

**Tennessee  
Behavioral Risk Factor Surveillance System  
(BRFSS)**

**State-Added Question Report**

**2017**

~

**Prescription Drug Abuse  
Veteran's Health  
Adverse Childhood Experiences  
Wearable Devices**

Prepared by the  
Office of Population Health Surveillance  
Division of Population Health Assessment



## **Acknowledgments**

Tennessee Behavioral Risk Factor Surveillance System (BRFSS) project staff would like to express their gratitude to all the respondents who took time to participate in the survey. Their information will provide public health professionals and researchers a better understanding of the health and prosperity of adult Tennesseans.

We would also like to acknowledge BRFSS data users across the state and nation, project partners, as well as our contractor for phone operations. Special thanks to members of the Tennessee Department of Health's Office of Population Health Surveillance for their contribution to this report.

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## Overview

The Tennessee Behavioral Risk Factor Surveillance System (TN BRFSS) is a telephone survey of randomly selected non-institutionalized adult (18+ years) Tennesseans conducted via landline or cell phone each year. Information collected is used in aggregate to generalize the overall health, well-being and behavioral health of the entire Tennessee adult population.

State-added questions, the focus of this publication, are those questions that were not included in the core or optional modules of the survey for the corresponding year. These questions may have been used in prior core or optional modules from any previous BRFSS survey, or may be new questions altogether. In either case they must have been field tested, cognitively tested, and approved for use by the Centers for Disease Control and Prevention. For the purpose of this publication, responses for “don’t know/not sure” or “refused” are dropped when analyzing each indicator.

Most of the State-added questions in this report have been used in previous BRFSS surveys, and were selected by data users across Tennessee in order to collect continuous data for their program’s data needs or in anticipation of prospective data collection. The only exception is the Wearable Devices module which was newly developed for the 2017 BRFSS survey.

Data users interested in including other State-added questions to the TN BRFSS questionnaire should attend the bi-annual TN BRFSS Data Users Group meetings or contact the TN BRFSS Coordinator (contact information below):

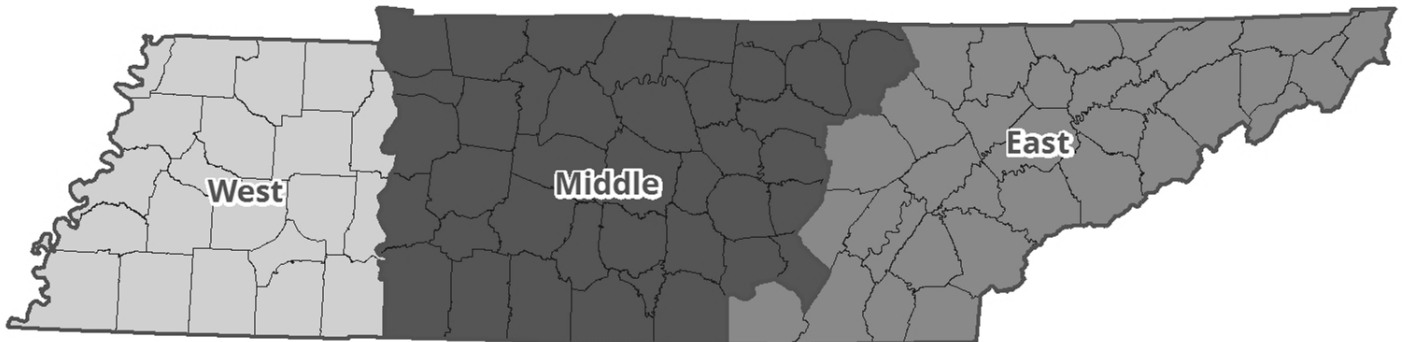


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Division of Population Health Assessment  
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## TENNESSEE GRAND DIVISIONS



**Tennessee Grand Divisions:** Analyzing Tennessee BRFSS by Grand Division became possible in 2016 and subsequently, State-added questions were stratified in this report by the West, Middle, and East regions of the state.

**West Region** includes the counties of Lake, Obion, Weakley, Henry, Benton, Carroll, Gibson, Dyer, Crockett, Lauderdale, Tipton, Haywood, Madison, Henderson, Decatur, Shelby, Fayette, Hardeman, Chester, McNairy, and Hardin.

**Middle Region** includes the counties of Stewart, Montgomery, Robertson, Sumner, Macon, Clay, Pickett, Houston, Dickson, Cheatham, Davidson, Wilson, Trousdale, Smith, Jackson, Overton, Fentress, Putnam, Humphreys, Hickman, Williamson, Rutherford, Cannon, DeKalb, White, Perry, Lewis, Maury, Marshall, Bedford, Coffee, Warren, Van Buren, Grundy, Sequatchie, Franklin, Moore, Lincoln, Giles, Lawrence, and Wayne.

**East Region** includes the counties of Scott, Morgan, Cumberland, Bledsoe, Marion, Hamilton, Bradley, Polk, McMinn, Meigs, Rhea, Monroe, Roane, Loudon, Blount, Anderson, Campbell, Claiborne, Union, Knox, Grainger, Sevier, Jefferson, Hamblen, Hancock, Hawkins, Cocke, Greene, Sullivan, Washington, Unicoi, Carter, and Johnson.

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## Prescription Drug Abuse

### *TN BRFSS asks:*

In the last 12 months, have you taken any prescription pain relievers or tranquilizers including (Codeine, morphine, Lortab, Vicodin, Tylenol #3, Percocet, OxyContin) when it was NOT prescribed to you by a doctor, dentist, nurse practitioner, or other healthcare provider? We only want to know about prescription medication NOT medication that is available over the counter.

### *SAS Variables Used*

DUPAIN

### *Dispositions*

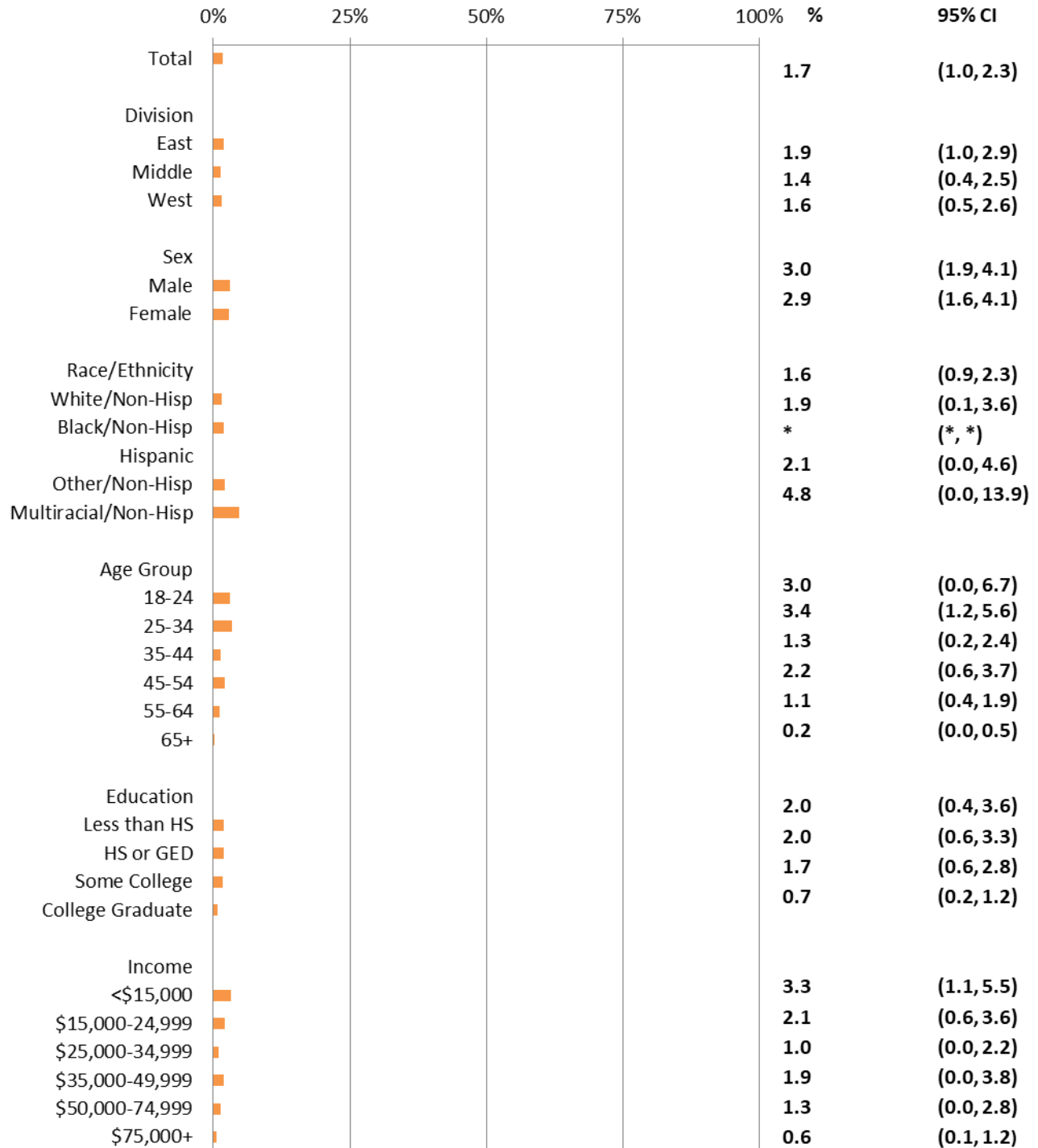
The question allows a “yes” or “no” choice for the respondent. All responses for “yes” are included in these results.

