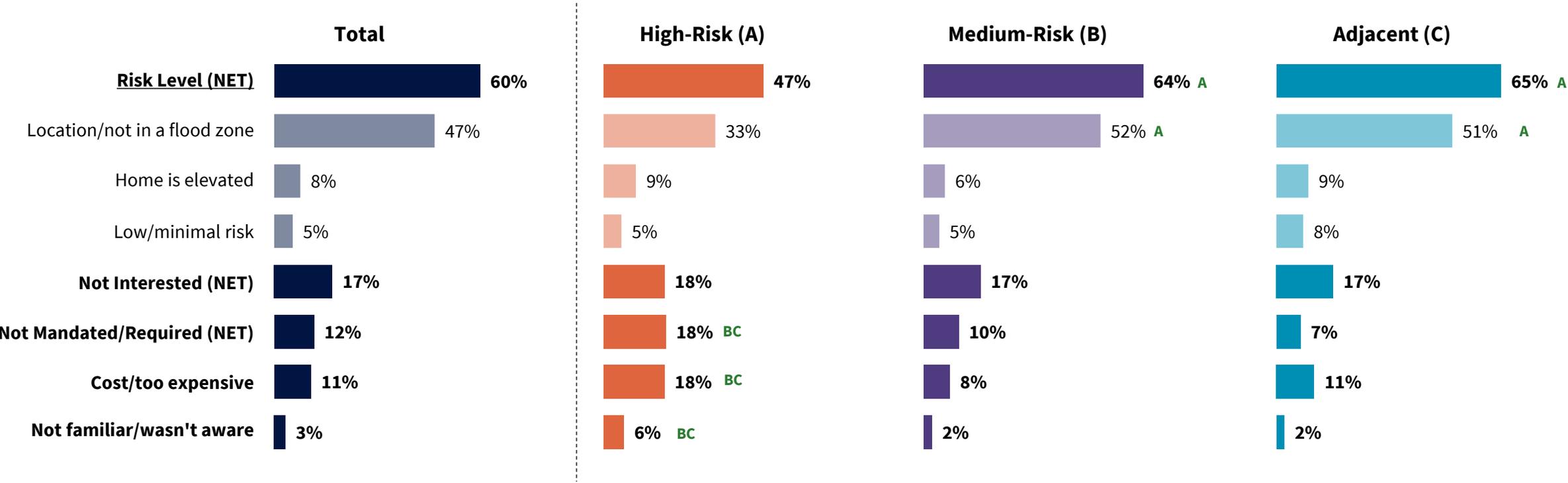
Base: Have separate flood policy, Total (n=1007); High (n=586); Medium (n=247); Adjacent (n=174)  
 Q25. What motivated you to purchase a flood insurance policy? [OPEN END]

Letter denotes significant difference (95% CL);  
 No stat testing against Total

# Reasons for Not Having Flood Insurance (Unaided)



Those not purchasing flood insurance cite location/non-flood zone as the top reason.



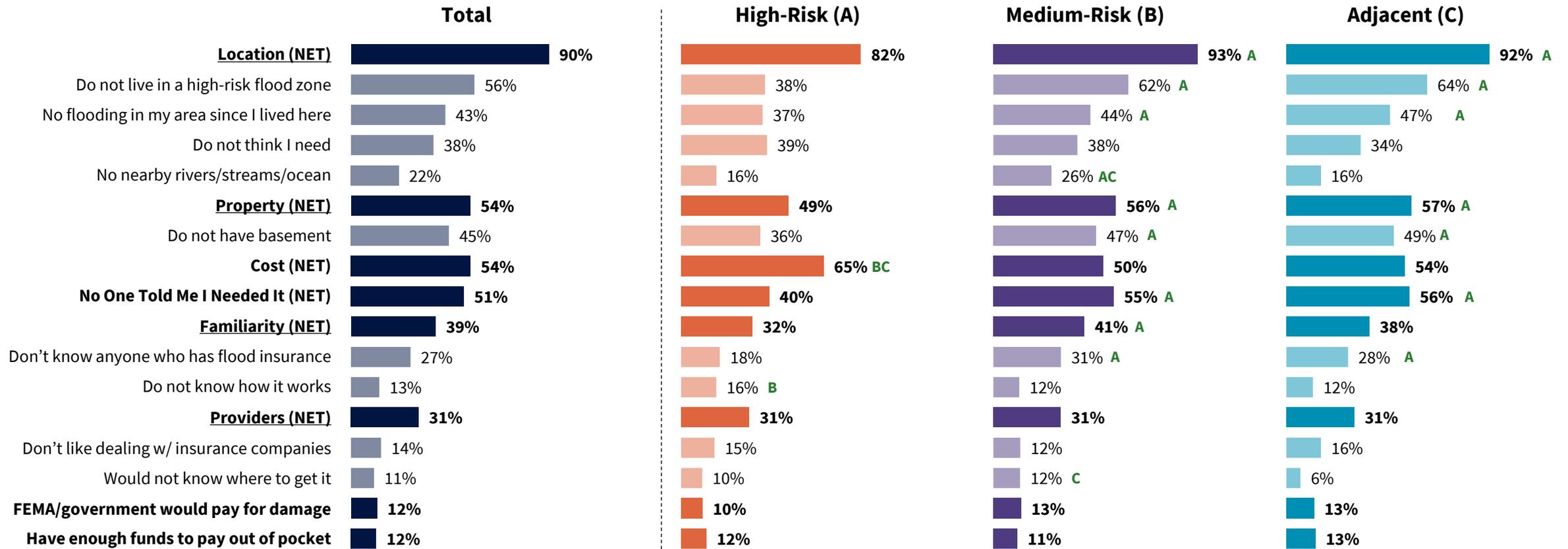
Base: Don't have flood coverage, Total (n=1843); High (n=427); Medium (n=1001); Adjacent (n=415)  
 Q33. What are some reasons you believe you do not currently have a flood insurance policy? [OPEN END]

Letter denotes significant difference (95% CL);  
 No stat testing against Total

# Reasons for Not Having Flood Insurance (Aided)



While main reason is “no need,” over half mention cost as a barrier to purchase.



Base: Don't have flood coverage, Total (n=1843); High (n=427); Medium (n=1001); Adjacent (n=415)  
 Q34. Which of the following, if any, are possible reasons that you believe you do not currently have a flood insurance policy?

Letter denotes significant difference (95% CL);  
 No stat testing against Total

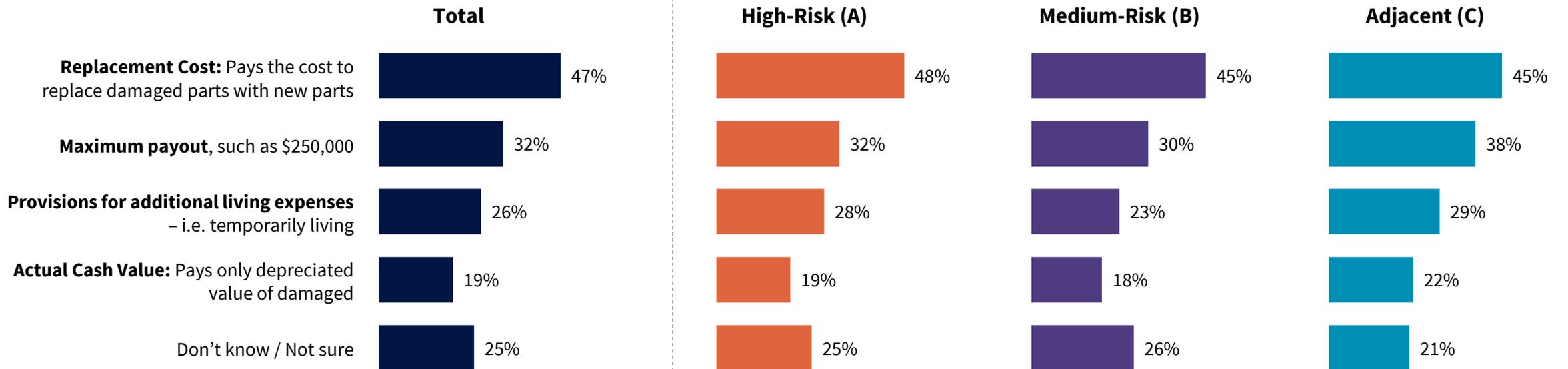


# Claimed Policy Coverage

# Flood Insurance Policy Coverage



Top coverage among those with insurance is replacement cost followed by a maximum payout. One-fourth are unsure of the policy coverage.



Multiple Response – can add to more than 100%

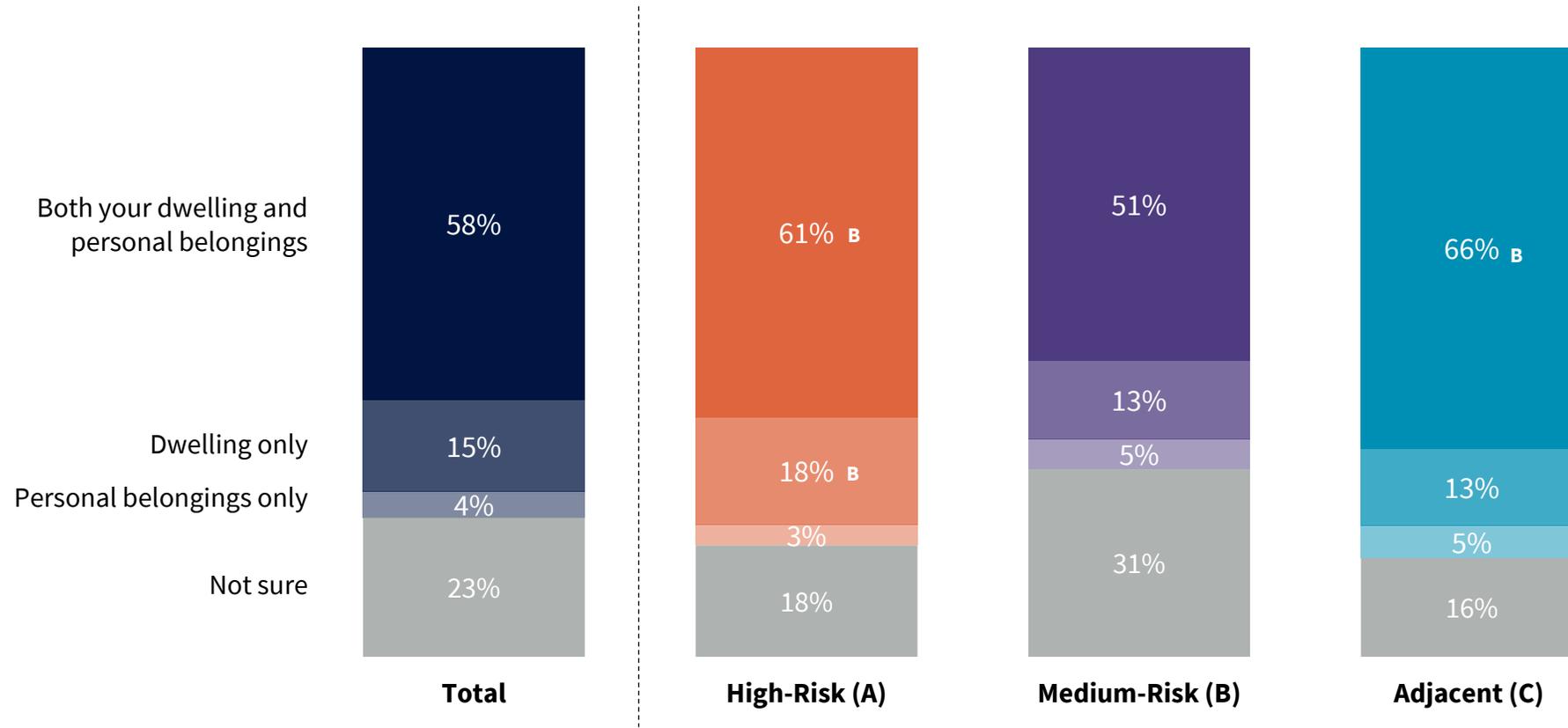
Base: Have separate flood policy, Total (n=1007); High (n=586); Medium (n=247); Adjacent (n=174)  
Q26. To the best of your knowledge, which of the following does your flood insurance policy include?

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

# Flood Insurance Coverage



Roughly two-thirds of those in a high-risk zone with flood insurance claim to have policies that cover both the dwelling and personal belongings.



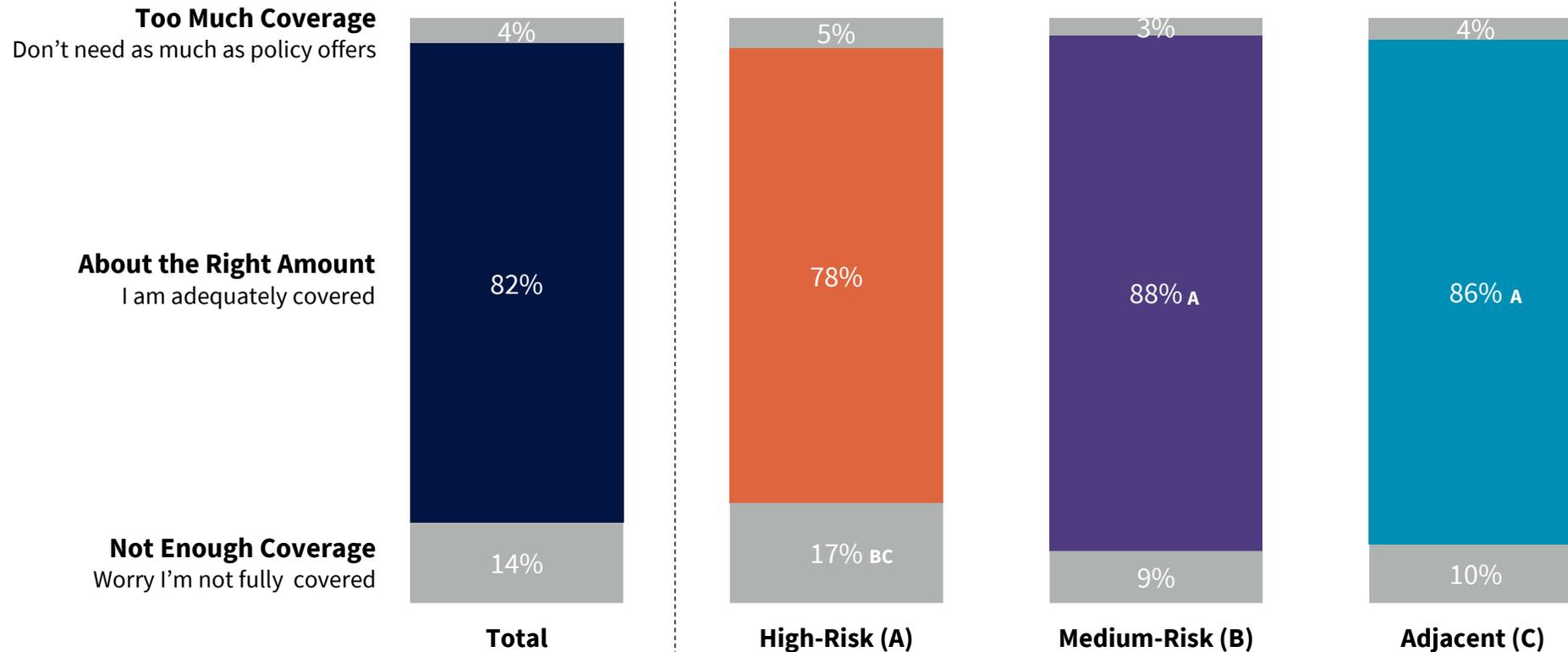
Base: Homeowners, have/think have flood insurance, Total (n=1510); High (n=715); Medium (n=522); Adjacent (n=273)  
 Q32. What does your current flood insurance cover?

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Amount of Flood Insurance Coverage



Regardless of risk level, majority believe their coverage is adequate.



