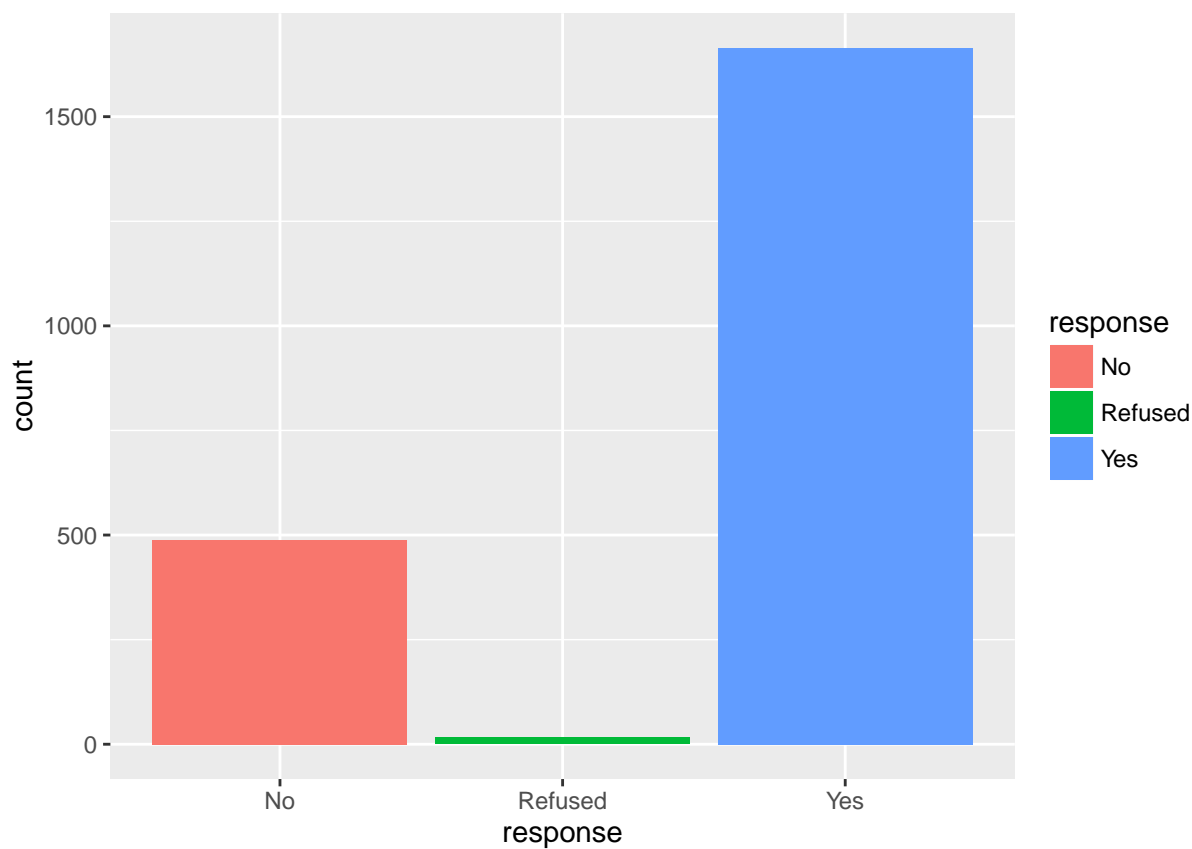


flu survey

Summary tables & plots

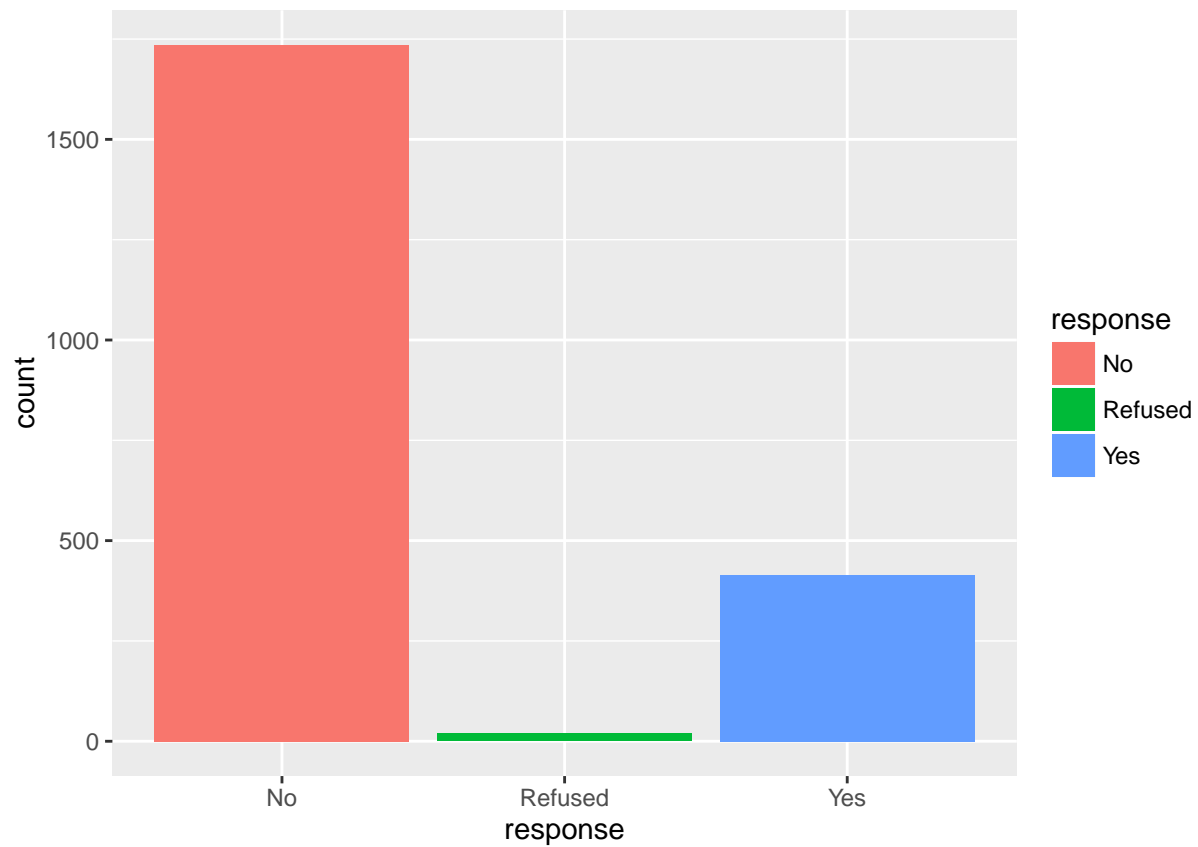
Q1. Before receiving this survey, did you know influenza is different from the stomach flu?

```