### *Key Findings*

- Tennessee statewide: Almost 2 out of 100 (1.7%) Tennesseans abused prescription drugs.
- Grand Division: No significant difference was observed between Grand Divisions.
- Sex: No significant difference was observed between men and women.
- Race/Ethnicity: No significant difference was observed among race/ethnicity groups.
- Age: Older adults tended to abuse prescription drugs less than younger adults.
- Education: No significant difference was observed among levels of education.
- Income: No significant difference was observed among levels of income.

\***Bold text** indicates statistical significance (Note: No statistical significance observed.)

## Tennesseans who have Abused Prescription Drugs, 2017



## Experienced Combat

### *TN BRFSS asks:*

Did you ever serve in a combat or war zone?

### *SAS Variables Used*

VHCOMBAT

### *Dispositions*

The question allows a “yes” or “no” choice for the respondent. All responses for “yes” are included in these results. Only respondents who previously said they had served in the armed services were included in this analysis.

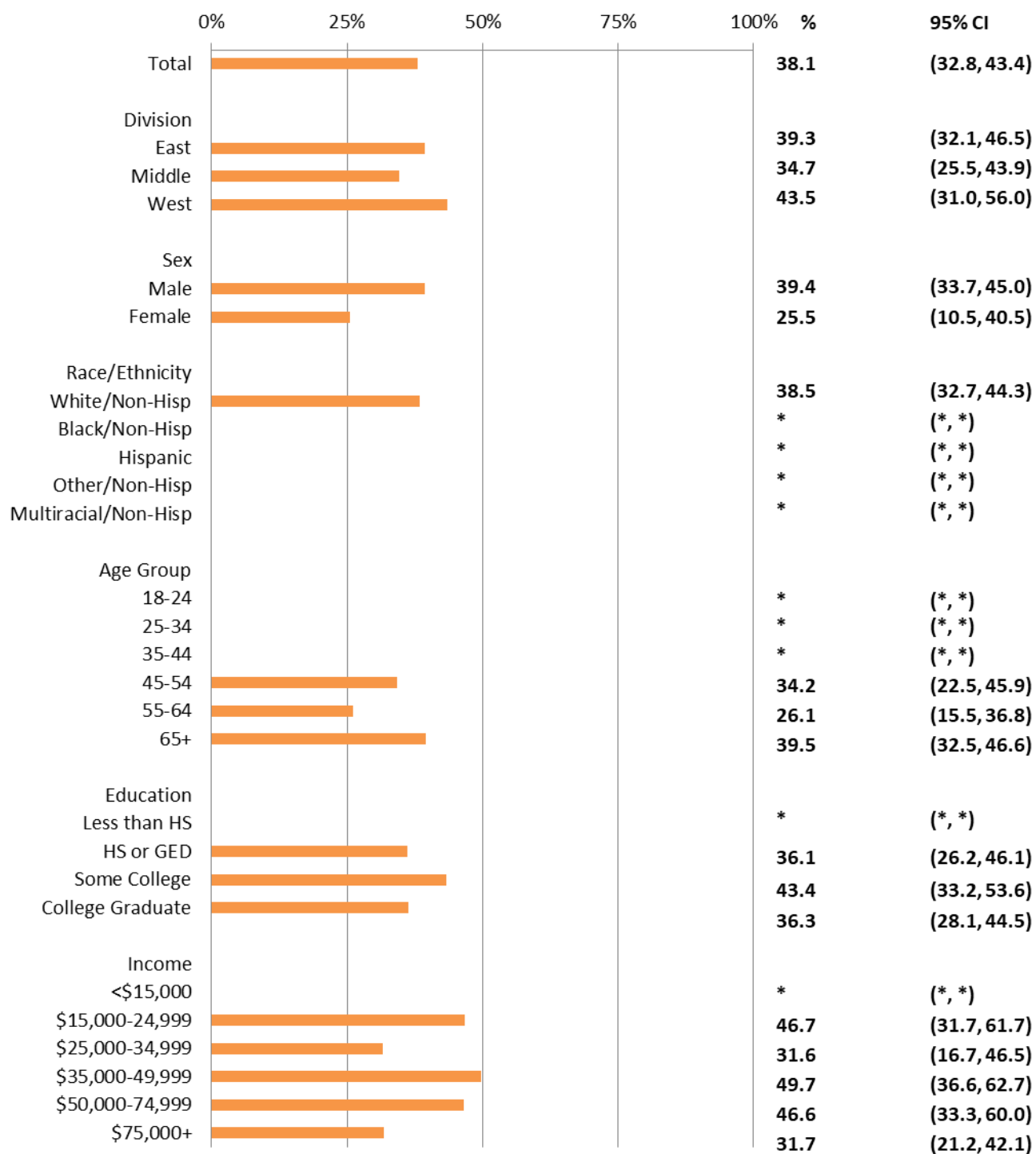
### *Key Findings*

- Tennessee statewide: Almost 2 out of 5 (38.1%) veterans served in a combat or war zone.
- Grand Division: West Tennessee veterans were more likely to have served in a combat or war zone than Middle or East Tennessee veterans.
- Sex: Men were more likely to have served in a combat or war zone than women.
- Race/ethnicity: No comparisons available as statistics for all but one group were suppressed due to insufficient sample size.
- Age: Tennessee veterans aged 65 and older were the most likely to have served in a combat or war zone.
- Education: Tennessee veterans with some college were the most likely to have served in a combat or war zone.
- Income: No significant difference was observed among levels of income.

\***Bold text** indicates statistical significance (Note: No statistical significance observed.)



## Tennessean Veterans who Served in a Combat or War Zone, 2017



## Lived with Depressed Adults

### *TN BRFSS asks:*

Did you live with anyone who was depressed, mentally ill, or suicidal?

### *SAS Variables Used*

ACEDEPRS

### *Dispositions*

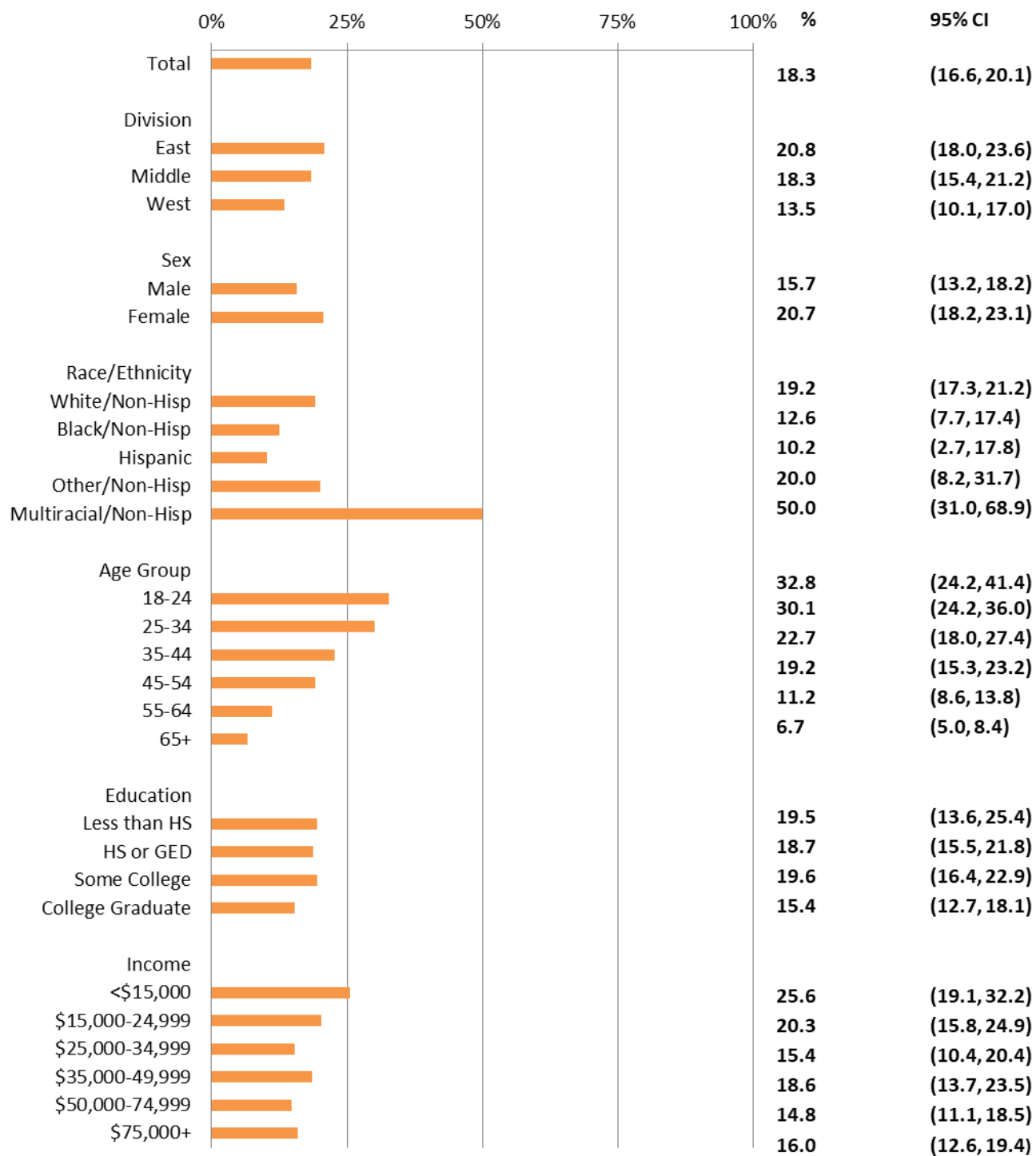
The question allows a “yes” or “no” choice for the respondent. All responses for “yes” are included in these results. Question refers to the time respondent was under 18 years of age.

