# Case-Study 10: Youth Health Risk Behavior using the Observational Big Data

**Overview:** This case study examines the associations between victimization, substance use, and suicide attempt among youth in Chicago in 2013.

# Driving Challenges:

* + Are there relations between victimization (fighting, bullying, sexual abuse) and substance use (Tabaco, alcohol and other drug use)?
  + Are there relations between victimization (fighting, bullying, sexual abuse) and suicide attempt?
  + Are there relations between substance use (Tabaco, alcohol and other substance use) and suicide attempt?

# Meta-data:

* + **Record ID**: Case subject identifier
  + **Demographic variables**: Age (1= <=12 years old, 2=13 years old, 3=14 years old, 4=15 years old, 5=16 years old, 6=17 years old, 7=18+ years old), sex (1=Female, 2=Male), race (1=White, 2=Black/African American, 3=Hispanic/Latino, 4=All other races), grade (1=9th, 2=10th, 3=11th, 4=12th)
  + **Victimization**: qn16 (Unsafe at school 1 or more times in the past 30 days), qn17 (Threatened at school 1 or more times in the past 12 months), qn19 (Injured at school 1 or more times in the past 12 months), qn20 (Fought at school 1 or more times in the past 12 months), qn21 (Forced to have sex), qn24 (Bullied 1 or more times in the past 12 months), qn25 (Electronically bullied 1 or more times in the past 12 months)
  + **Suicide attempt**: qn27 (Considered suicide in the past 12 months), qn28 (Made suicide plan in the past 12 months), qn29 (Attempted suicide in the past 12 months), qn30 (Suicide attempt with or without injury in the past 12 months)
  + **Substance use**: qn33 (Smoked 1 or more times in the past 30 days), qn37 (Smoked daily for 30 days), qn43 (Had drinks 1 or more times in the past 30 days), qn45 (Had drinks 10 or more times in the past 30 days), qn47 (Tried marijuana 1 or more times in life), qn50 (Used cocaine 1 or more times in life), qn51 (Sniffed glue 1 or more times in life), qn52 (Used heroin 1 or more times in life), qn53 (Used meth 1 or more times in life), qn54 (Used ecstasy 1 or more times in life), qn55 (Took steroids 1 or more times in life), qn56 (Taken prescription drug without prescription 1 or more times in life), qn57 (Injected drugs 1 or more times in life)

**Data:** Complete data is in this table (YRBS\_2013\_Yang).

**Provenance:** This case study is from the Youth Risk Behavior Survey (YRBS) data which are free for use (Seen from [http://www.cdc.gov/healthyyouth/data/yrbs/data.htm).](http://www.cdc.gov/healthyyouth/data/yrbs/data.htm))