##      Q1
## No      : 488
## Refused:  16
## Yes     :1664
```



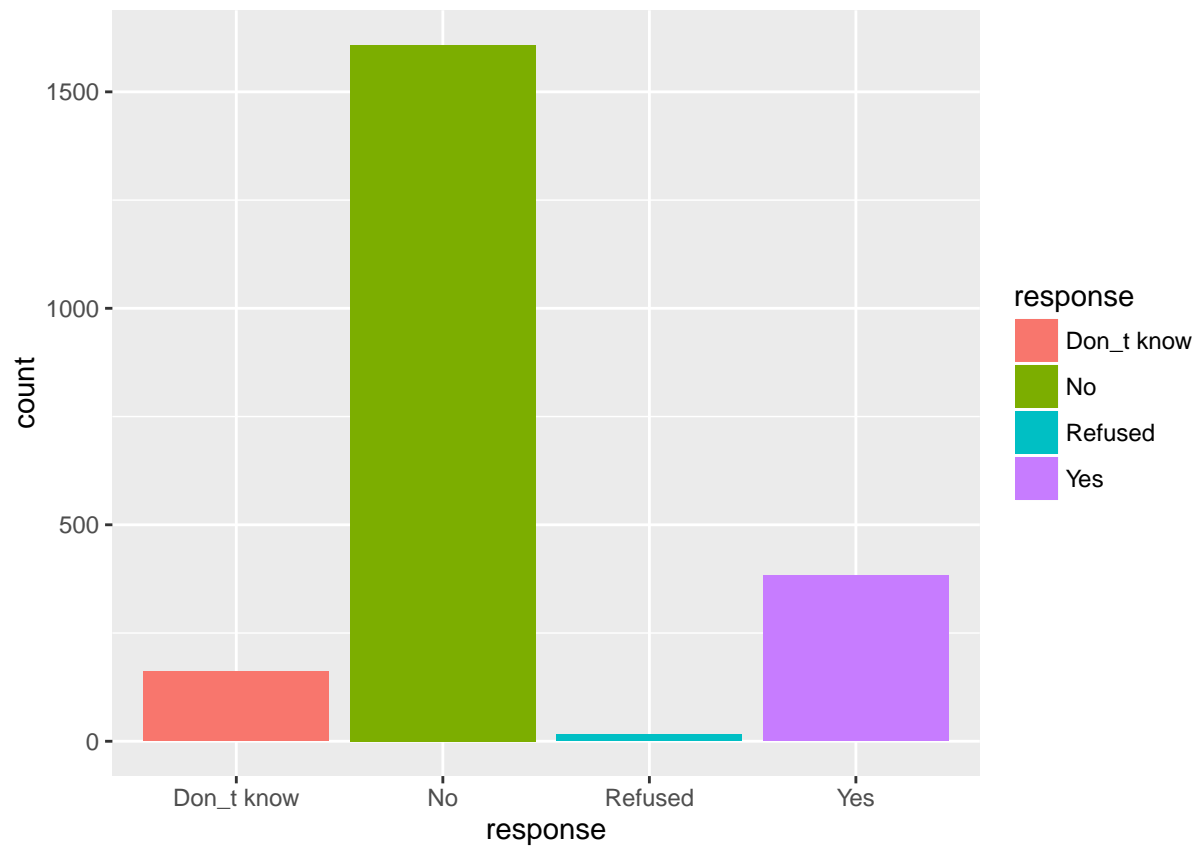
Q2. Have you had an illness with influenza like symptoms since August 2015?

```
##      Q2
## No      :1735
## Refused:  19
## Yes     : 414
```