### *Key Findings*

- Tennessee statewide: Almost 1 in 5 (18.3%) Tennesseans lived with someone who was depressed, mentally ill, or suicidal.
- **Grand Division: West Tennesseans were less likely to have lived with someone who was depressed, mentally ill, or suicidal than East Tennesseans.**
- Sex: Women were more likely to have lived with someone who was depressed, mentally ill, or suicidal than men.
- Race/ethnicity: Multi-racial non-Hispanics were the most likely to have lived with someone who was depressed, mentally ill, or suicidal.
- **Age: Tennesseans under the age of 55 years were more likely to have lived with someone who was depressed, mentally ill, or suicidal than those 55 years and older.**
- Education: No significant difference was observed among levels of education.
- Income: No significant difference was observed among levels of income.

\***Bold text** indicates statistical significance

## Tennesseans who Lived with Someone who was Depressed, Mentally Ill, or Suicidal, 2017



## Lived with Alcoholic

### *TN BRFSS asks:*

Did you live with anyone who was a problem drinker or alcoholic?

### *SAS Variables Used*

ACEDRINK

### *Dispositions*

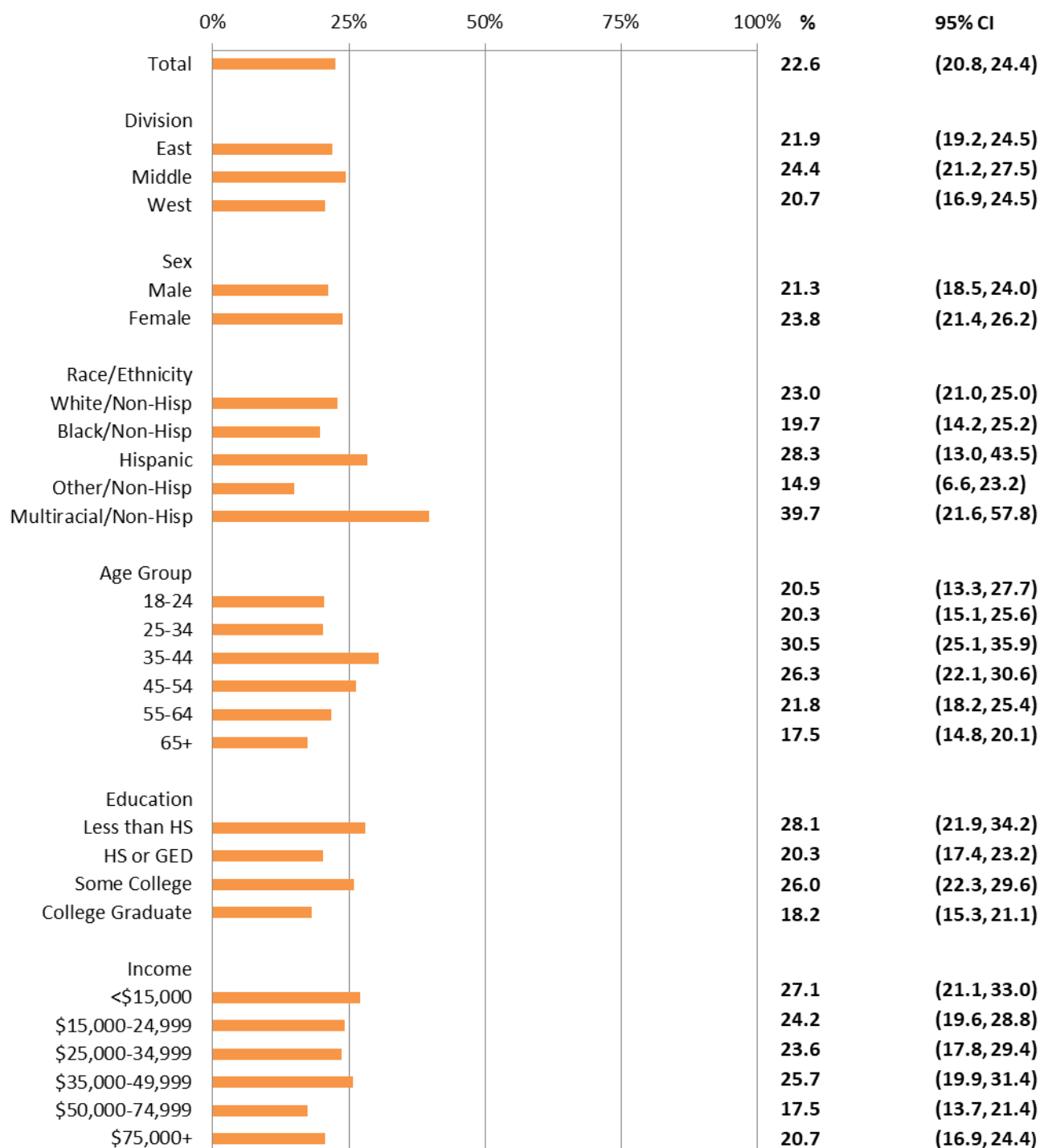
The question allows a “yes” or “no” choice for the respondent. All responses for “yes” are included in these results. Question refers to the time respondent was under 18 years of age.

### *Key Findings*

- Tennessee statewide: More than 1 in 5 (22.6%) Tennesseans lived with someone who was a problem drinker or alcoholic.
- Grand Division: Middle Tennesseans were more likely to have lived with someone who was a problem drinker or alcoholic than East or West Tennesseans.
- Sex: Women were more likely to have lived with someone who was a problem drinker or alcoholic than men.
- Race/ethnicity: Multi-racial non-Hispanics were the most likely to have lived with someone who was a problem drinker or alcoholic.
- **Age: Tennesseans aged 65 years and older were less likely to have lived with someone who was a problem drinker or alcoholic than those aged 35-54 years.**
- Education: College graduates were less likely to have lived with someone who was a problem drinker or alcoholic than those with less than a college degree.
- Income: Tennesseans earning less than \$15,000 per year were more likely to have lived with someone who was a problem drinker or alcoholic than those making more.

\***Bold text** indicates statistical significance

## Tennesseans who Lived with Someone who was a Problem Drinker or Alcoholic, 2017



## Lived with Illegal Drug User

### *TN BRFSS asks:*

Did you live with anyone who used illegal street drugs or abused prescription medications?

### *SAS Variables Used*

ACEDRUGS

### *Dispositions*

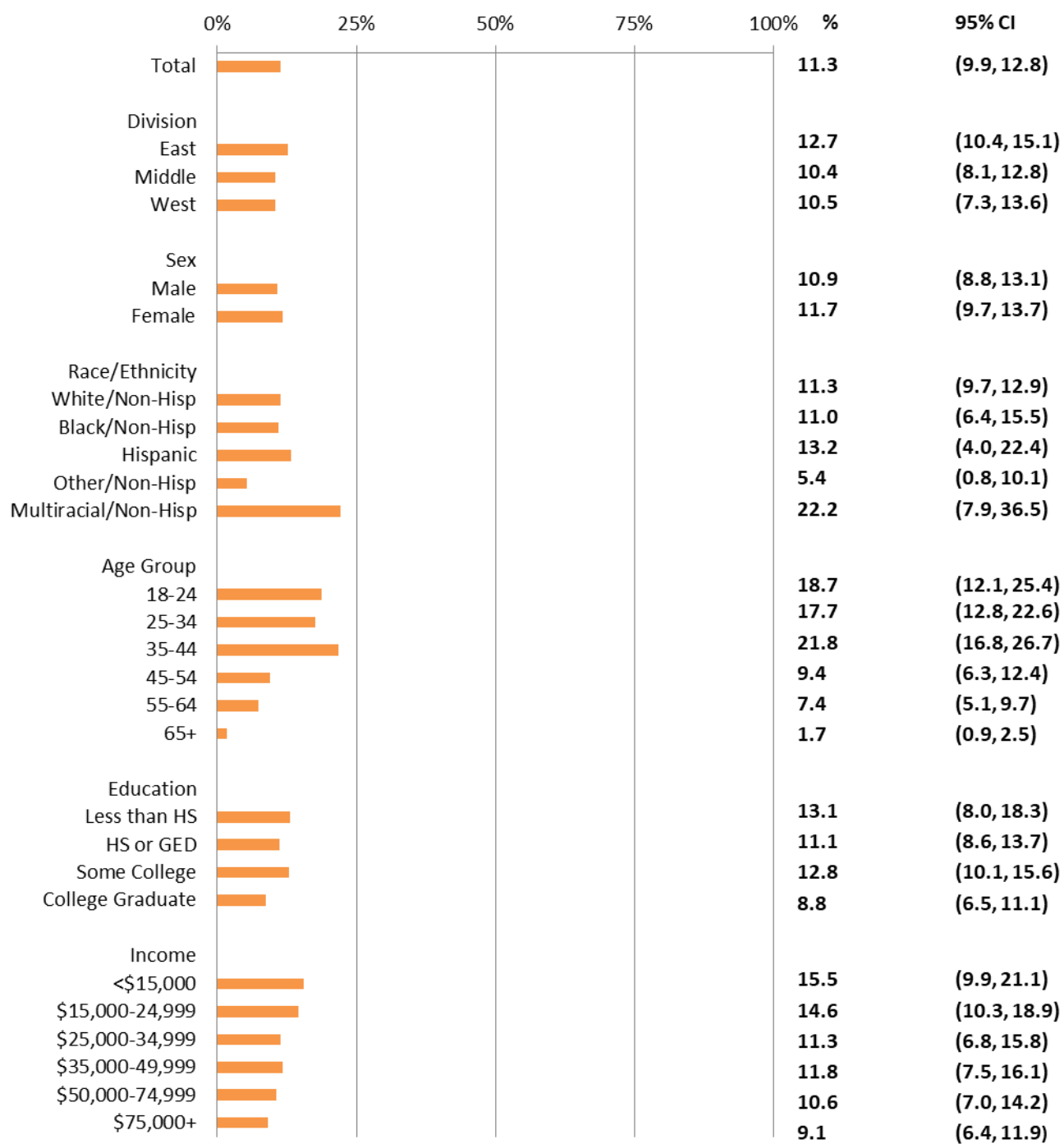
The question allows a “yes” or “no” choice for the respondent. All responses for “yes” are included in these results. Question refers to the time respondent was under 18 years of age.