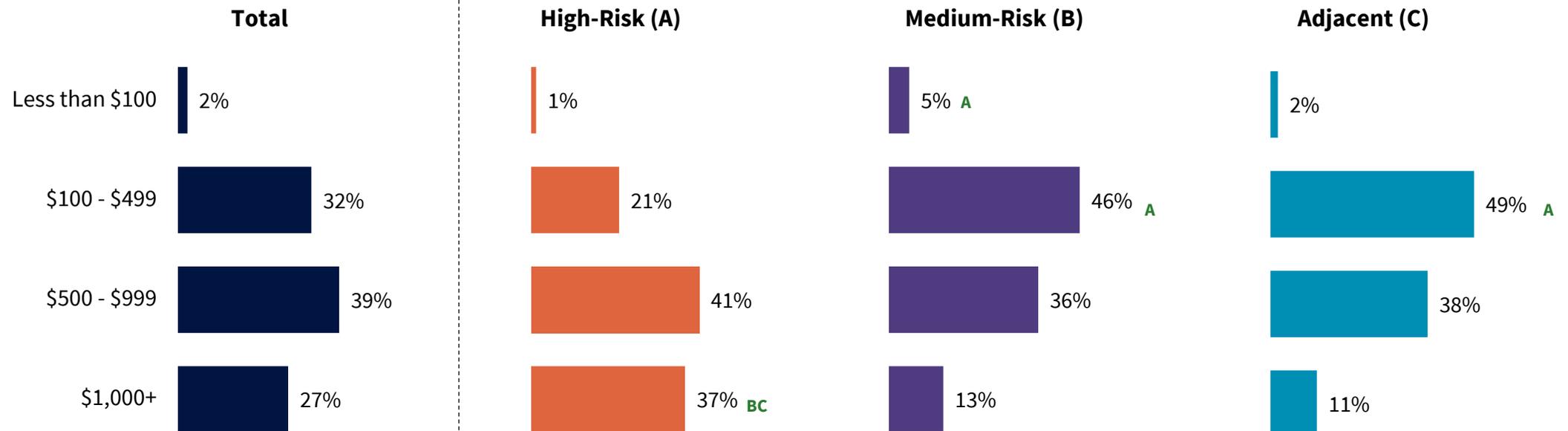
Base: Have separate flood policy, Total (n=1007); High (n=586); Medium (n=247); Adjacent (n=174)  
Q27. How would you best describe the amount of flood insurance coverage you have?

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

# Annual Flood Insurance Cost



Insurance premiums vary, with close to one-third paying less than \$500 while another one-third pay over \$1,000.



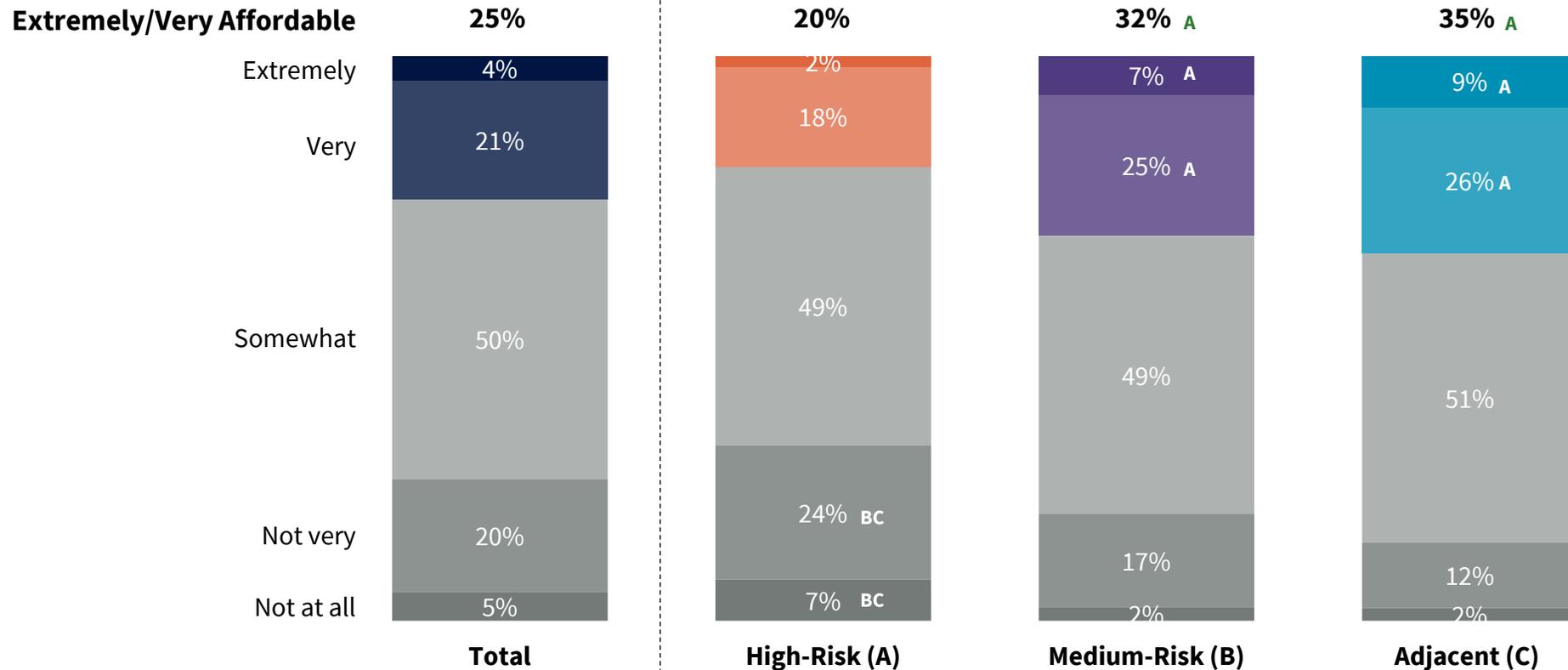
Base: Have separate flood policy, Total (n=887); High (n=520); Medium (n=215); Adjacent (n=152)  
 Q28. Approximately how much do you currently pay for your flood insurance?

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Affordability of Flood Insurance



Those at high-risk are least likely to feel flood insurance is affordable.



Base: Have separate flood policy, Total (n=1007); High (n=586); Medium (n=247); Adjacent (n=174)  
 Q29. How would you best describe the affordability of your flood insurance?

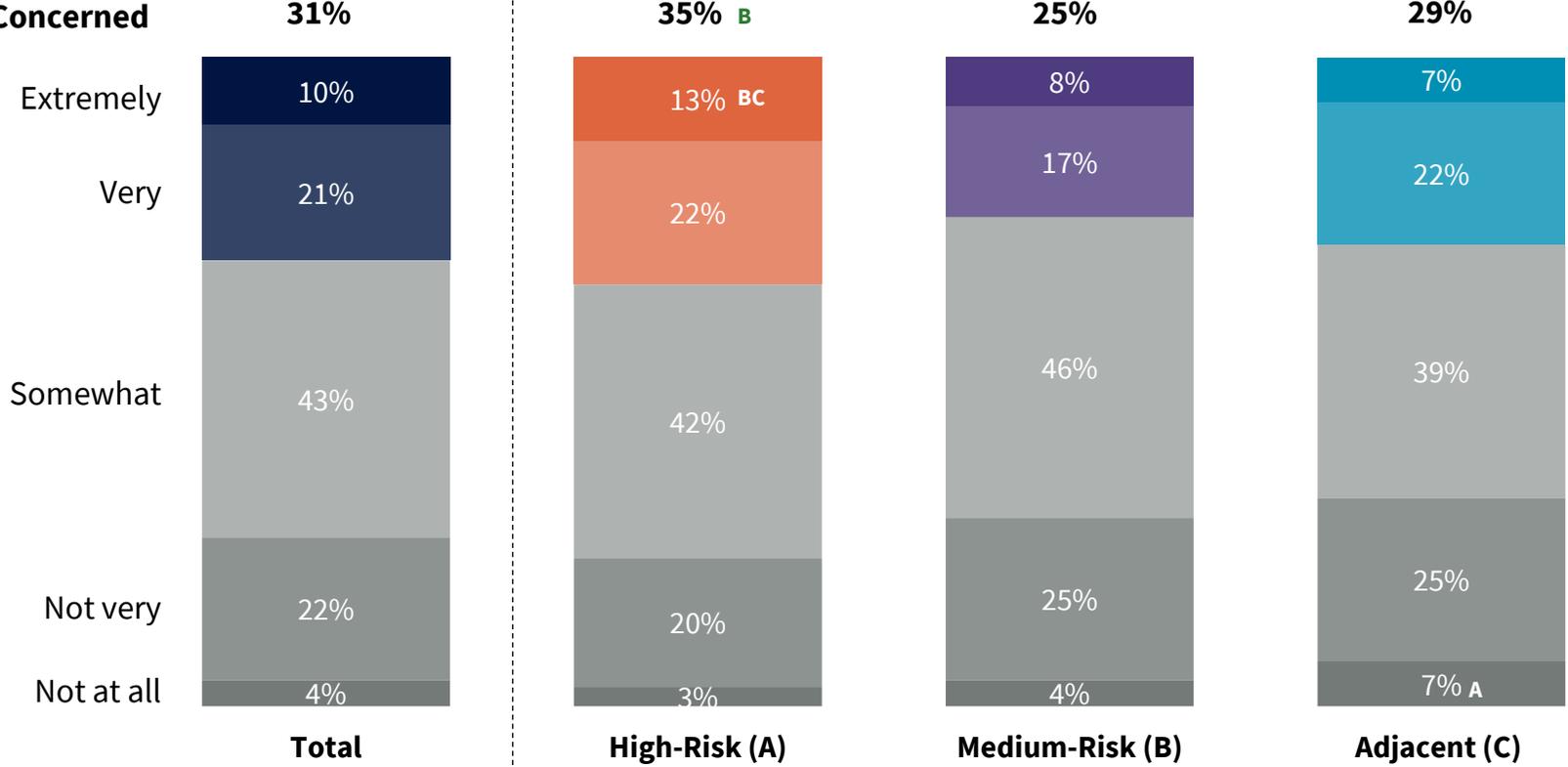
**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Concerned Premiums Will Increase Next Year



The high-risk group is more likely to feel premiums will continue to increase next year.

## Extremely/Very Concerned



Base: Have separate flood policy, Total (n=1007); High (n=586); Medium (n=247); Adjacent (n=174)  
 Q30. How concerned are you that your flood insurance premiums will increase next year?

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

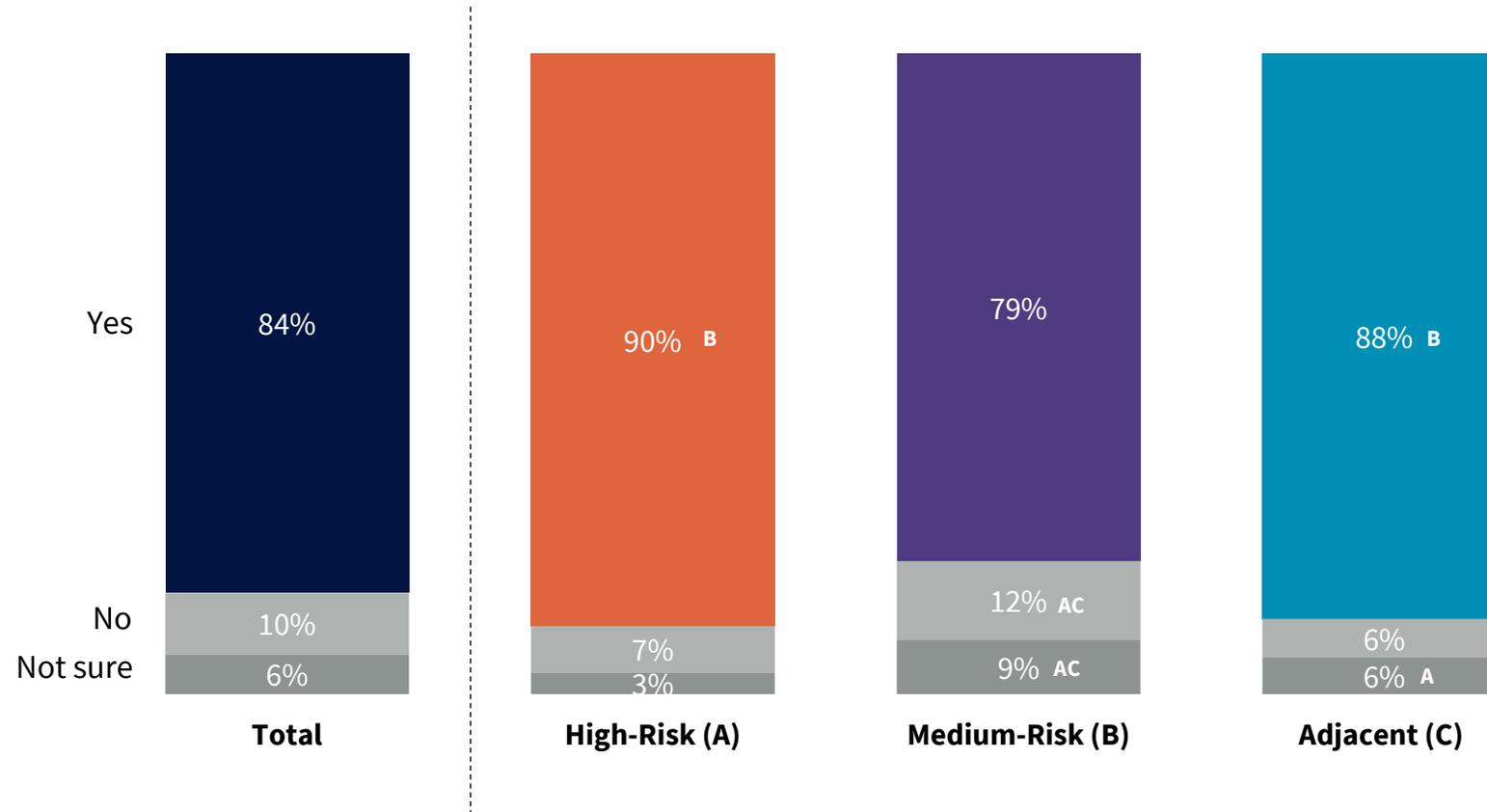


# Flood Zone Knowledge

# Aware of FEMA Identifying Flood Risk Zones



Basic awareness of FEMA responsibility for zone identification is strong.



Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)

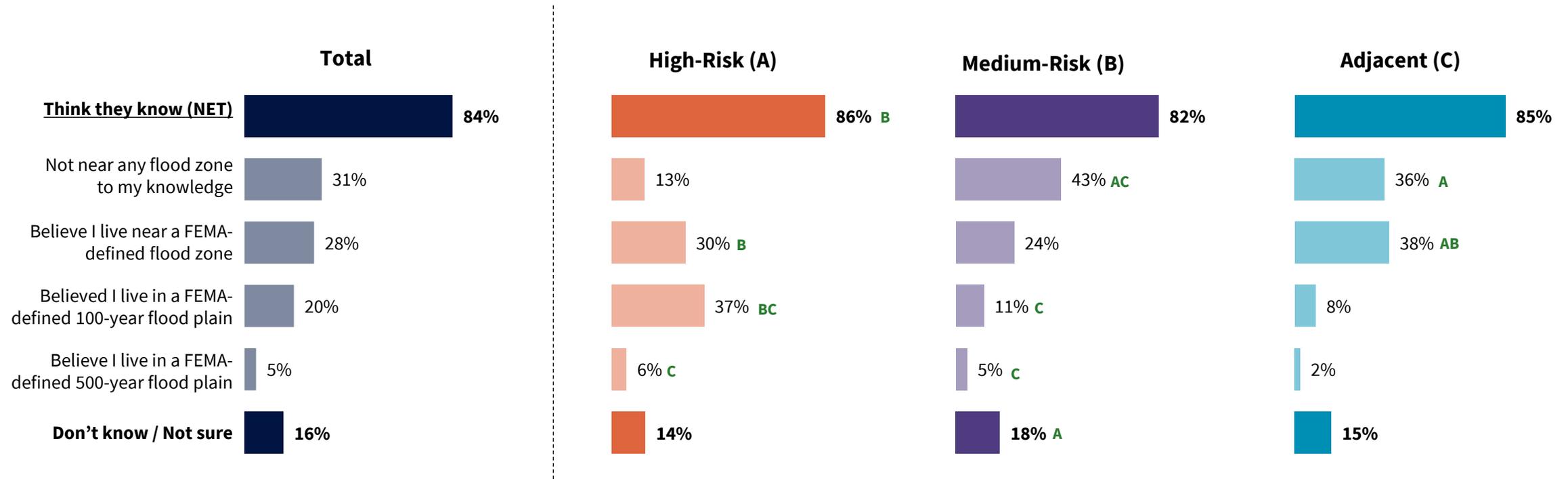
Q4. Are you aware that FEMA (Federal Emergency Management Agency) identifies flood risk zones and maps those areas?

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

# Flood Zone Area (Self-Reported)



While most people *think* they know which zone they are in, they really don't know.



Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)

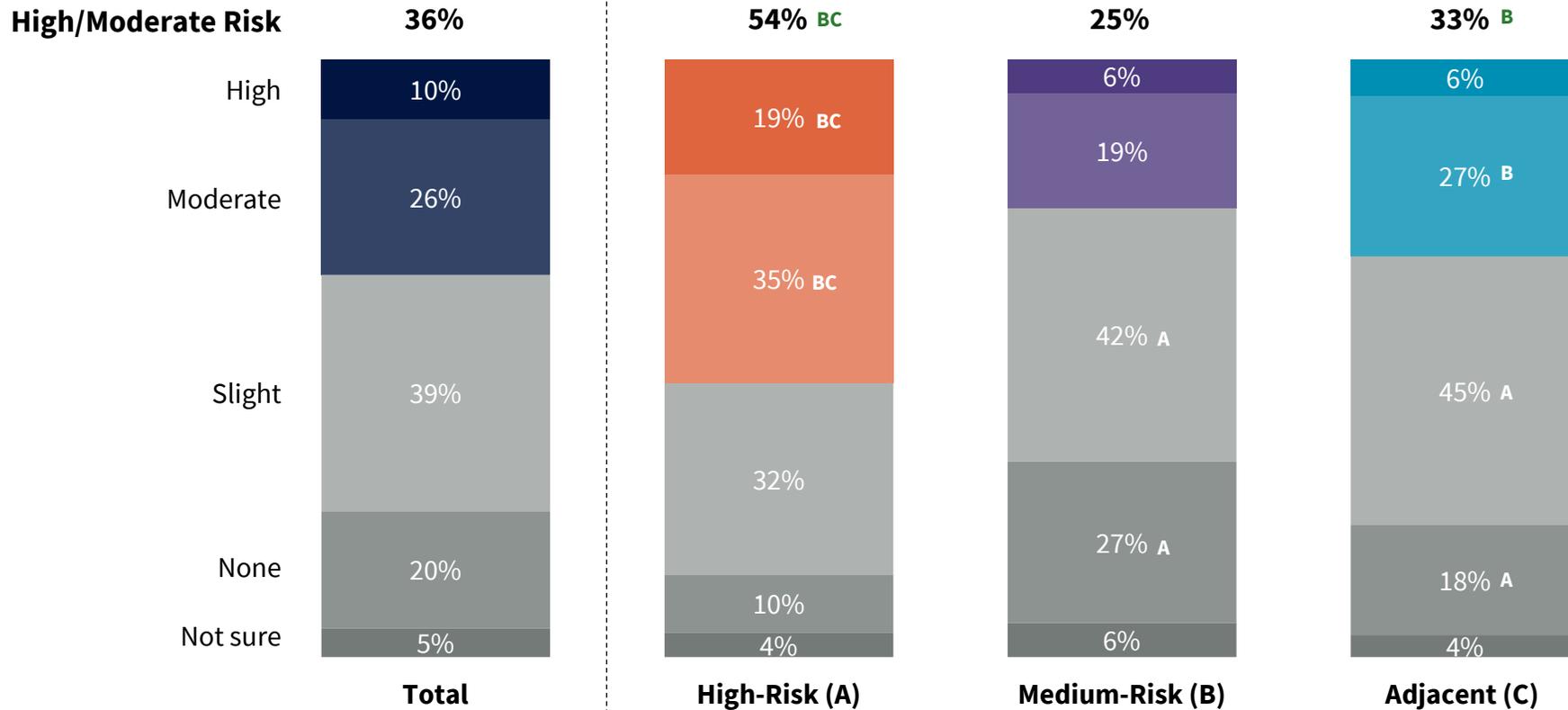
Q5. To the best of your knowledge, in which flood zone area as defined by FEMA is your residence located?

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

# Estimated Risk For Flooding in Community



Those in high-risk zone *do* believe their community is at higher risk for floods...



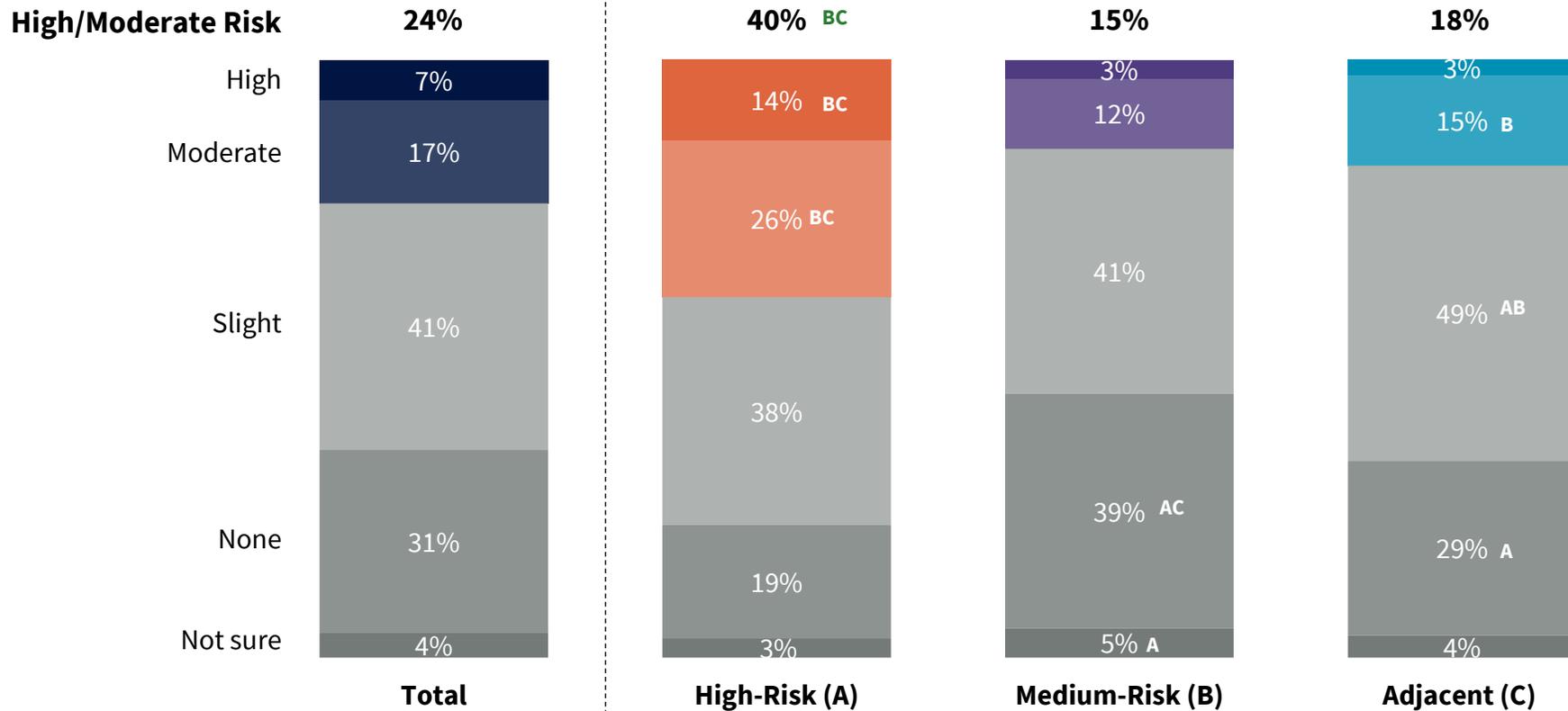
Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)  
 Q6a. To the best of your knowledge, to what extent is your community at risk for flooding?

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Estimated Risk For Flooding at Current Residence



...and while high-risk zone residents also believe their *homes* are at greater risk vs. other zones, they are more worried about their *community* (54%) than their home (40%).



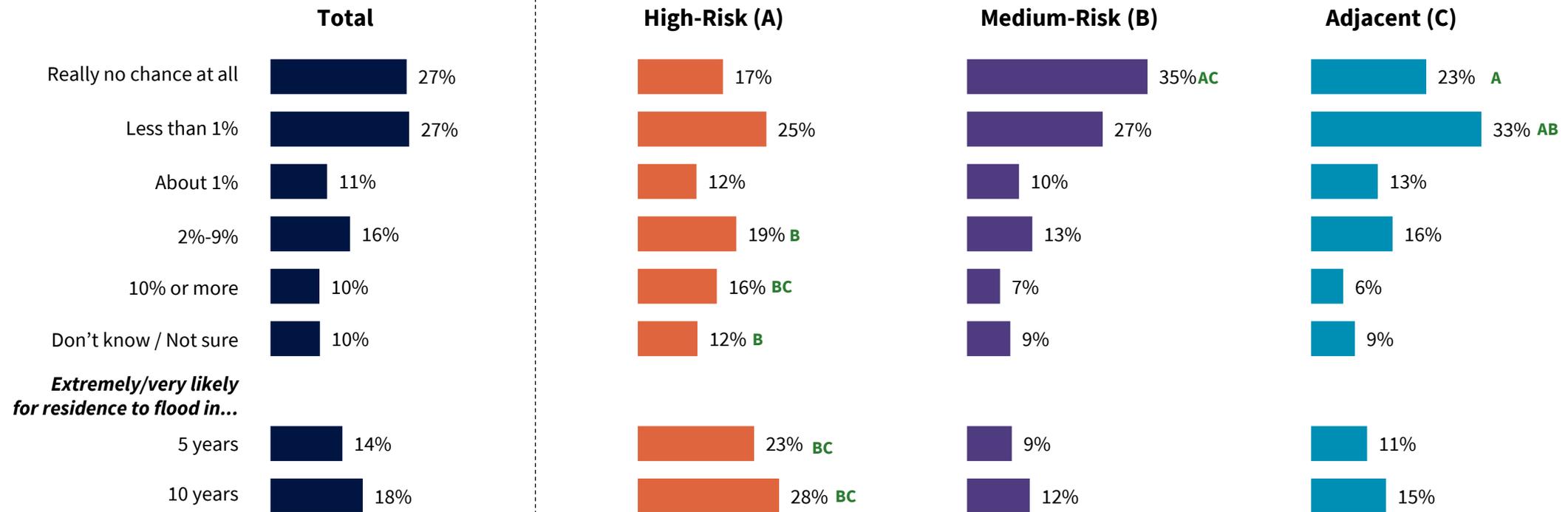
Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)  
 Q6b. To what extent is your current residence at risk for flooding?

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Estimated Flood Zone Risk



People are not really familiar with actual risk definitions.



Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)

Q7. How much of a chance do you think there is that your residence could be impacted by a flood in the next year? Your best guess is fine.

Q8. How likely do you think it will be for your residence to flood in the next... (5 pt. scale)

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

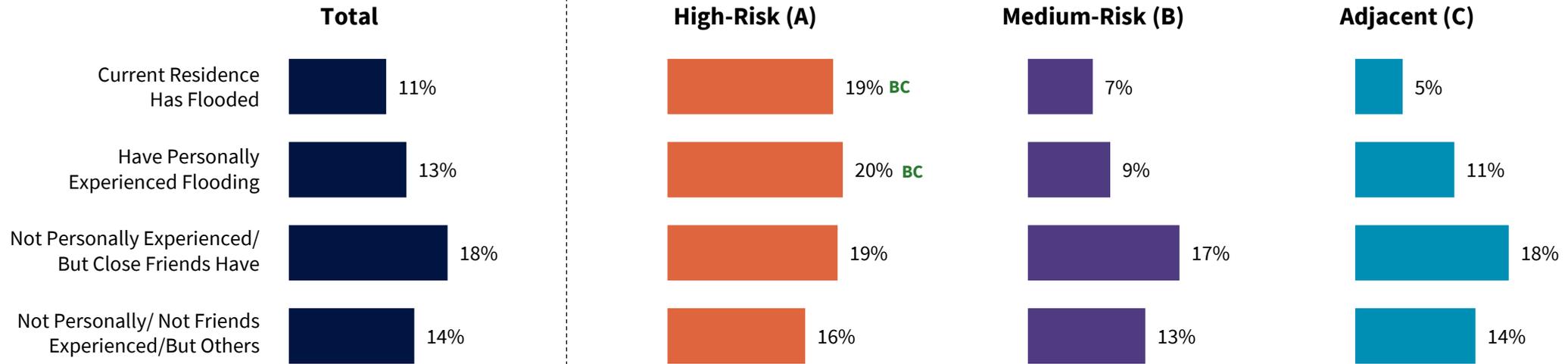


# Personal Flood Experience

# Personal Flood Experience



High-risk zone residents have more personal experience with floods.



Multiple Response – no experience not shown

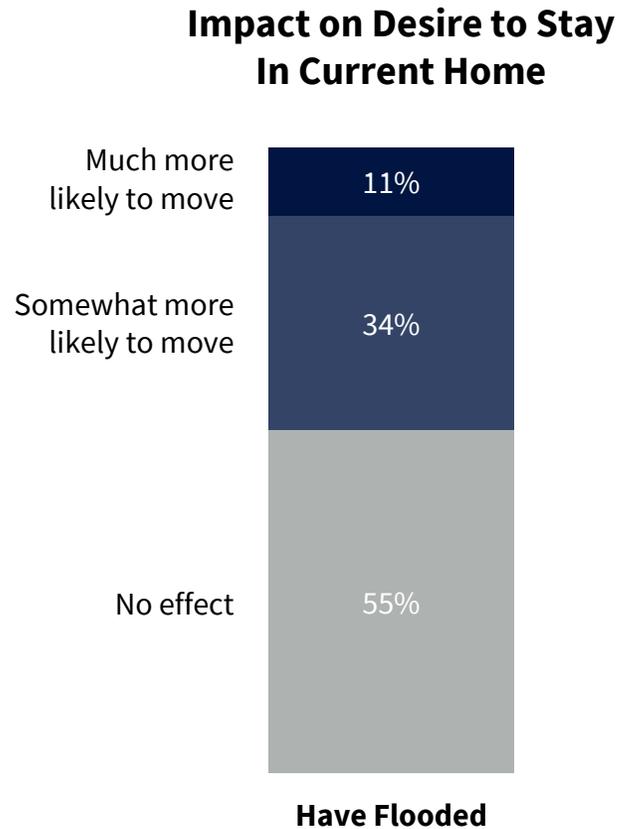
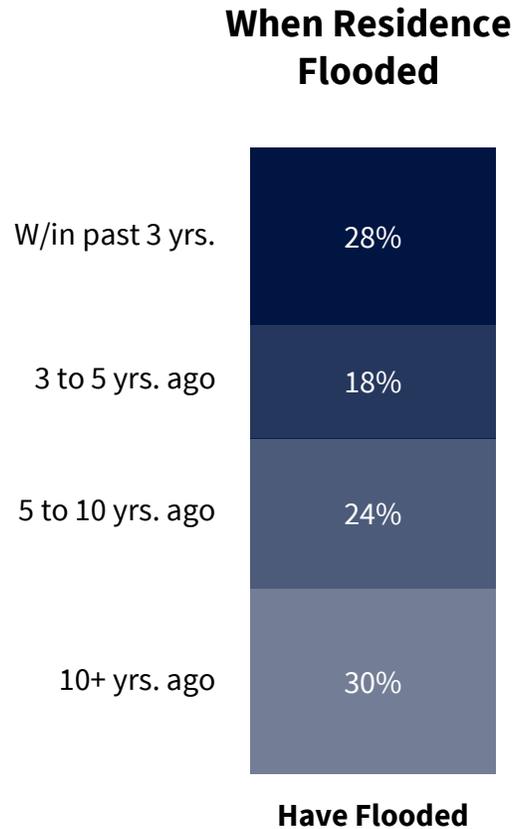
**Letter** denotes significant difference (95% CL); No stat testing against Total

Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)  
Q40. What has been your personal experience regarding flooding?

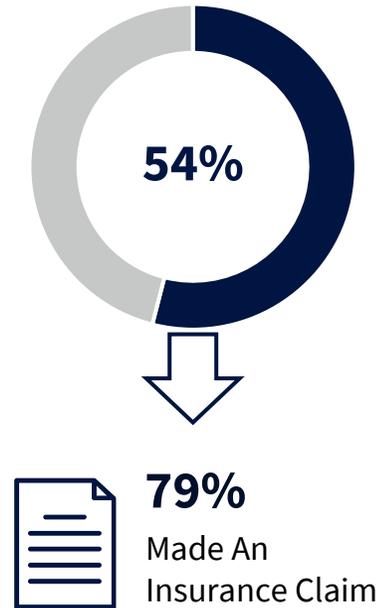
# Personal Flood Experience



If flooded, it was generally not within the past few years and had a relatively low impact on the desire to move. Only half had flood insurance and most of those made a claim.



### Had Insurance At Time Residence Flooded



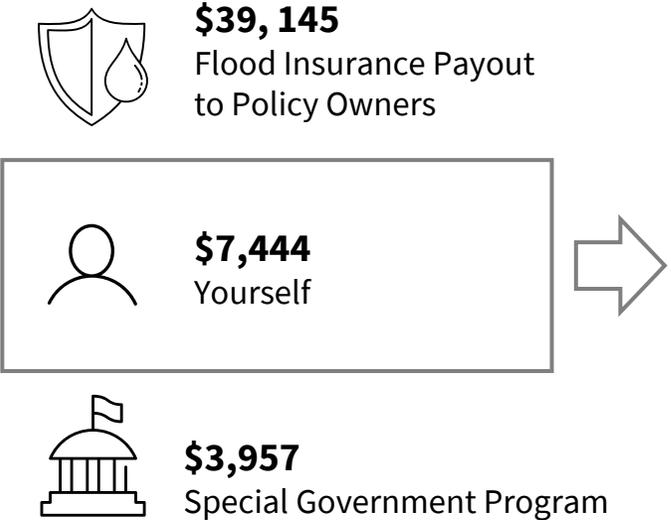
Base: Total- Have flooded (n=256); Had insurance when flooded (n=144)  
Q41. How long ago did your residence flood? / Q50. What impact did the flooding at your current residence have on your desire to stay in your current home?  
Q42. Did you have flood insurance at the time your residence flooded? / Q43. Did you make a claim against your flood insurance when your residence flooded?