### *Key Findings*

- Tennessee statewide: Over 1 in 10 (11.3%) Tennesseans lived with someone who used illegal street drugs or abused prescription medications.
- Grand Division: No significant difference was observed between Grand Divisions.
- Sex: No significant difference was observed between men and women.
- Race/ethnicity: Multi-racial non-Hispanics were the most likely to have lived with someone who used illegal street drugs or abused prescription medications.
- **Age: Older Tennesseans were less likely to have lived with someone who used illegal street drugs or abused prescription medications than younger Tennesseans.**
- Education: College graduates were the least likely to have lived with someone who used illegal street drugs or abused prescription medications.
- Income: Tennesseans who earned more were less likely to have lived with someone who used illegal street drugs or abused prescription medications.

\***Bold text** indicates statistical significance

## Tennesseans who Lived with Someone who Used Illegal Street Drugs or Abused Prescription Medications, 2017



## Lived with Incarcerated Adult

### *TN BRFSS asks:*

Did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?

### *SAS Variables Used*

ACEPRISN

### *Dispositions*

The question allows a “yes” or “no” choice for the respondent. All responses for “yes” are included in these results. Question refers to the time respondent was under 18 years of age.

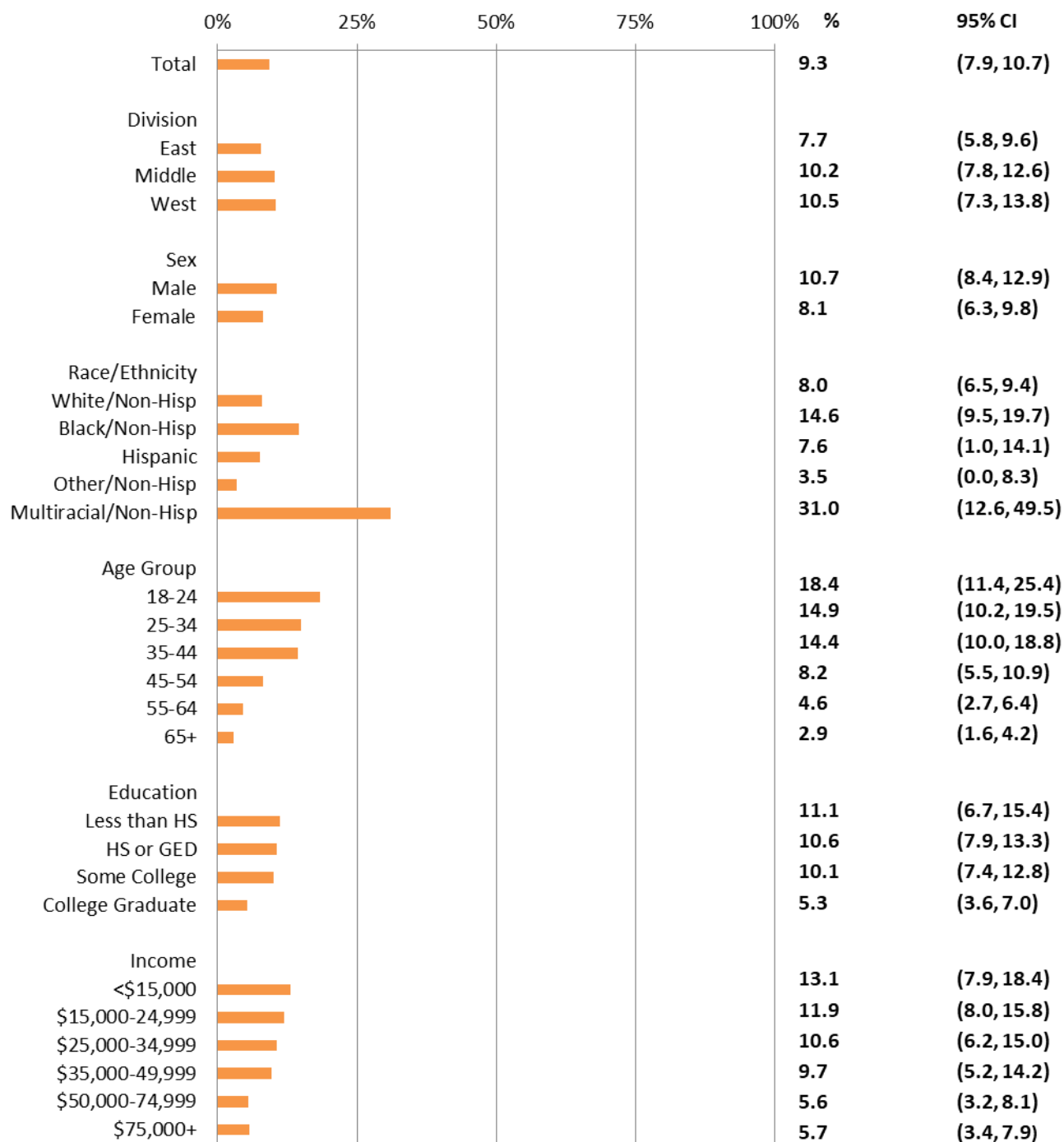
### *Key Findings*

- Tennessee statewide: Less than 1 in 10 (9.3%) Tennesseans lived with someone who served time in a correctional facility.
- Grand Division: East Tennesseans were less likely to have lived with someone who served time in a correctional facility than Middle or West Tennesseans.
- Sex: Men were more likely to have lived with someone who served time in a correctional facility than women.
- Race/ethnicity: Multi-racial non-Hispanics were the most likely to have lived with someone who served time in a correctional facility.
- **Age: Older Tennesseans were less likely to have lived with someone who served time in a correctional facility than younger Tennesseans.**
- **Education: College graduates were less likely to have lived with someone who served time in a correctional facility than those with less than a college degree.**
- Income: Tennesseans who earned more were less likely to have lived with someone who served time in a correctional facility.

\***Bold text** indicates statistical significance



## Tennesseans who Lived with Someone who Served Time or was Sentenced to Serve Time in Prison, Jail, or Other Correctional Facility, 2017



## Lived with Divorced Parents

### *TN BRFSS asks:*

Were your parents separated or divorced?

### *SAS Variables Used*

ACEDIVRC

### *Dispositions*

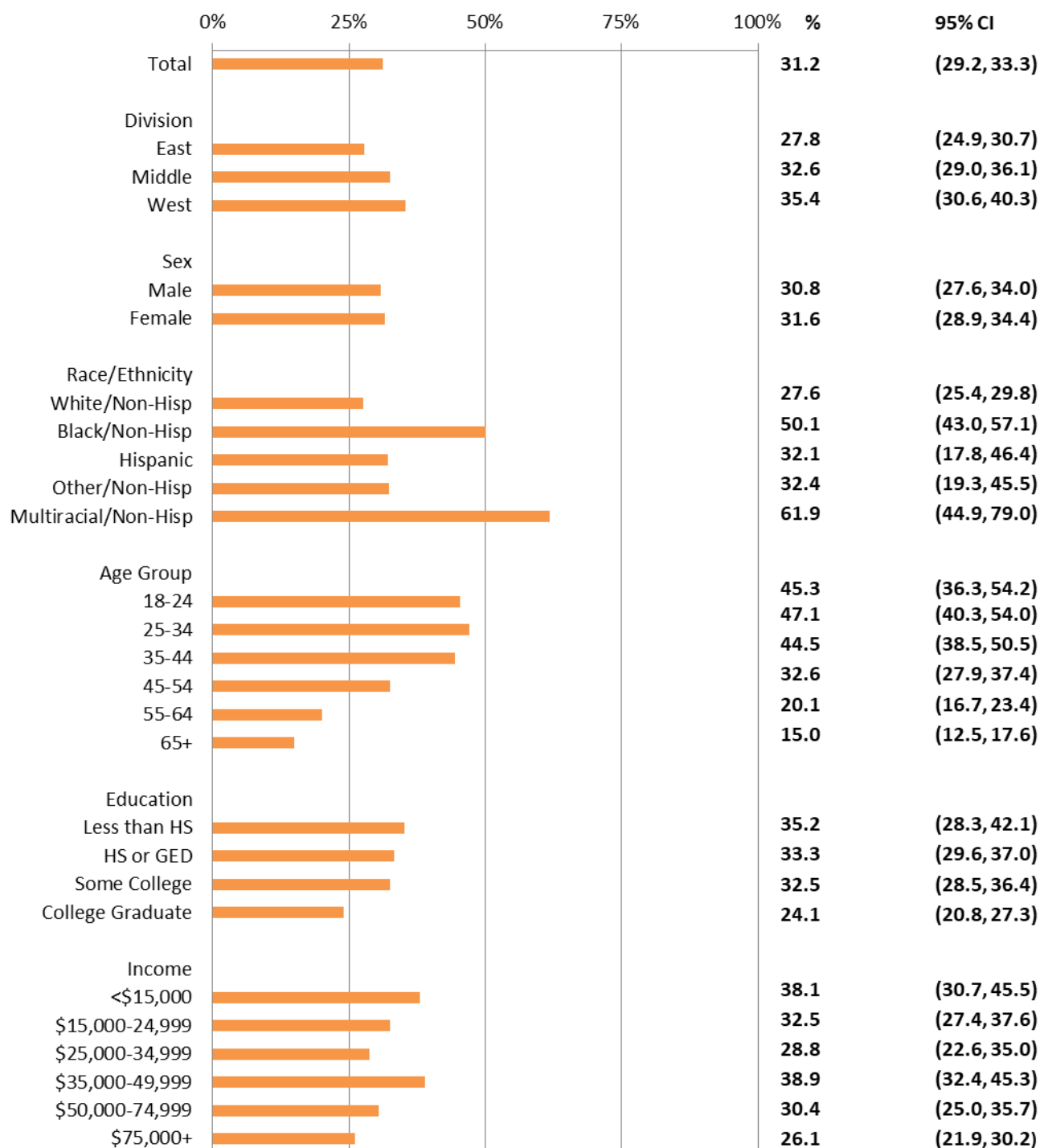
The question allows the respondent to answer “yes,” “no,” or “never married.” All responses for “yes” or “no” are included in these results and those with parents who were never married were excluded from the analyses. Question refers to the time respondent was under 18 years of age.

### *Key Findings*

- Tennessee statewide: Almost 1 in 3 (31.2%) Tennesseans had divorced or separated parents.
- Grand Division: West Tennesseans were more likely to have divorced or separated parents than Middle or East Tennesseans.
- Sex: No significant difference was observed between men and women.
- **Race/ethnicity: Black non-Hispanics and Multi-racial non-Hispanics were more likely to have divorced or separated parents than white non-Hispanics.**
- **Age: Older Tennesseans are less likely to have divorced or separated parents than younger Tennesseans.**
- **Education: College graduates were less likely to have divorced or separated parents than those with less than a college degree.**
- **Income: Tennesseans with incomes of \$75,000 or more per year were less likely to have divorced parents than those with incomes lower than \$15,000 per year.**

\***Bold text** indicates statistical significance

## Tennesseans with Separated or Divorced Parents (Excluding Those Never Married), 2017



## Lived with Adults who beat Each Other

### *TN BRFSS asks:*

How often did your parents or adults in your home ever slap, hit, punch, or beat each other up?

### *SAS Variables Used*

ACEPUNCH

### *Dispositions*

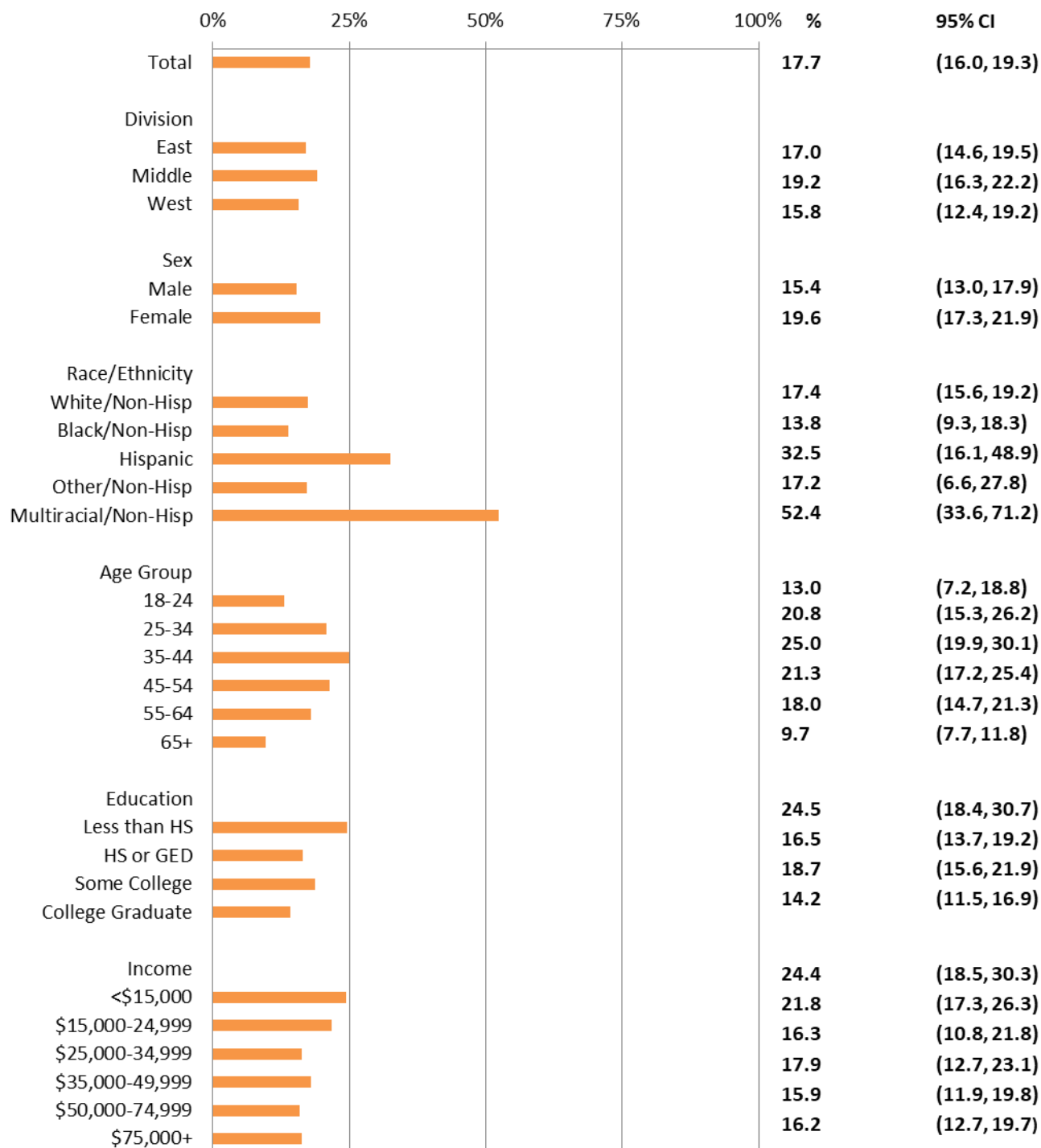
The question allows the respondent to answer “never,” “once,” or “more than once.” All responses for “more than once” and “once” were counted as “yes” and “never” was counted as “no.” Question refers to the time respondent was under 18 years of age.

### *Key Findings*

- Tennessee statewide: Almost 1 in 5 (17.7%) Tennesseans had parents who physically abused each other.
- Grand Division: No significant difference was observed among Grand Divisions.
- Sex: Men were more likely to have parents who physically abused each other than women.
- Race/ethnicity: Multi-racial non-Hispanics were the most likely to have parents who physically abused each other.
- Age: Tennesseans aged 35-44 years were most likely to have parents who abused each other.
- **Education: College graduates were less likely to have parents who abused each other than those with less than a high school degree.**
- Income: Tennesseans earning less than \$15,000 per year were most likely to have parents who abused each other.

\***Bold text** indicates statistical significance

## Tennesseans with Parents who Slapped, Hit, Punched, or Beat Each Other Up, 2017



## Experienced Physical Violence

### *TN BRFSS asks:*

How often did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way? Do not include spanking.