# Flood Payment Responsibility

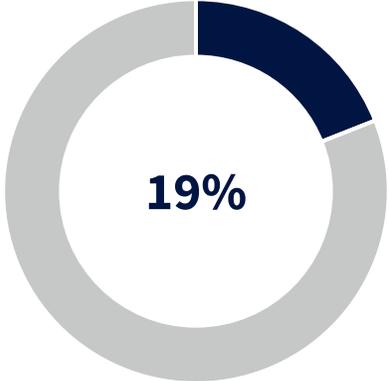


The average claimed insurance payout received by respondents was almost \$40,000, while personal expense averaged over \$7,000, with about 20% requiring borrowing.

## How Much Each Paid



## Borrowed Money From Lenders or Others (among those paying themselves)

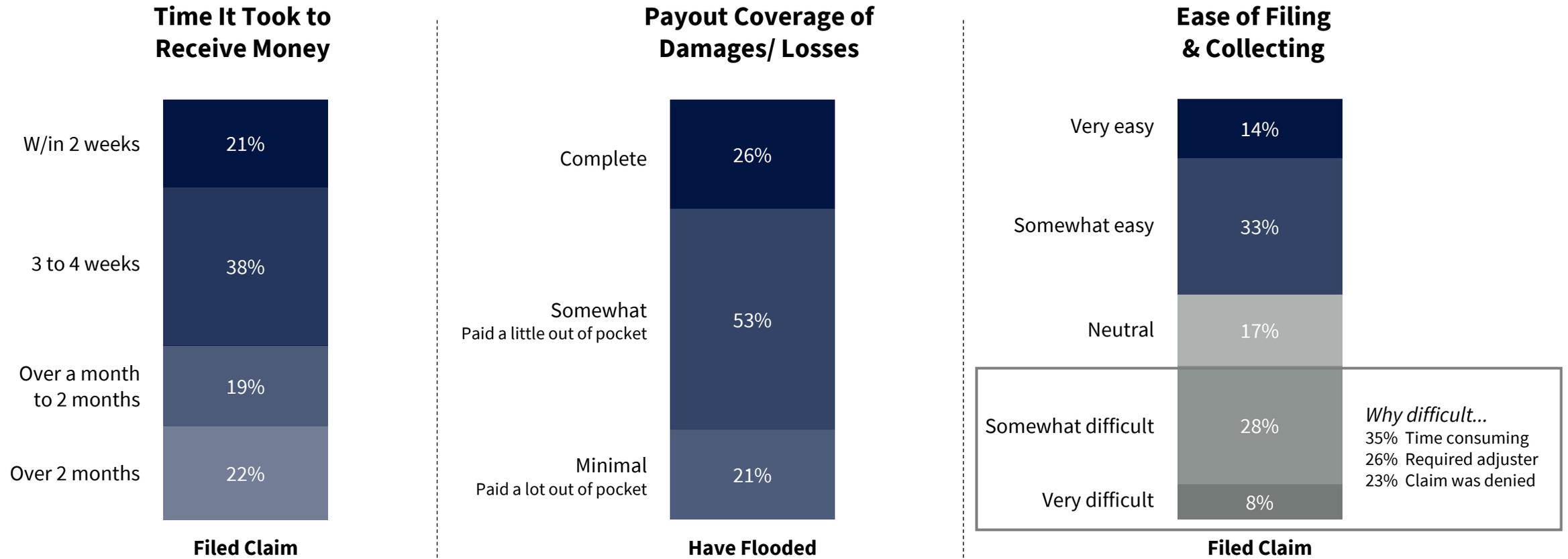


Base: Total- Have flooded (n=256); Had insurance when flooded (n=144); Paid personally (n=159)  
Q44. How much did each of the following pay for damage caused by the flood?  
Q45. How much, if anything, did you need to borrow from lenders or others to help you pay for the damage.

# Insurance Claim Experience



The time it took to collect varied dramatically, and most ended up paying at least partially out-of-pocket. Many thought the entire process was somewhat difficult.



Base: Total- Filed claim (n=112); Very/somewhat difficult (n=41)

Q46. How long did it take to receive your flood insurance money after filing your insurance claim or government forms? / Q47. To what extent did your flood insurance payout cover your damages and losses?

Q48. How easy was it to file and collect on your flood insurance claim? / Q49. Please tell us why it was [SOMEWHAT/VERY DIFFICULT] to file and collect on your flood insurance claim.



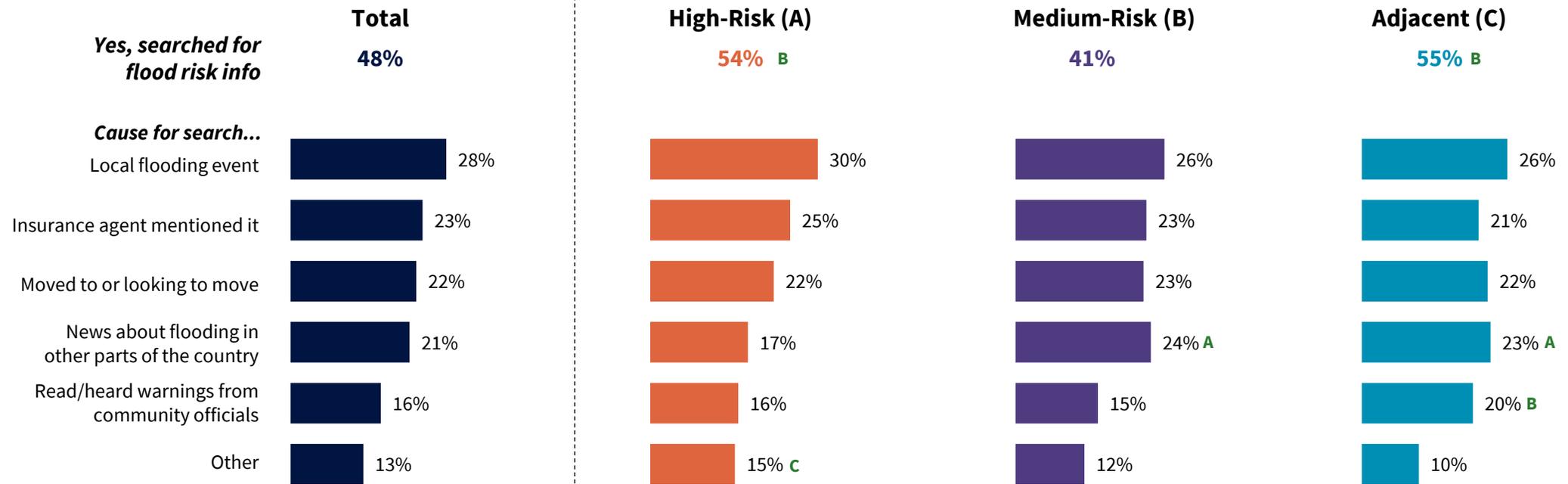
# Flood Risk Information

# Searching For Flood Risk Information



Over half of those even in adjacent areas had searched for flood risk info. Medium-risk are the least likely to have searched.

Less than half of those without flood insurance have searched for flood risk info



Multiple Response – can add to more than 100%

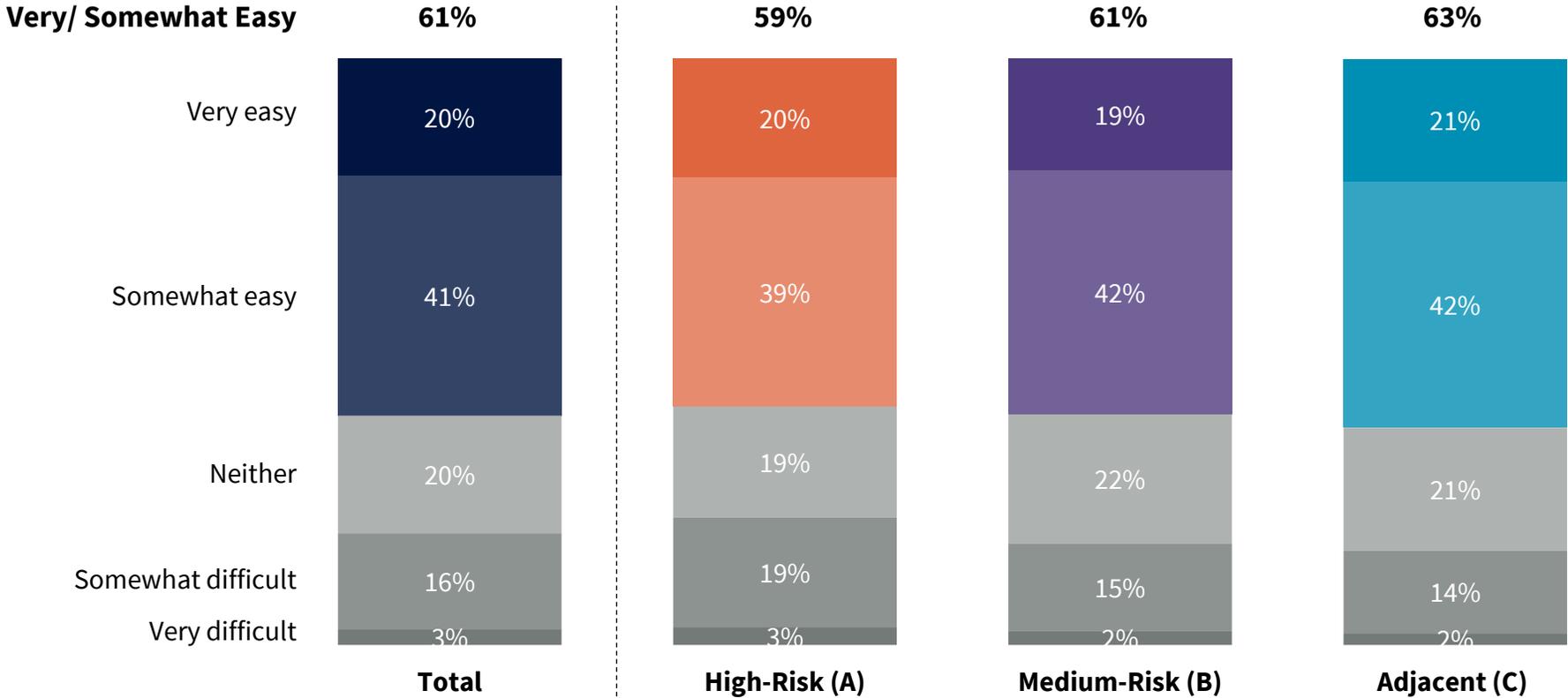
Letter denotes significant difference (95% CL); No stat testing against Total

Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720);  
 Searched for info, Total (n=1744); High (n=690); Medium (n=656); Adjacent (n=398)  
 Q9a. Just to check, have you ever searched for information about flood risk to your home?  
 Q9c. What caused you to search for information about your flood risk?

# Ease of Searching for Flood Risk Information



Searching for flood information should be made even easier, especially for high-risk.



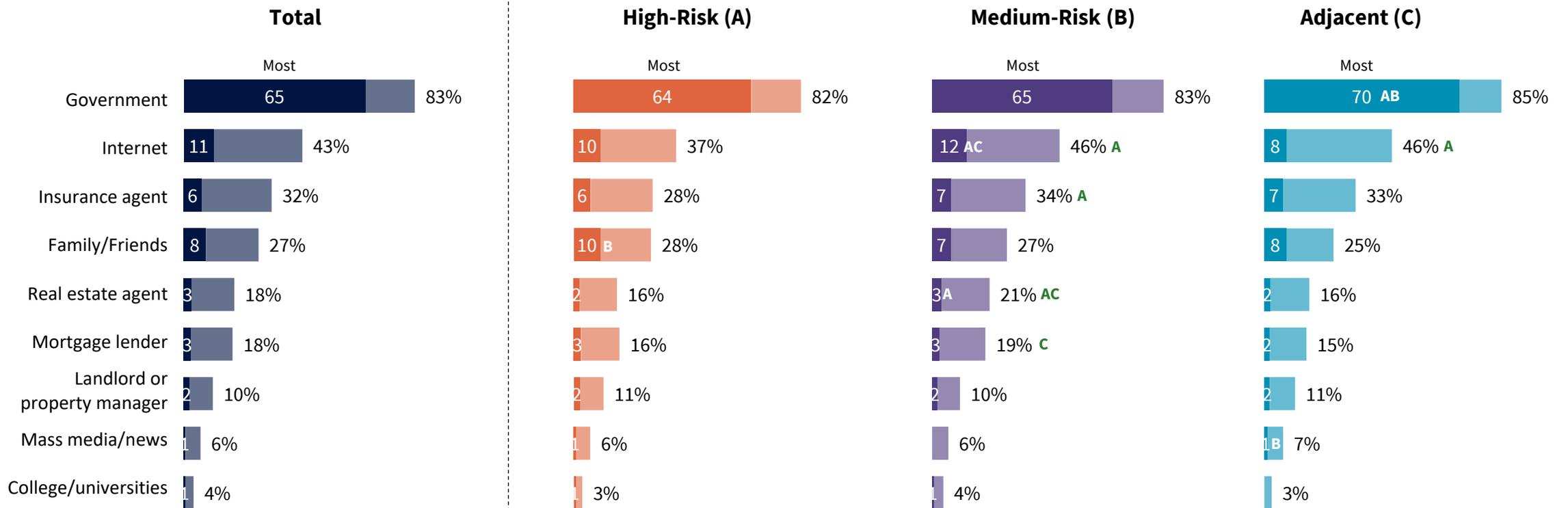
Base: Searched for info, Total (n=1744); High (n=690); Medium (n=656); Adjacent (n=398)  
 Q9b. How easy was it to find information about your flood risk?

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Trusted Resources for Determining Flood Risk



Government agencies are highly trustworthy in terms of assessing flood risk. It is worth noting that scores these high are rarely seen for government agencies.



Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)  
 Q20a. Which of the following resources/tools would you trust to determine your property's flood risk?  
 Q20b. Which one of the following resources/tools would you most trust to determine your property's flood risk?

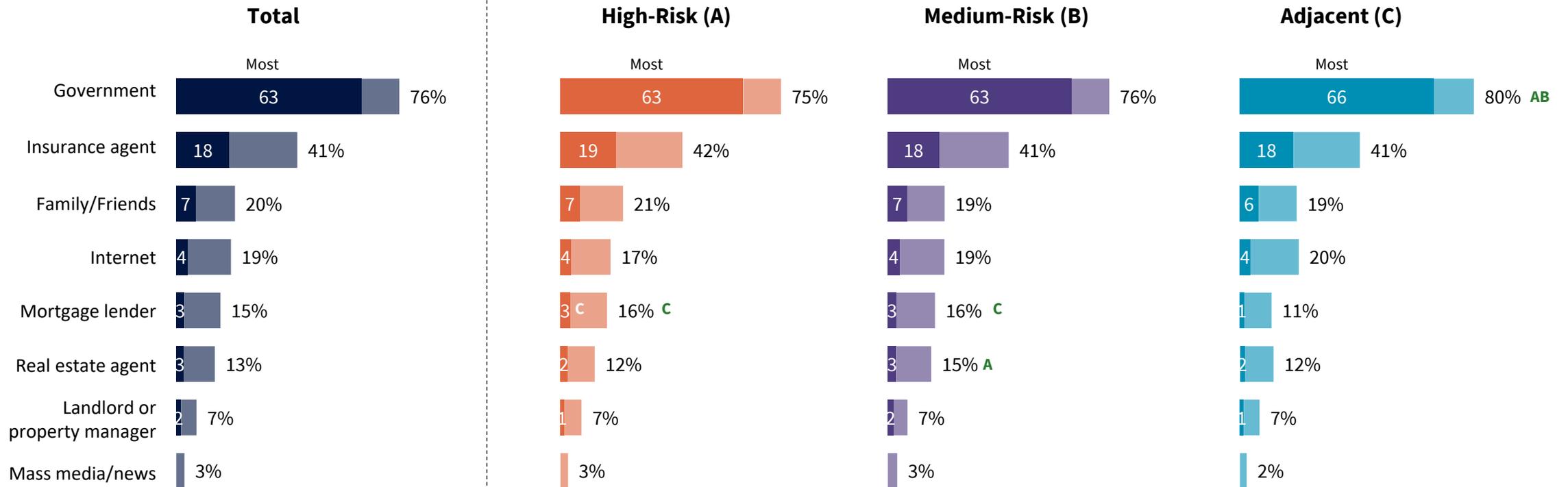
Each evaluated separately –  
 MOST trusted adds to 100%.