### *SAS Variables Used*

ACEHURT

### *Dispositions*

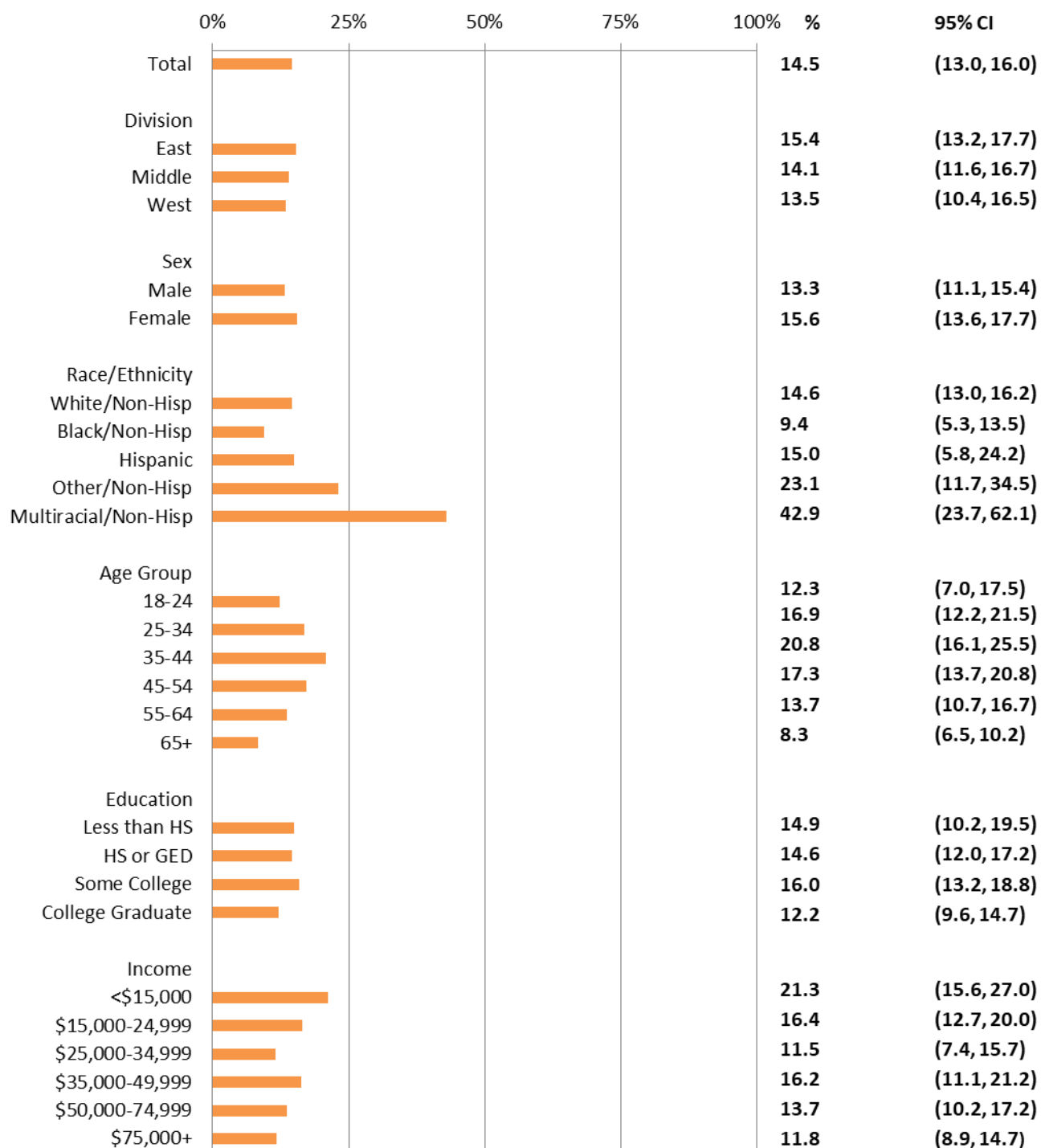
The question allows the respondent to answer “never,” “once,” or “more than once.” All responses for “more than once” and “once” were counted as “yes” and “never” was counted as “no.” Question refers to the time respondent was under 18 years of age.

### *Key Findings*

- Tennessee statewide: Almost 1 in 7 (14.5%) Tennesseans had a parent who hit, kick, beat, or hurt them.
- Grand Division: East Tennesseans were more likely to have parents who hit, kick, beat, or hurt them than Middle or West Tennesseans.
- Sex: Women were more likely to have parents who hit, kick, beat, or hurt them than men.
- Race/ethnicity: Multi-racial non-Hispanics were the most likely to have parents who hit, kick, beat, or hurt them.
- **Age: Tennesseans aged 65 years and older were the less likely to have parents who hit, kick, beat, or hurt them than those aged 25-64 years.**
- Education: College graduates were the least likely to have parents who hit, kick, beat, or hurt them.
- Income: Tennesseans earning less than \$15,000 per year were most likely to have parents who hit, kick, beat, or hurt them than.

\***Bold text** indicates statistical significance

## Tennesseans with Parents who Hit, Kick, Beat, or Hurt Them, 2017



## Experienced Verbal Abuse

### *TN BRFSS asks:*

How often did a parent or adult in your home ever swear at you or put you down?

### *SAS Variables Used*

ACESWEAR

### *Dispositions*

The question allows the respondent to answer “never,” “once,” or “more than once.” All responses for “more than once” and “once” were counted as “yes” and “never” was counted as “no.” Question refers to the time respondent was under 18 years of age.

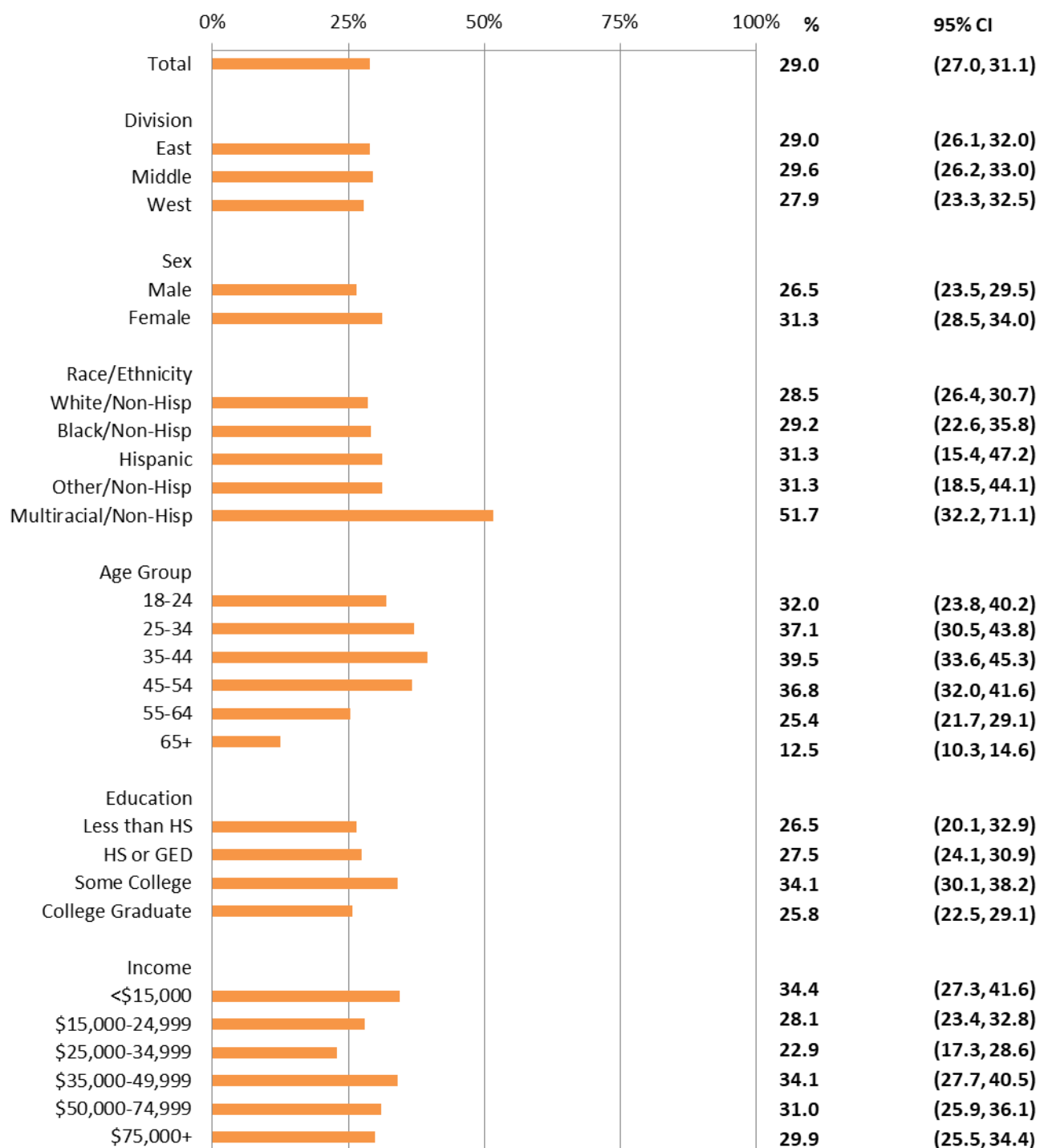
### *Key Findings*

- Tennessee statewide: Almost 1 in 3 (29.0%) Tennesseans had a parent who swore at them or put them down.
- Grand Division: No significant difference was observed among Grand Divisions.
- Sex: Women were more likely to have had a parent who swore at them or put them down than men.
- Race/ethnicity: Multi-racial non-Hispanics were the most likely to have parents who swore at them or put them down.
- **Age: Tennesseans aged 65 years and older were less likely to have had a parent who swore at them or put them down than those younger than 65 years.**
- Education: Tennesseans with some college were the most likely to have parents who swore at them or put them down.
- Income: Tennesseans earning less than \$15,000 per year were most likely to have parents who swore at them or put them down.

\***Bold text** indicates statistical significance



## Tennesseans with Parents who Swore at Them or Put Them Down, 2017



## Experienced Sexual Touching

### *TN BRFSS asks:*

How often did anyone at least 5 years older than you or an adult ever touch you sexually?

### *SAS Variables Used*

ACETOUCH

### *Dispositions*

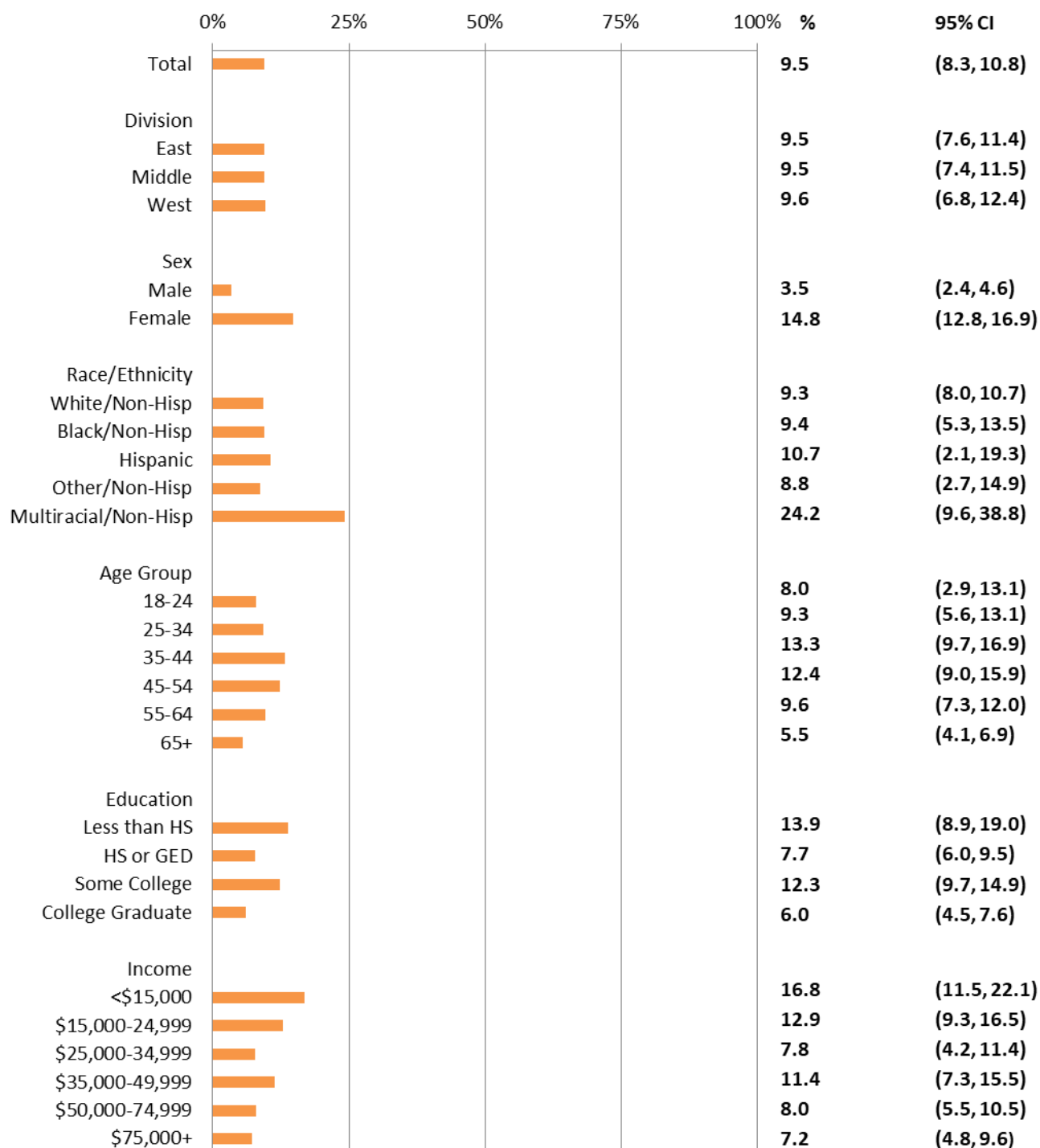
The question allows the respondent to answer “never,” “once,” or “more than once.” All responses for “more than once” and “once” were counted as “yes” and “never” was counted as “no.” Question refers to the time respondent was under 18 years of age.

### *Key Findings*

- Tennessee statewide: About 1 in 10 (9.5%) Tennesseans were touched sexually by someone at least 5 years older.
- Grand Division: No significant difference was observed between Grand Divisions.
- **Sex: Women were more likely to have been touched sexually by someone at least 5 years older than men.**
- Race/ethnicity: Multi-racial non-Hispanics were the most likely to have been touched sexually by someone at least 5 years older.
- Age: Tennesseans aged 35-44 years and older were the most likely to have been touched sexually by someone at least 5 years older.
- Education: College graduates were the least likely to have been touched sexually by someone at least 5 years older.
- Income: Tennesseans earning under \$15,000 per year were the most likely to have been touched sexually by someone 5 years or older.

\***Bold text** indicates statistical significance

## Tennesseans who were Touched Sexually by Someone at Least 5 Years Older, 2017



## Forced Touching of Adult

### *TN BRFSS asks:*

How often did anyone at least 5 years older than you or an adult try to make you touch them sexually?

### *SAS Variables Used*

ACETTHEM

### *Dispositions*

The question allows the respondent to answer “never,” “once,” or “more than once.” All responses for “more than once” and “once” were counted as “yes” and “never” was counted as “no.” Question refers to the time respondent was under 18 years of age.

### *Key Findings*

- Tennessee statewide: Almost 1 in 10 (7.9%) Tennesseans were asked by someone at least 5 years older to touch them in a sexual manner.
- Grand Division: No significant difference was observed between Grand Divisions.
- **Sex: Women were more likely to have been asked by someone at least 5 years older to touch them in a sexual manner than men.**
- Race/ethnicity: Multi-racial non-Hispanics were the most likely to have been asked by someone at least 5 years older to touch them in a sexual manner.
- **Age: Tennesseans aged 65 years and older were less likely to have been asked by someone at least 5 years older to touch them in a sexual manner than those aged 25-64 years.**
- Education: College graduates were less likely to have been asked by someone at least 5 years older to touch them in a sexual manner than those with less than a college degree.
- Income: Tennesseans earning less than \$15,000 per year were the most likely to have been asked by someone at least 5 years older to touch them in a sexual manner than those earning more.

\***Bold text** indicates statistical significance

## Tennesseans who were Asked by Someone at Least 5 Years Older to Touch Them in a Sexual Manner, 2017



## Forced Sex from Adult

### *TN BRFSS asks:*

How often did anyone at least 5 years older than you or an adult force you to have sex?