Letter denotes significant difference (95% CL);  
 No stat testing against Total

# Trusted Resources for Flood Insurance Info



Similarly, people view the government as a generally trustworthy institution to administer flood insurance information, though a bit less so than assessing flood risk.



Each evaluated separately – MOST trusted adds to 100%.

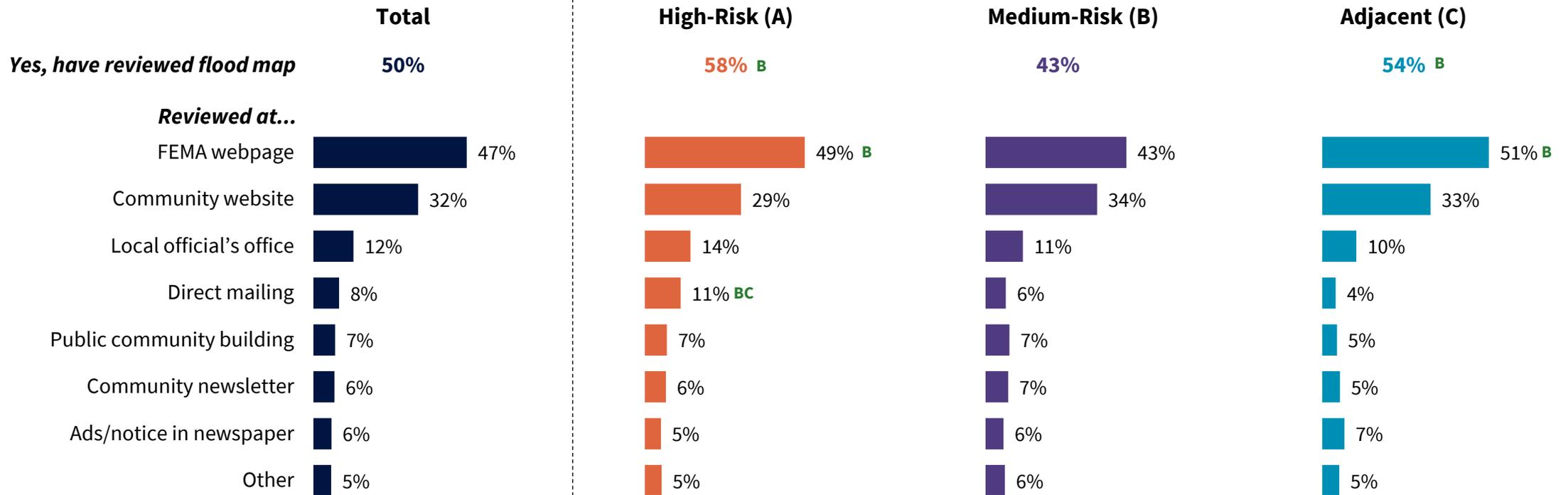
**Letter** denotes significant difference (95% CL); No stat testing against Total

Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)  
 Q21a. Which of the following resources/tools would you trust to get flood insurance information?  
 Q21b. Which one of the following resources/tools would you most trust to get flood insurance information?

# Community Flood Map Usage



Half claim to have reviewed community flood maps, with those in high-risk zone being more inclined to do so.



Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720);  
 Reviewed community flood map, Total (n=1822); High (n=736); Medium (n=686); Adjacent (n=400)  
 Q10a. Have you reviewed your community's flood map? / Q10b. Where did you review your community's flood map?

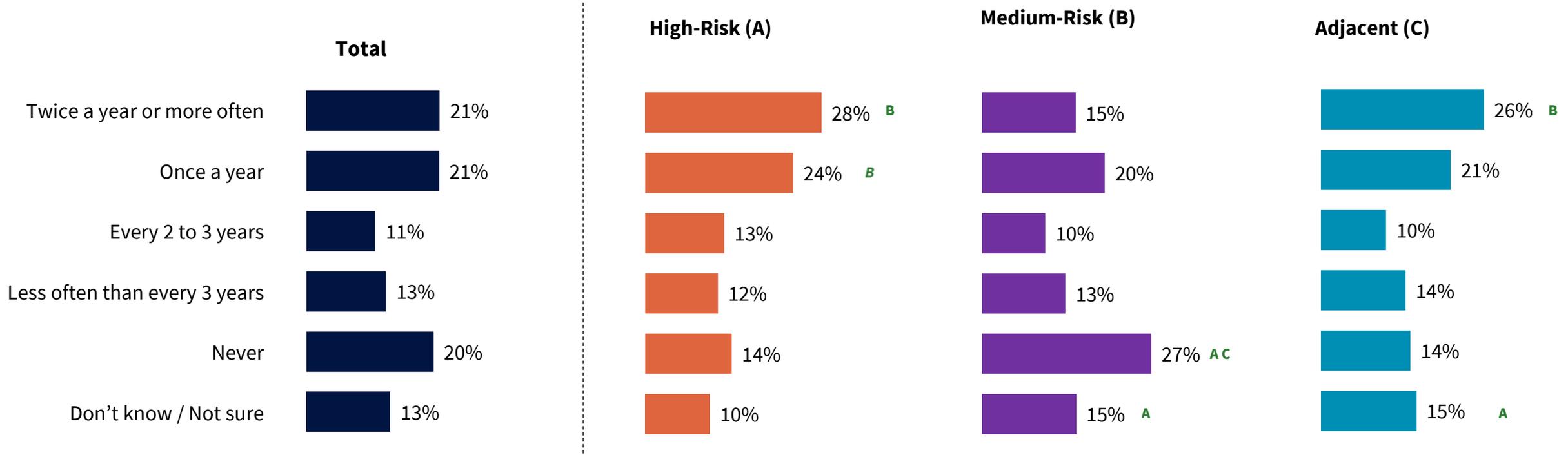
Multiple Response – can add to more than 100%

Letter denotes significant difference (95% CL);  
 No stat testing against Total

# Frequency of Hearing About Flood Risk



About 40% hear about flood risk at least yearly. Medium-risk zone residents are less likely to receive annual communication.

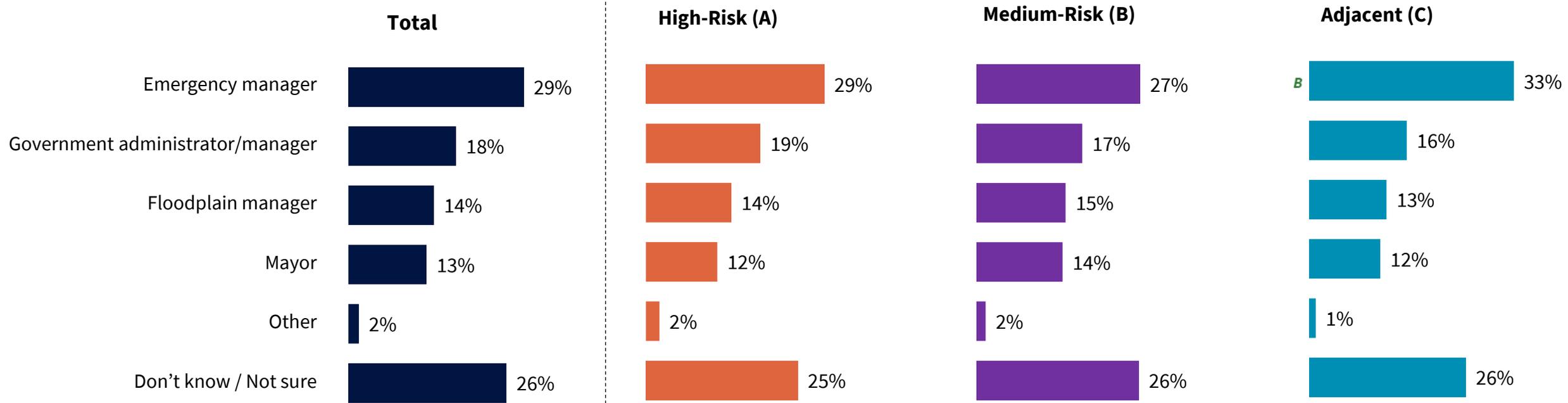


se: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)  
 Q51. Approximately how often do you hear about flood risk?

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Public Official Most Expected to Communicate Flood Risk

Emergency managers are most frequently cited as the prominent public communications officials, though nearly an equal number cite not knowing.



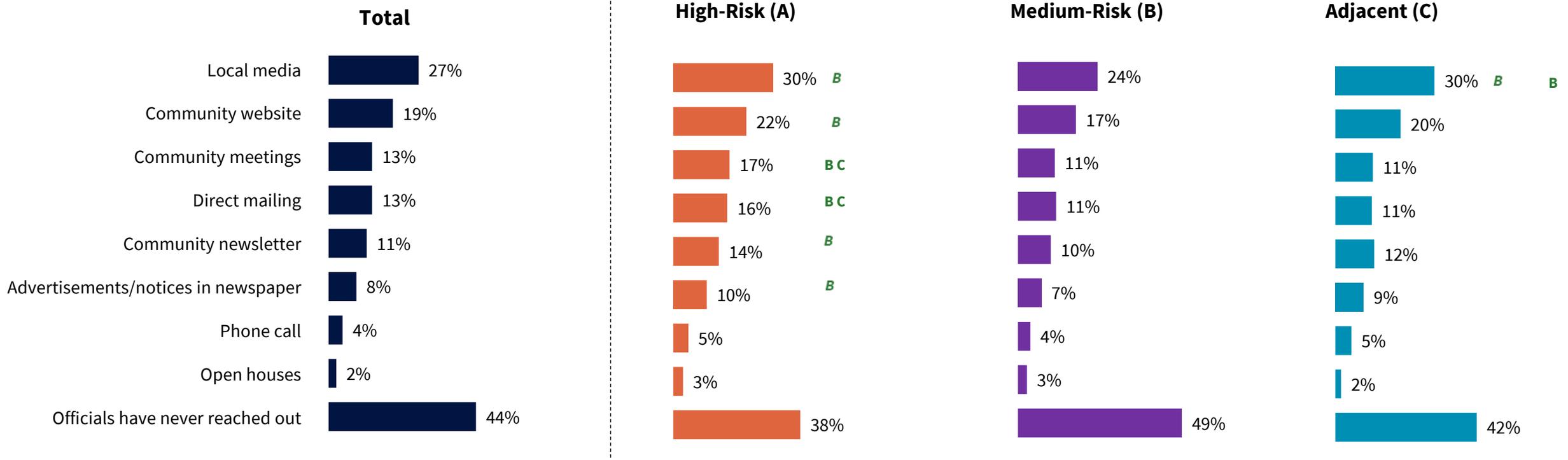
se: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)  
 Q52. Which official within your community would you most expect to hear from about flood risk?

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Methods Used by Officials to Reach Out to Inform



Local media is the most prominent communication method, though myriad ways are used.



se: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)  
 Q56. Specifically, how have officials in your community reached out to inform the public about flooding risk and information?

Multiple Response – can add to more than 100%

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

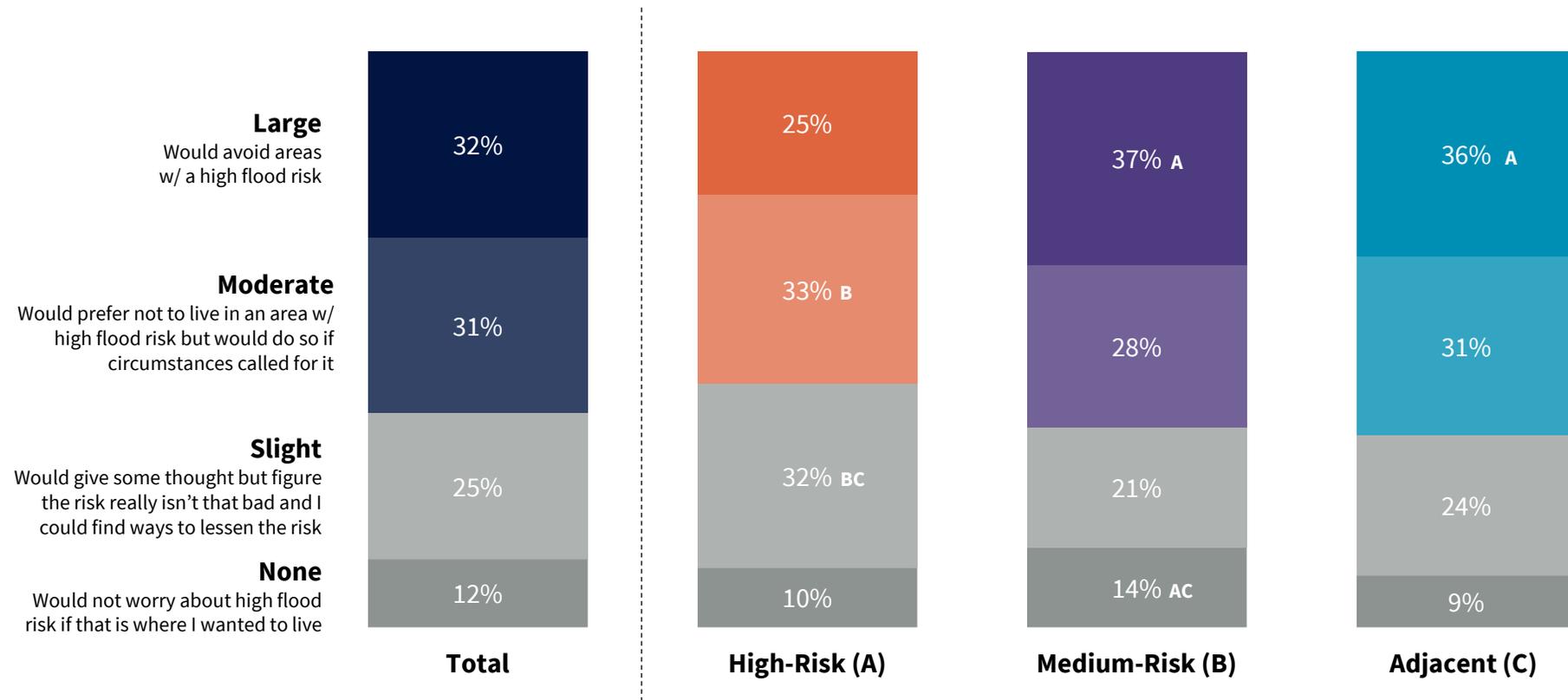


# Desirability of Living in Flood Zone

# Impact of Flood Risk on Choice of Living Area



Knowledge of flood risk impacts living choices – even one-quarter of those currently in high-risk zones mention they would try to avoid such areas if they could.



Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)

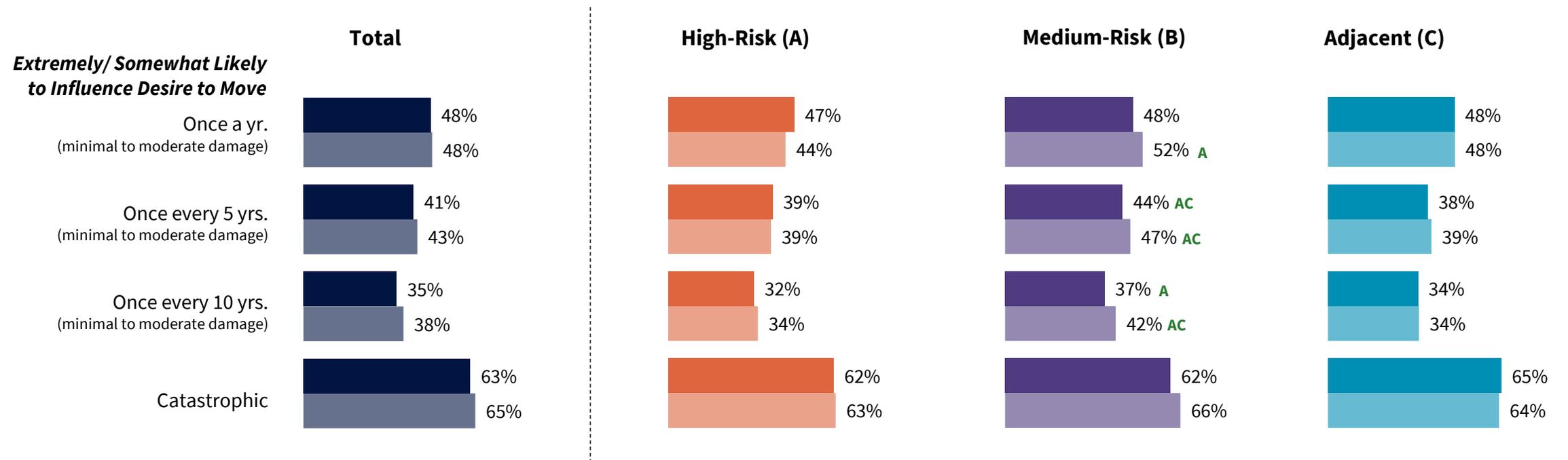
Q12. Which of the following best describes the impact the risk of flooding has on your choice of where to live?

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

# Influence of Flooding Risk on Desire to Move



Even an annual flood would only motivate approximately half to move; one-third or more of the population will not be likely to move even after catastrophic flooding to their residence or neighborhood.



● Flooding in Current Residence    ● Flooding in Neighborhood

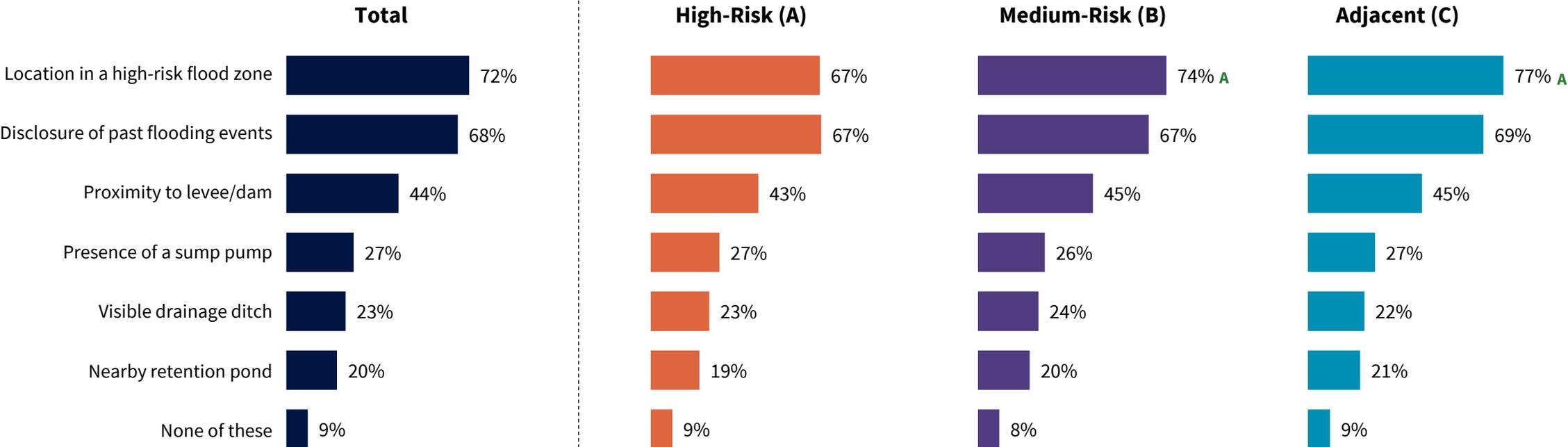
Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)  
 Q19a. How likely would this type of flooding in your current residence influence your desire to move? (5 pt. scale)  
 Q19b. How likely would this type of flooding in your neighborhood influence your desire to move? (5 pt. scale)

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Flood Risk Concerns About Purchasing/Renting



However, the majority will think twice about moving to a high-risk zone. Those already in a high-risk zone are slightly less concerned about moving to another high-risk area.



Multiple Response – can add to more than 100%

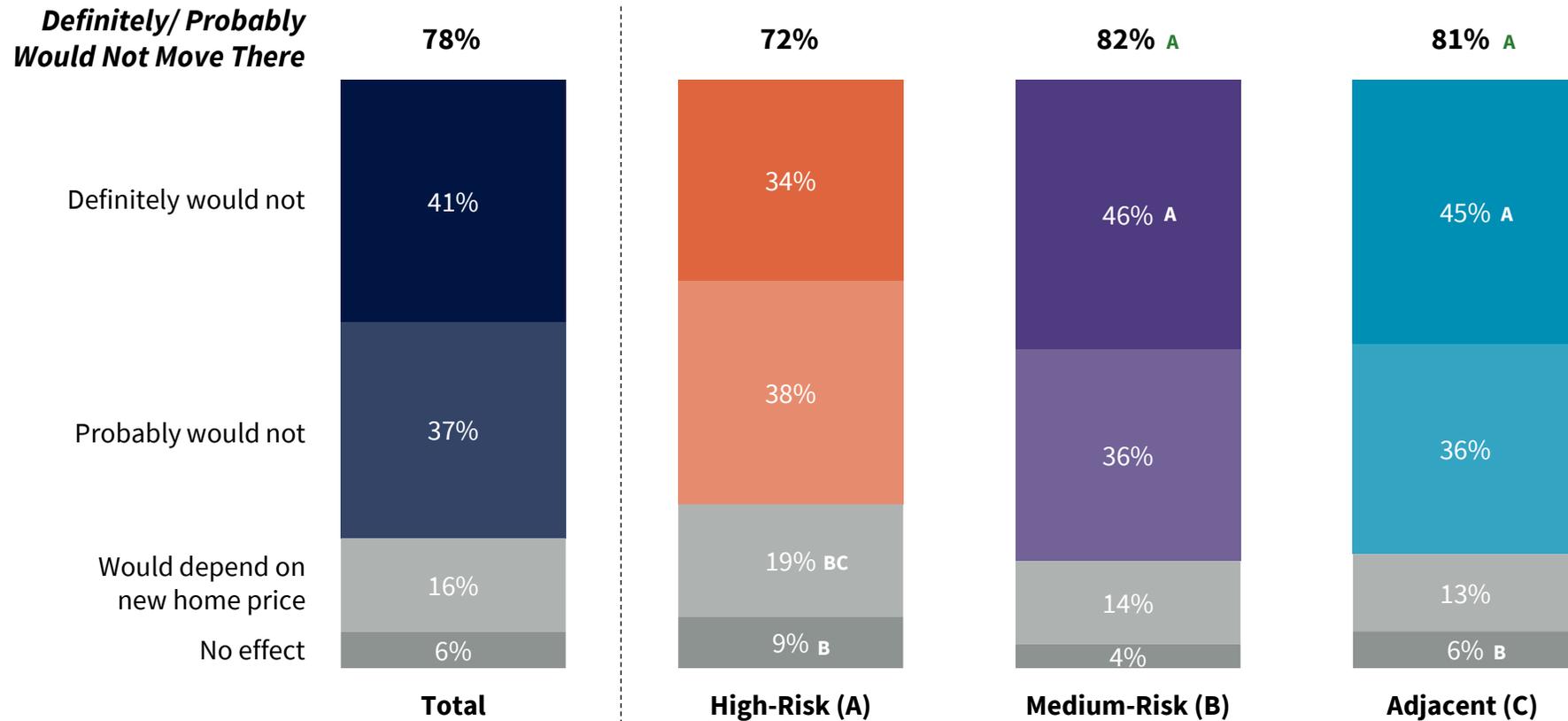
<sup>Letter</sup> denotes significant difference (95% CL); No stat testing against Total

Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)  
 Q15. When looking at a potential new home, which of the following, if any, would make you concerned to purchase or rent?

# Reaction on Moving to High-Risk Flood Area



A vast majority report not wanting to move into high-risk zones, including 7 out of 10 who are already in a high-risk area.

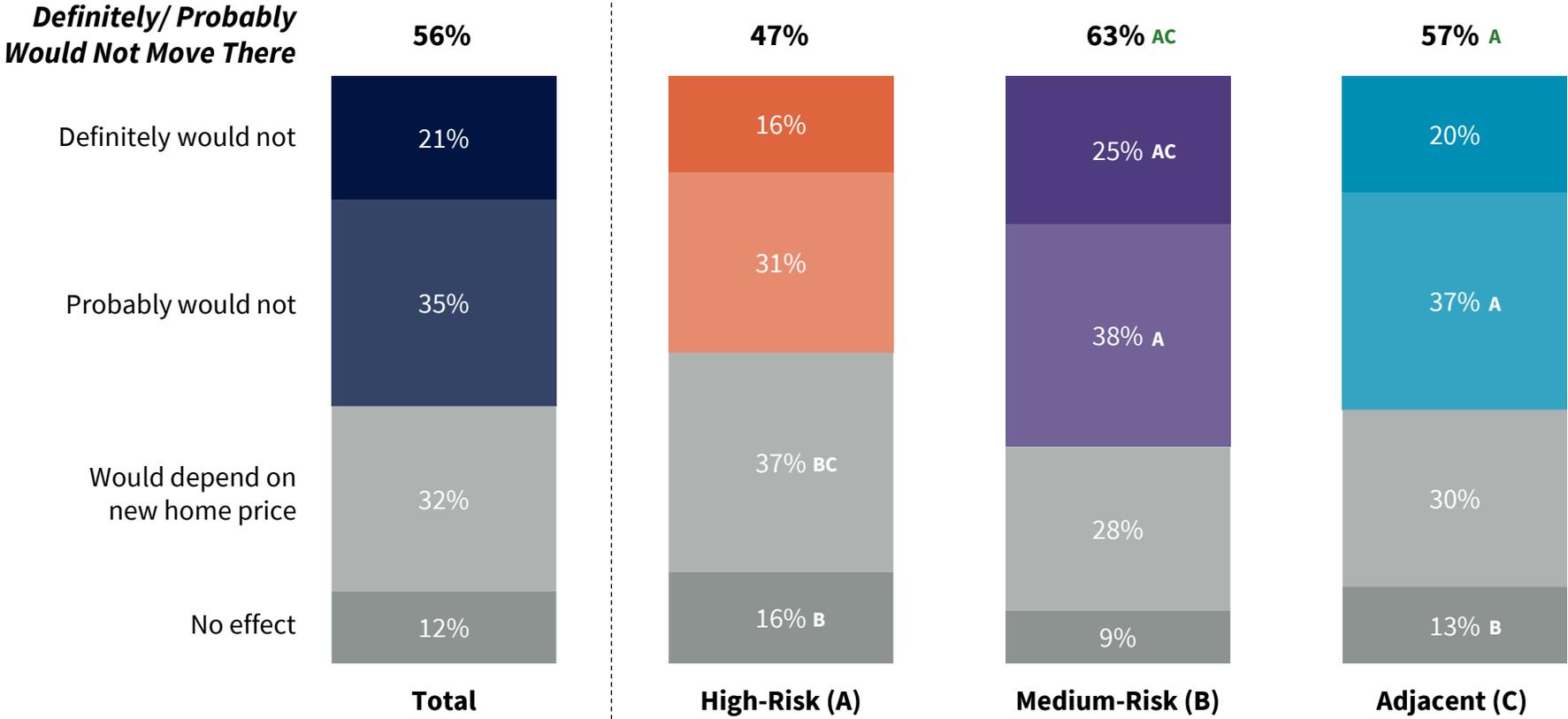


Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)  
 Q14a. When looking at a potential new home, what would your reaction be if you found out it was in a high-risk flood area?

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Reaction Moving to Where Flood Insurance Is Mandatory

Mandatory insurance serves as a mitigator for some, but many would not move there if it required flood insurance, although those in high-risk zones are slightly more amenable to it.



Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)

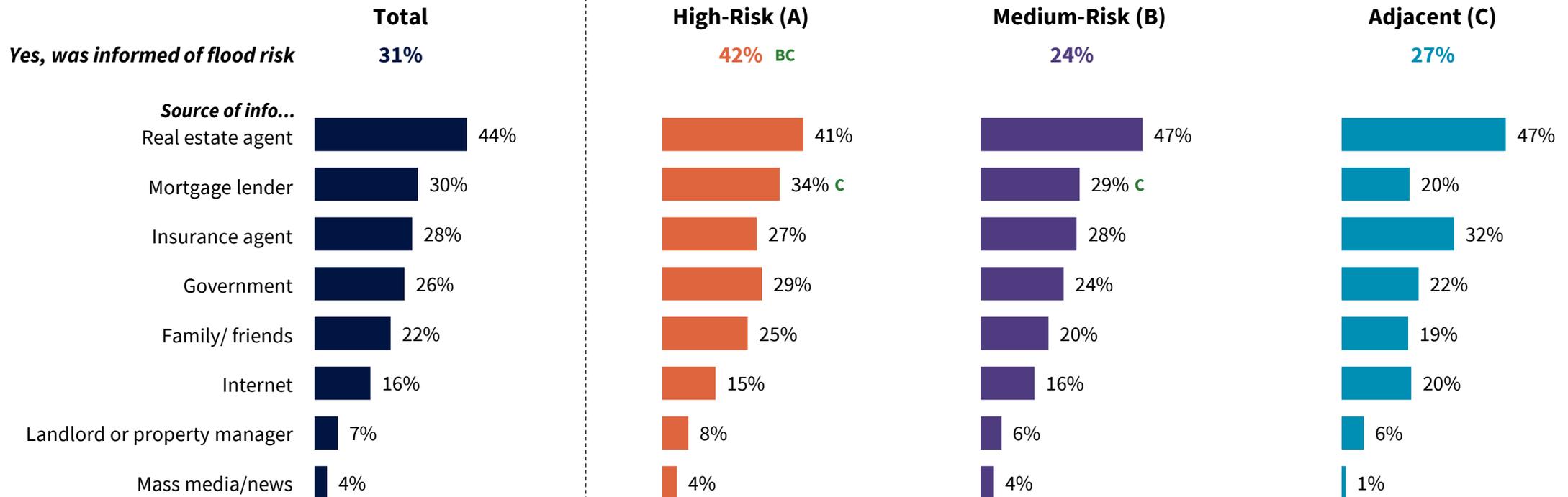
Q14b. When looking at a potential new home, what would your reaction be if you found out that you had to purchase flood insurance for the property?

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

# Flood Risk Information Prior to Moving



Approximately 40% in high-risk zone claim being informed of risk prior to moving, with real estate agents and lenders as primary sources.



Multiple Response – can add to more than 100%

Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720);  
 Informed about flood risk, Total (n=1130); High (n=527); Medium (n=398); Adjacent (n=205)

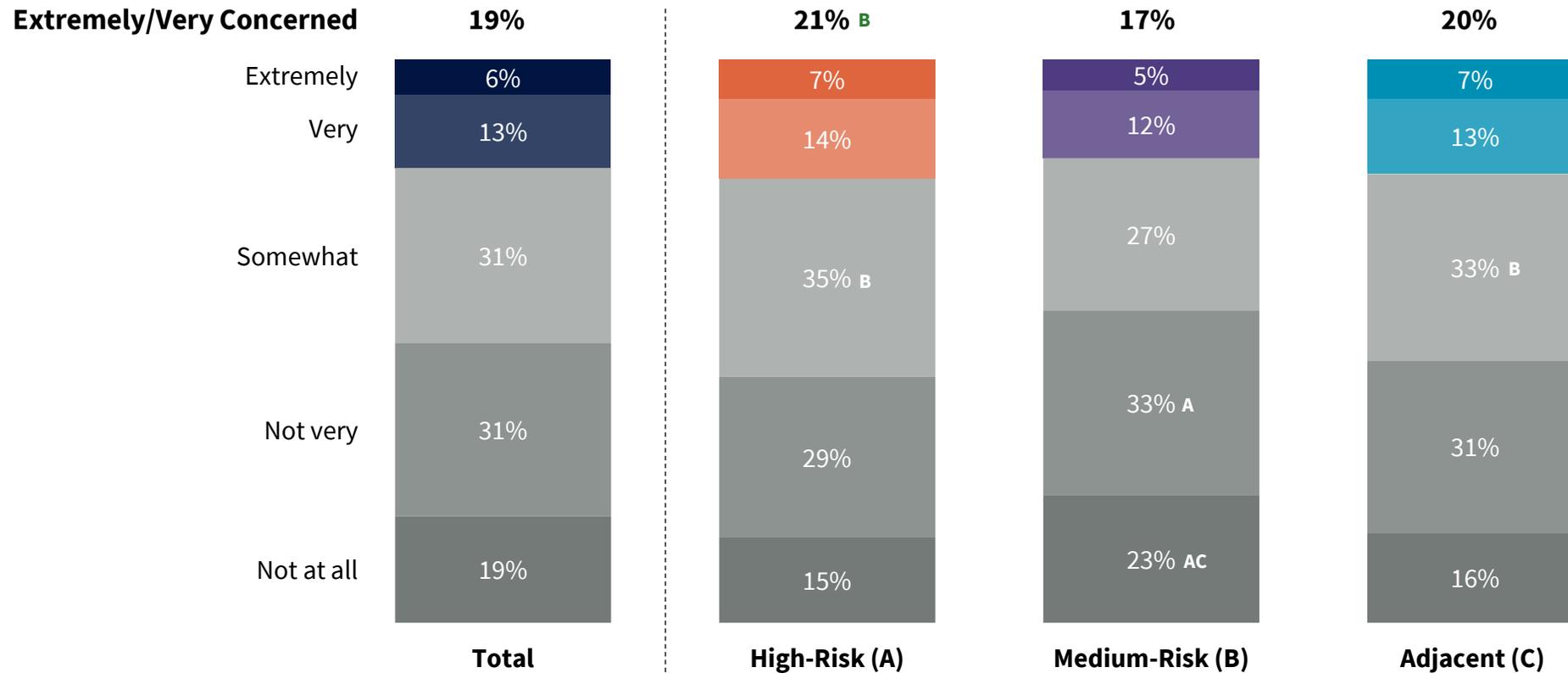
Q13a. Were you informed about any flood risk upon moving into your current residence? / Q13b. How did you become informed about your flood risk upon moving into your current residence?