### *SAS Variables Used*

ACEHVSEX

### *Dispositions*

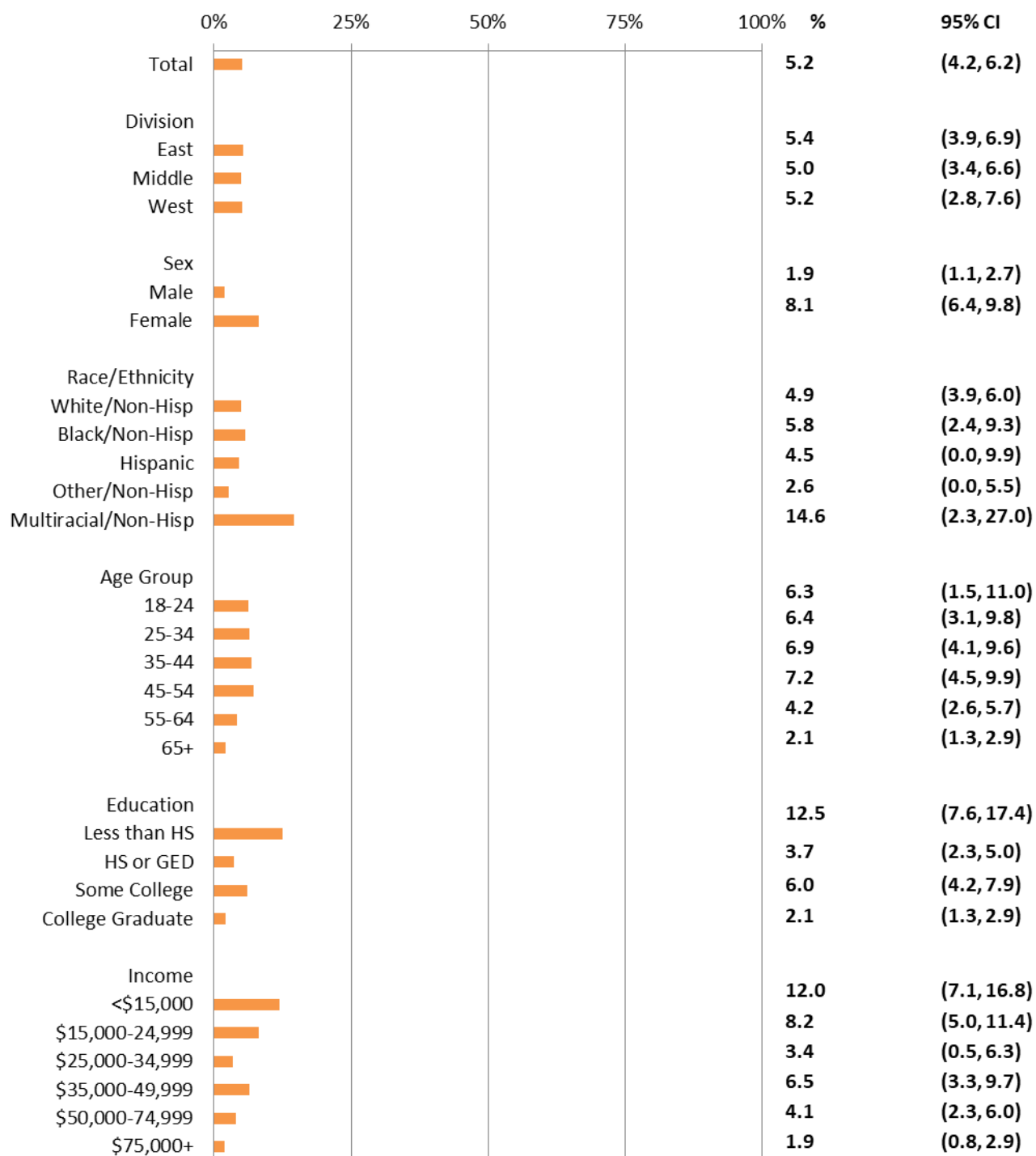
The question allows the respondent to answer “never,” “once,” or “more than once.” All responses for “more than once” and “once” were counted as “yes” and “never” was counted as “no.” Question refers to the time respondent was under 18 years of age.

### *Key Findings*

- Tennessee statewide: About 1 in 20 (5.2%) Tennesseans were forced to have sex by someone at least 5 years older.
- Grand Division: No significant difference was observed between Grand Divisions.
- **Sex: Women were more likely to report having been forced to have sex than men.**
- Race/ethnicity: Multi-racial non-Hispanics were the most likely to report having been forced to have sex than other races/ethnicities.
- Age: Older adults were less likely to report having been forced to have sex than younger groups.
- Education: Adults with less than a high school education were the most likely to report having been forced to have sex than those with more education.
- Income: Adults with lower income were the most likely to report having been forced to have sex than those with higher income.

\***Bold text** indicates statistical significance

## Tennesseans who were Forced to have Sex with Someone at Least 5 Years Older, 2017



## Wearable Device Usage

### *TN BRFSS asks:*

Do you track your nutrition, sleep, or physical activity using a wearable device or a mobile application (such as Fitbit, Samsung Gear Fit, Apple fitness app or other consumer application)?

### *SAS Variables Used*

WDUSENOW

### *Dispositions*

The question allows a “yes” or “no” choice for the respondent. All responses for “yes” are included in these results.

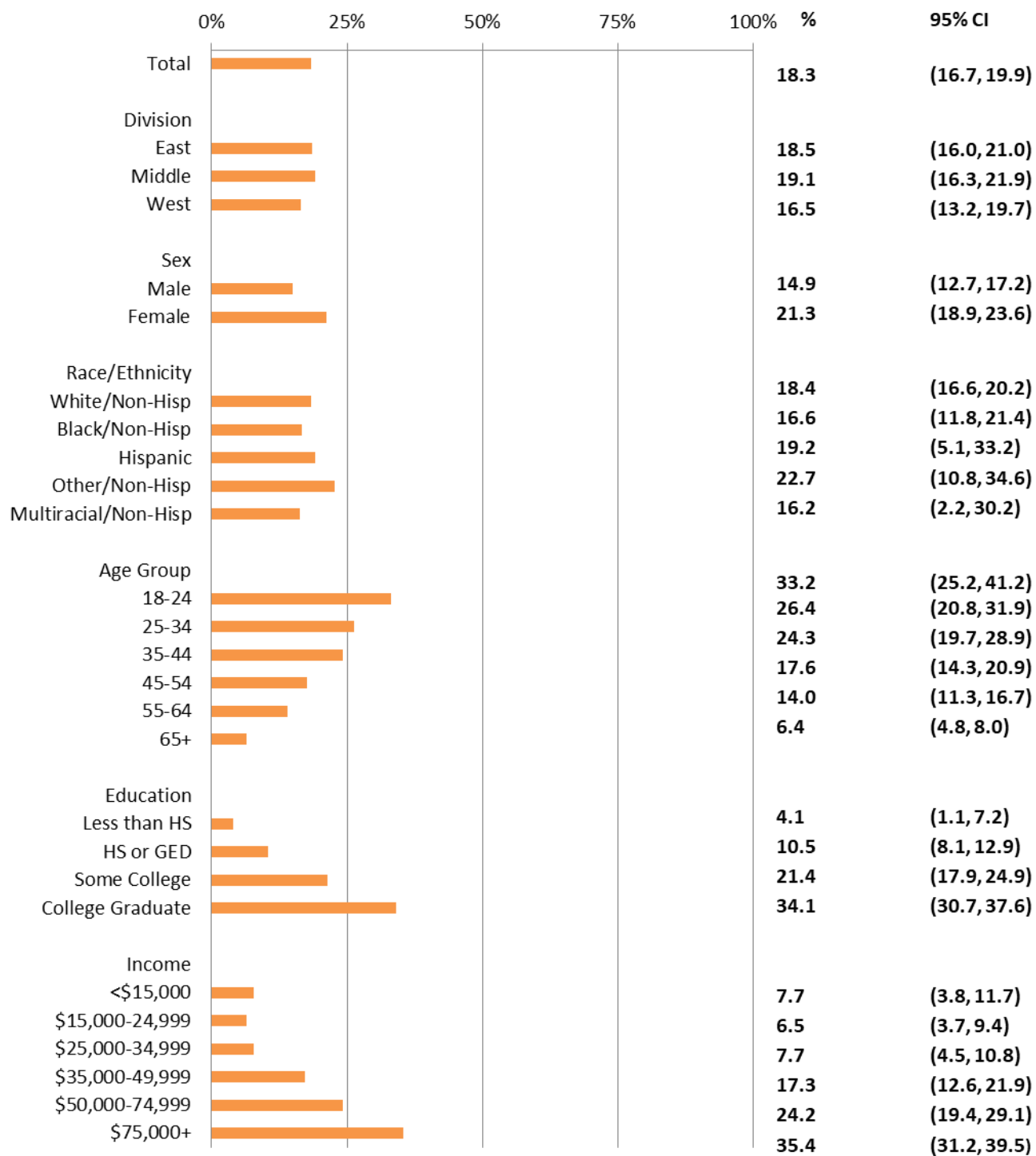
### *Key Findings*

- Tennessee statewide: About 1 in 5 (18.3%) Tennesseans used a wearable device.
- Grand Division: No significant difference was observed between Grand Divisions.
- **Sex: Women were more likely to report using a wearable device.**
- Race/ethnicity: Other non-Hispanics were the most likely to report using a wearable device than other races/ethnicities.
- **Age: Younger adults were more likely to report using a wearable device than older age groups.**
- **Education: Adults with more education were the most likely to report using a wearable device than those with less education.**
- **Income: Adults with higher income were the most likely to report using a wearable device than those with lower income.**

\***Bold text** indicates statistical significance



## Tennesseans who Wore a Wearable Device



## Wearable Device Information Sharing

### *TN BRFSS asks:*

Would you be willing to share information stored on your mobile device or app for use in public health research?

### *SAS Variables Used*

WDSHARE

### *Dispositions*

The question allows a “yes” or “no” choice for the respondent. All responses for “yes” are included in these results. Note: Only respondents who first answered “yes” to the *Do you track your nutrition, sleep, or physical activity using a wearable device or a mobile application (such as Fitbit, Samsung Gear Fit, Apple fitness app or other consumer application)?* question were allowed to answer.

### *Key Findings*

- Tennessee statewide: About 1 in 3 (32.8%) Tennesseans would be willing to share information collected on their wearable device.
- Grand Division: Middle Tennesseans were least likely to be willing to share information collected on their wearable device than Tennesseans in other regions.
- Sex: Men were more likely to be willing to share information collected on their wearable device than women.
- Race/ethnicity: White non-Hispanics were the most likely to be willing to share information collected on their wearable device than other race/ethnicities.
- Age: No significant difference was observed among age groups.
- Education: College graduates were the most likely to be willing to share information collected on their wearable device than those with less education.
- Income: Adults earning \$75,000 or more per year were the most likely to be willing to share information collected on their wearable device than those earning less.

\***Bold text** indicates statistical significance (Note: No statistical significance observed.)

## Tennesseans who Would be Willing to Share Wearable Device Information