Letter denotes significant difference (95% CL);  
 No stat testing against Total

# Concern for Decrease in Value Due to High-Risk



There is a modicum of concern over any possibility of home value decrease due to being designated as a high-risk zone.



Base: Total (n=3532); High (n=1216); Medium (n=1597); Adjacent (n=719)

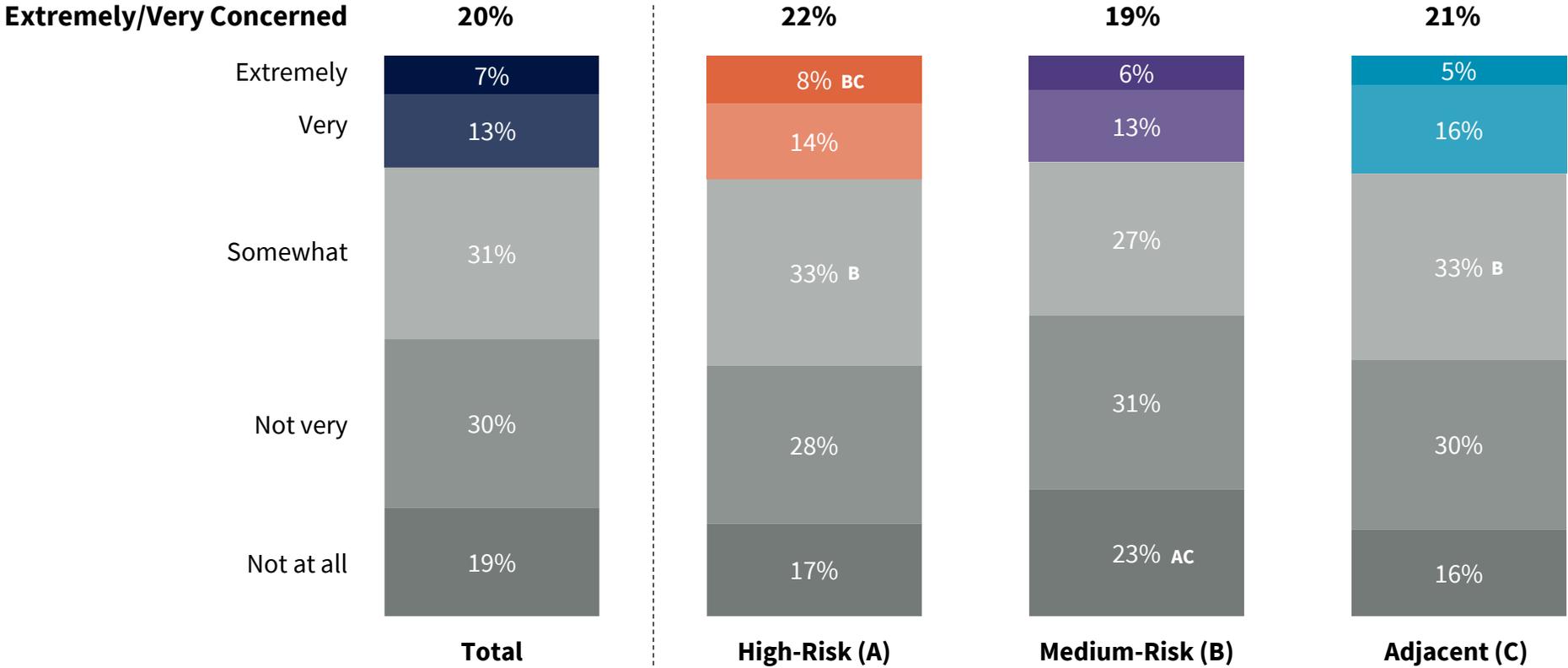
Q18a. How concerned are you that an organization/agency could list your property as at high-risk for flooding that could decrease your property value?

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

# Concern for Required Insurance Due to High-Risk



Just as insurance requirements appear to yield some level of comfort, there is not strong concern about potential requirements to purchase flood insurance.



Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)

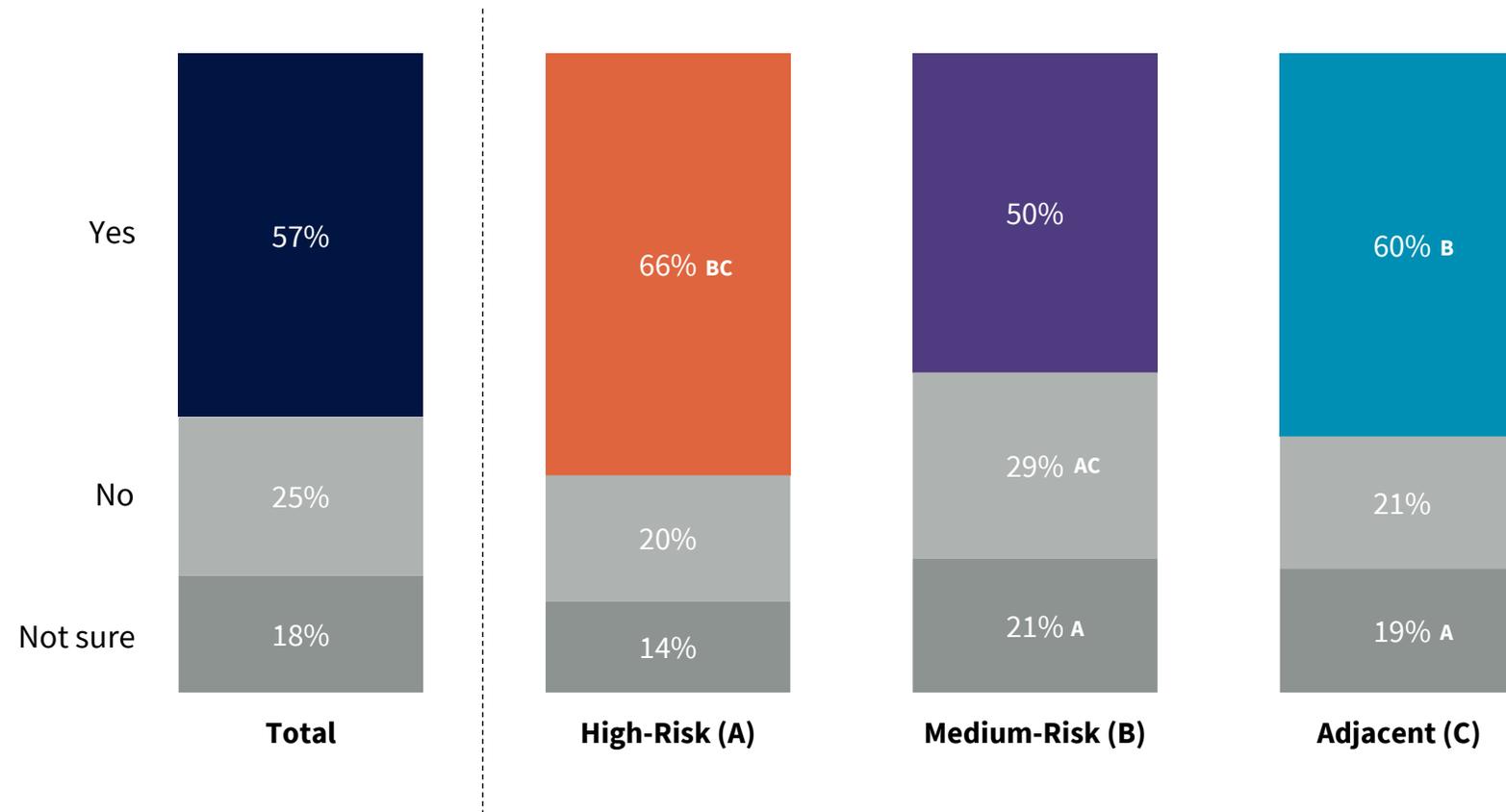
Q18b. How concerned are you that an organization/agency could list your property as at high-risk for flooding that would make you required to purchase flood insurance?

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

# Aware Map Changes Can Impact Flood Insurance



A strong majority of those in high-risk zone are aware that map changes could induce insurance requirements – even half or more of those in the other zones are aware as well.



Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)

Q11. Are you aware that if flood maps change as a result of analysis, it could make it mandatory for people to purchase flood insurance in the future?

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

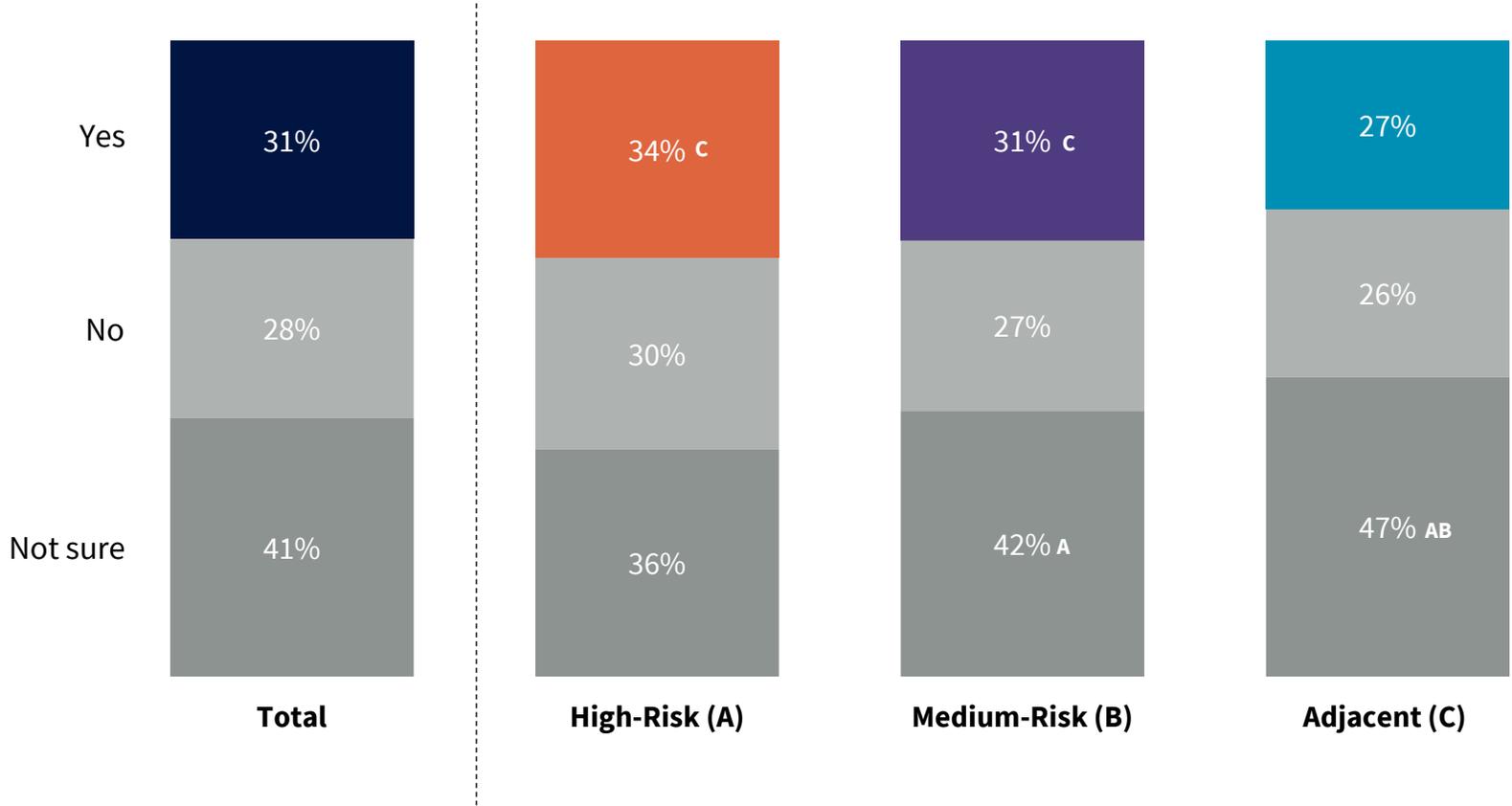


# Flood Risk Prevention

# Has Community Taken Steps to Prevent/Minimize?



Communities in high-risk areas are more likely to have taken preventative steps.



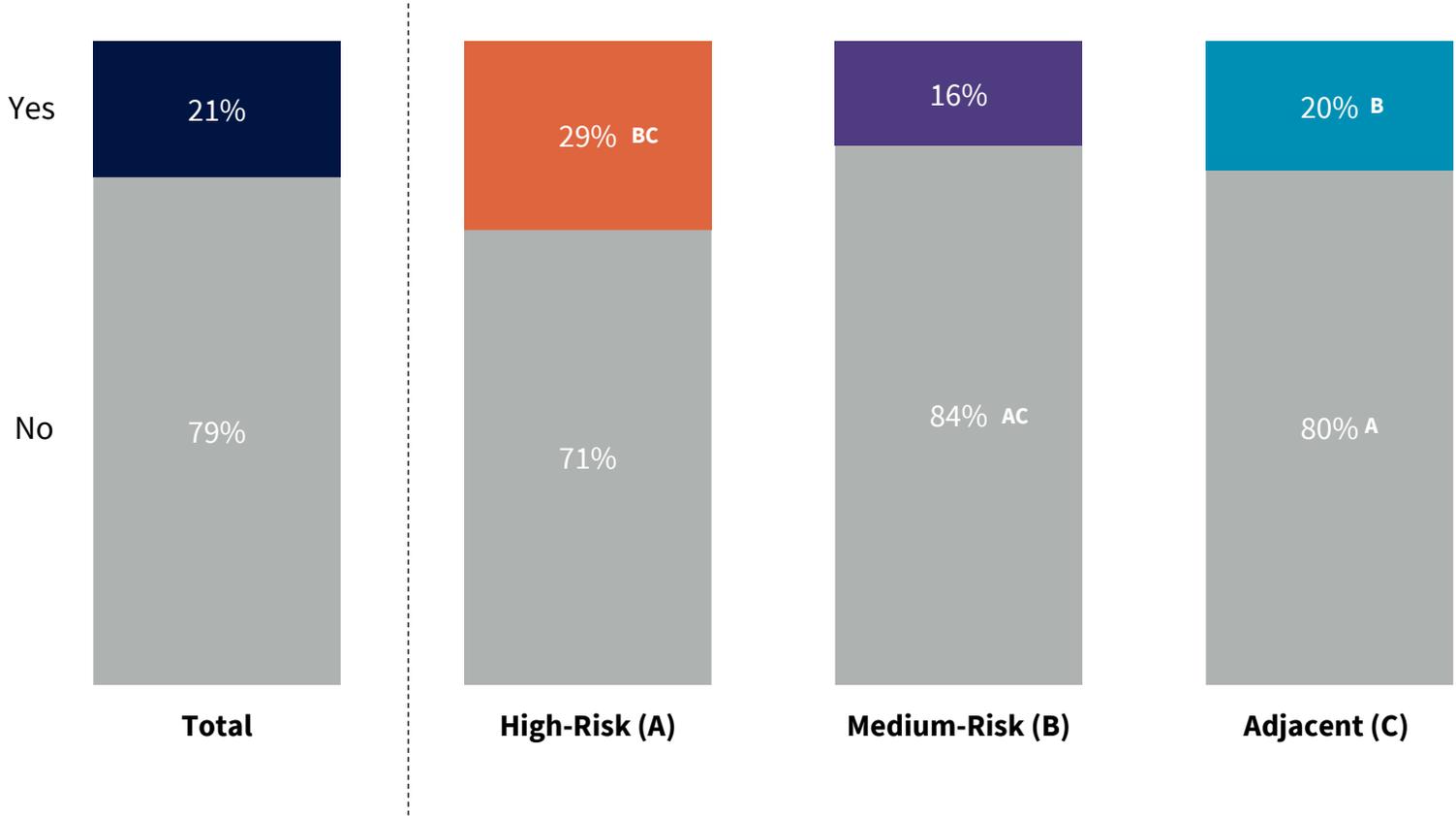
Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)  
Q53. Has your community taken any steps to prevent future flooding?

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

# Have You/Yourself Taken Steps to Prevent/Minimize?



Even in high-risk, most people have not taken any steps to protect against flooding.



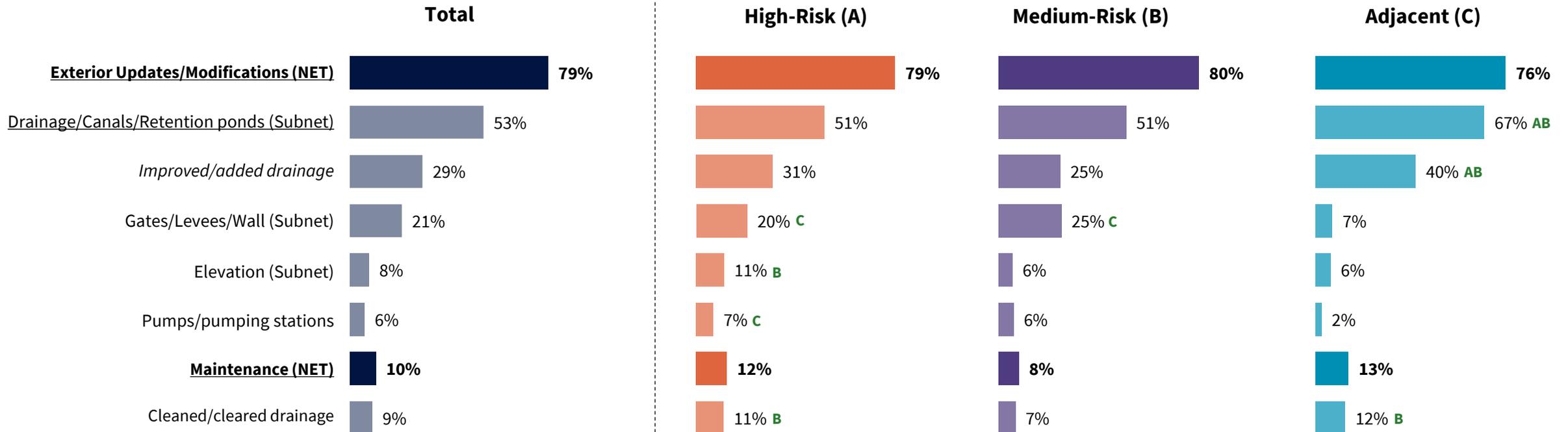
Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)  
Q57. Have you, personally, taken any steps to prevent or minimize the impact from future flood/water damage at your home?

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

# Steps Community Has Taken (Unaided)



The steps communities have made are mostly related to drainage/retention.



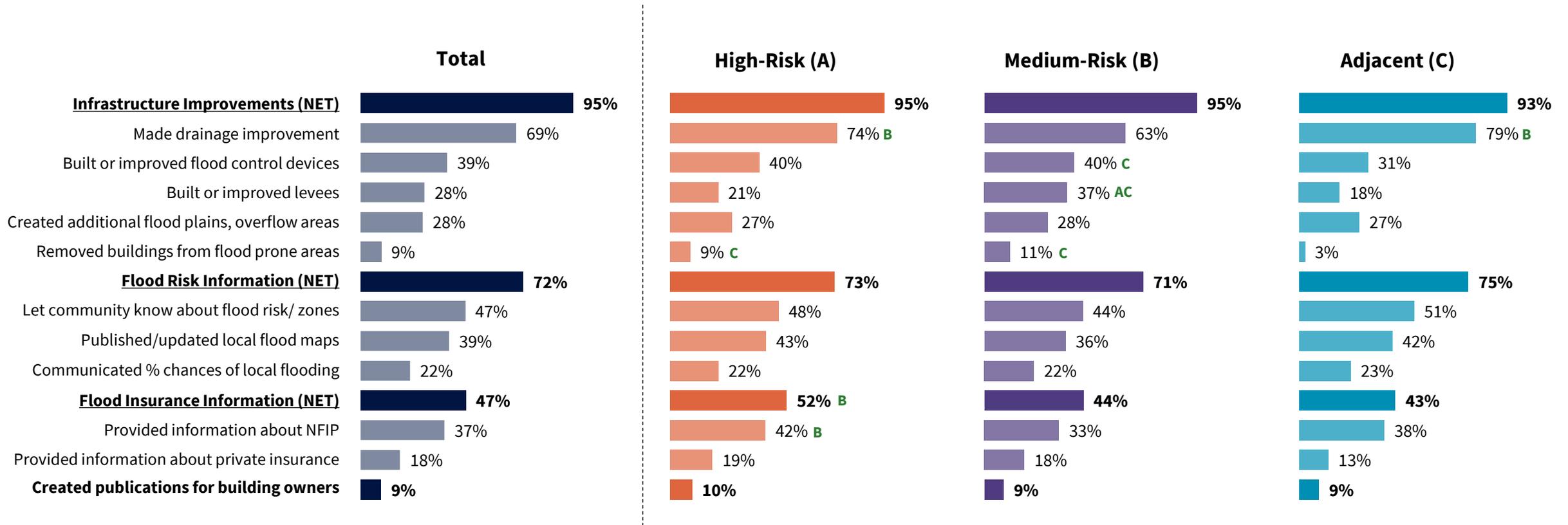
Base: Community has taken steps, Total (n=1092); High (n=417); Medium (n=486); Adjacent (n=189)  
 Q54. Please tell us what specific steps your community has taken to prevent future flooding. [OPEN END]

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Steps Community Has Taken (Aided)



After prompting, most think that their community has made physical improvements such as built/improved water containment and overflow areas.



Base: Community has taken steps, Total (n=1092); High (n=417); Medium (n=486); Adjacent (n=189)

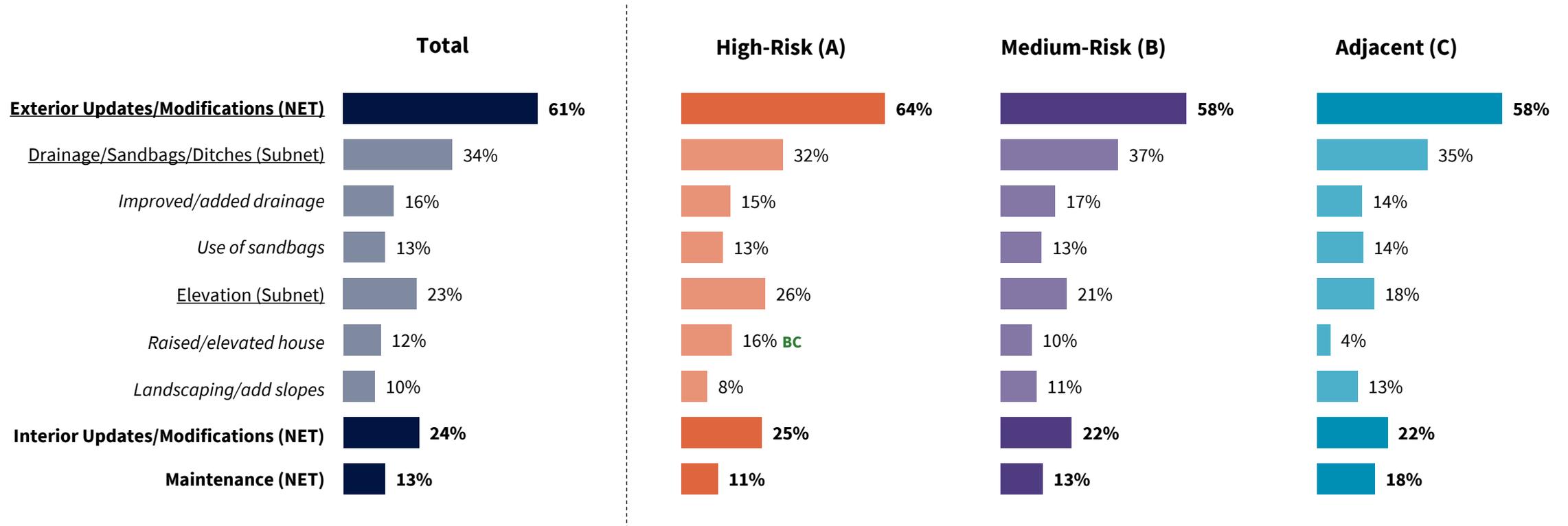
Q55. You may have mentioned some of these already, but just to confirm, which of the following, if any, are specific steps your community has taken to prevent future flooding?

**Letter** denotes significant difference (95% CL);  
No stat testing against Total

# Steps You, Yourself, Have Taken (Unaided)



The biggest personal step in high-risk areas is related to drainage.



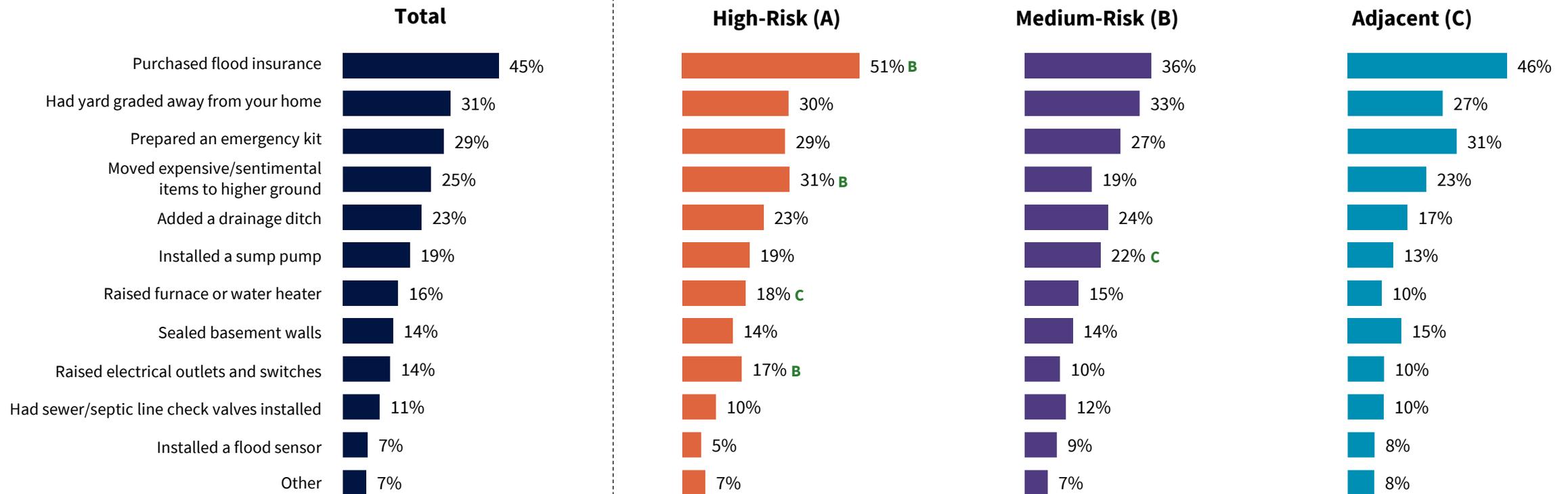
Base: Have personally taken steps, Total (n=767); High (n=363); Medium (n=251); Adjacent (n=153)  
 Q58. Please tell us what specific steps taken to prevent future flood/water damage at your home. [OPEN END]

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Steps You, Yourself, Have Taken (Aided)



High-risk took the step to purchase flood insurance along with moving personal objects higher.



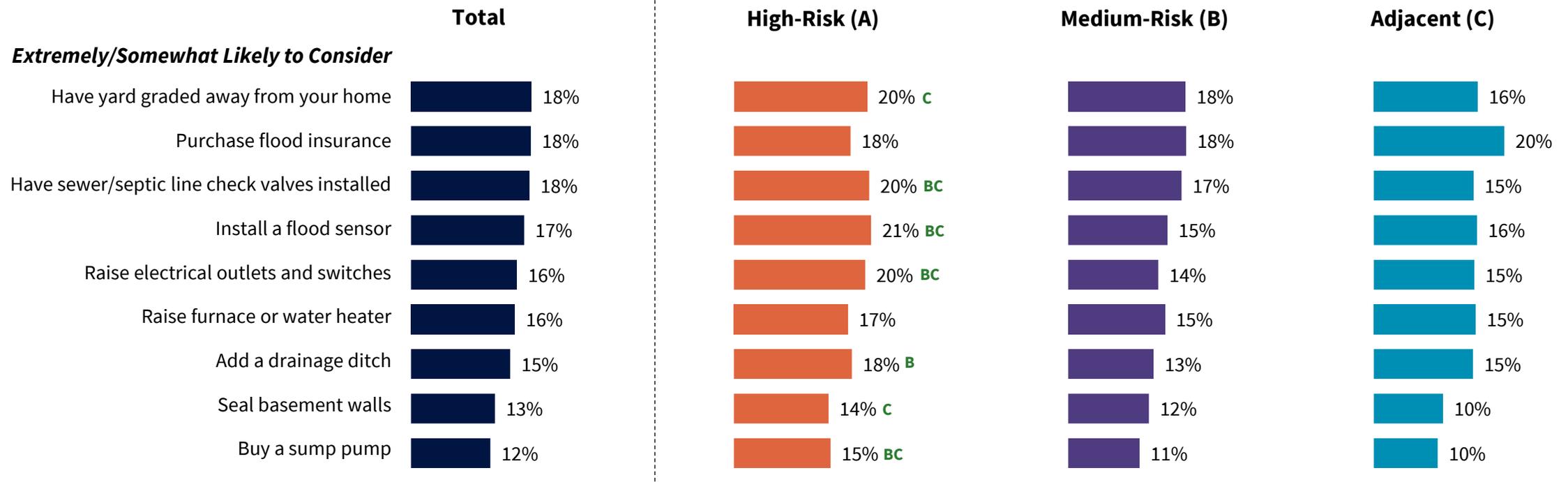
Base: Have personally taken steps, Total (n=767); High (n=363); Medium (n=251); Adjacent (n=153)  
 Q59. You may have mentioned some of these already, but just to confirm, what specific steps taken to prevent future flood/water damage at your home?

**Letter** denotes significant difference (95% CL);  
 No stat testing against Total

# Likelihood to Consider Measures to Reduce Flooding



Consumers are not particularly likely to consider these investments. High-risk is most likely to consider sewer/septic line check valves.



Base: Total (n=3533); High (n=1216); Medium (n=1597); Adjacent (n=720)

Q60. How likely would you be to consider making the following investments to reduce the risk of future flood/water damage? (5 pt. scale, not at all to extremely likely with 6<sup>th</sup> point of Already Done)

**Letter** denotes significant difference (95% CL);  
No stat testing against Total



# Appendices

Sampling and Weighting

Summary Comparison to Past FEMA studies

# Sampling Explanation



- Using public data sources, 13.6 million physical addresses were identified along with the following information:
  - ID, Address, Flood Plain Indicator, Type of Dwelling (e.g., apartment, townhome, condo), Single Family vs. Multifamily, and Number of Stories
  - The Flood Plain Indicator was High (100-year flood plain), Medium (500-year flood plain), and Adjacent to flood plain
- This information was matched against a third-party research panel with 62MM consumer and business panelists across the globe and 20MM in the U.S.
- Once the sample was matched, the physical addresses were removed and were not tagged to the panel members or data for security reasons. The other pass-through variables were blindly coded.
- Approximately 300,000 addresses were successfully matched – just over 2%.

# Weighting Explanation



- The weighting procedure uses the ANES (American National Election Study) [weighting algorithm](#). The algorithm, documented by DeBell and Krosnick ([Computing Weights for American National Election Study Survey Data](#)), aims to provide a default approach to survey weighting to avoid potential methodological pitfalls. It identifies discrepant variables and uses an iterative procedure to generate multiplicative weights. The weights are chosen so that the survey marginals agree with the population marginals for a specific set of parameters.
- Universe distributions are estimated. The weighting variables are:
  - ❑ Flood Risk, FM AVM, Dwelling type, and Region.
- The weighting results are diagnosed, and the results show that the bias in the sample groups are removed and the differences of the weighting variables' distributions between the sample groups and the universes have been minimized.



# Trending to Past FEMA Studies

General findings are comparable with FEMA studies 8-10 years ago.

	2010 (A) %	2011 (B) %	2012 (C) %	2020 (D) %
<b>Risk of Flooding - Community</b>				
Community at risk	31	41 ACD	31	36 AC
<b>Official Expect to Hear From</b>				
Emergency managers	26	---	---	29
<b>Info About Flood Risk</b>				
Local news	31 D	---	---	27
<b>Source of Flood Risk</b>				
Insurance agent	17	16	---	23 AB
<b>Informed About Flood Risk Prior to Moving</b>				
Were Informed	35 D	---	---	31
Not informed	56	---	---	59
Not sure	9	---	---	10
<b>Who Informed About Flood Risk Prior to Moving</b>				
Real estate agent	38 B	18	---	44 AB
Mortgage lender	23	20	---	30 AB
Insurance agent	22	32 ACD	23	28 AC
<b>Taken Steps to Prevent Flood Damage</b>				
Total	32 BD	27 D	---	22
<b>Believe federally-backed flood insurance available</b>				
Total	33	---	---	38 A

\*Caution- the historic exact question wording was not available. Also, the sampling method was different. Therefore, trends should be viewed with extreme caution and need to be substantiated.  
 Base: RDD conducted via phone, 2010 (n=1019\*) 2011 (n=1000\*); 2012 (1000\*) RDD conducted via phone; MMR Research Associates, Inc. conducted via online 2020 (n=3533)  
 SOURCE: The 2010 – 2012 data was pulled from FEMA Public Survey Findings Summaries  
 2020 Question sources: S6a / Q52 / Q56 / Q9c / Q13a / Q13b / Q57 / Q17

Letter denotes significant difference (95% CL)