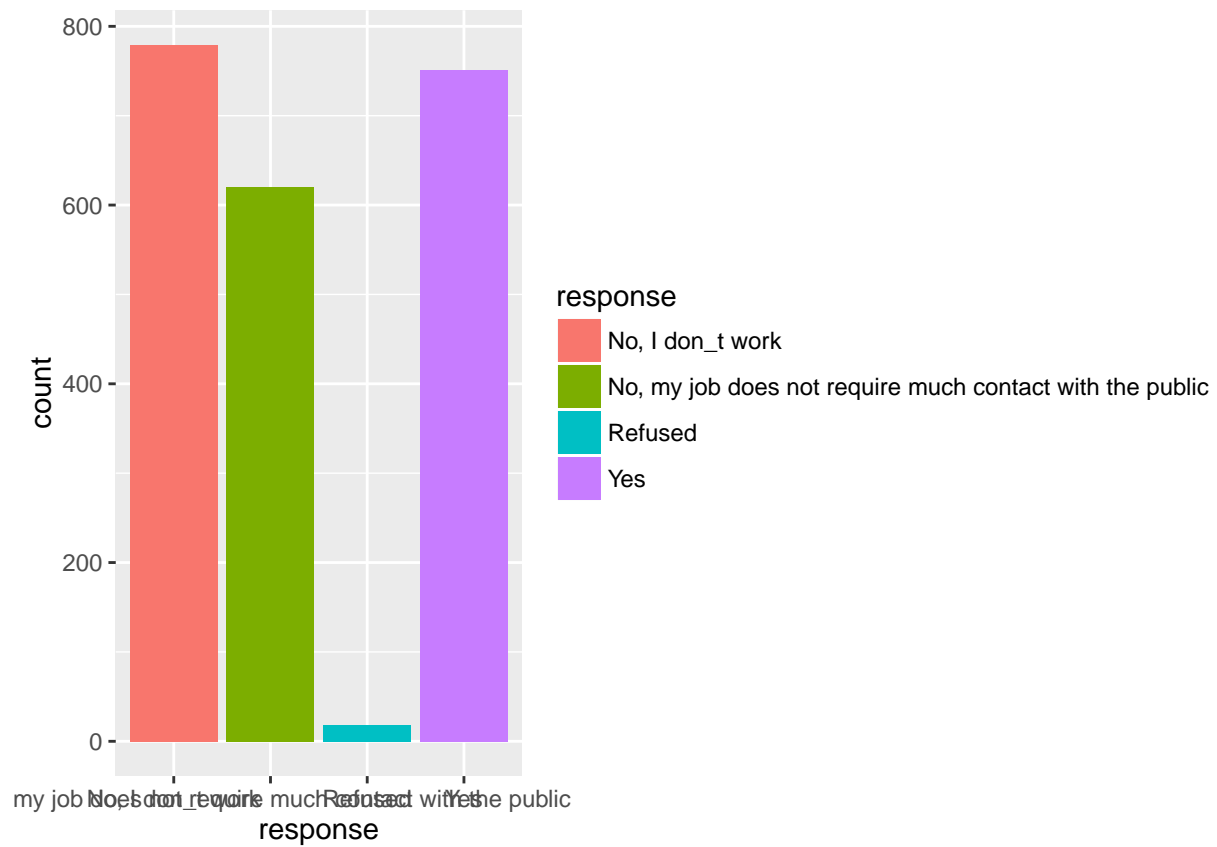
Q3. Has any other person in your household had an illness with influenza like symptoms since August 2015?

```
##          Q3
## Don't know: 161
## No          :1608
## Refused     :  16
## Yes         : 383
```



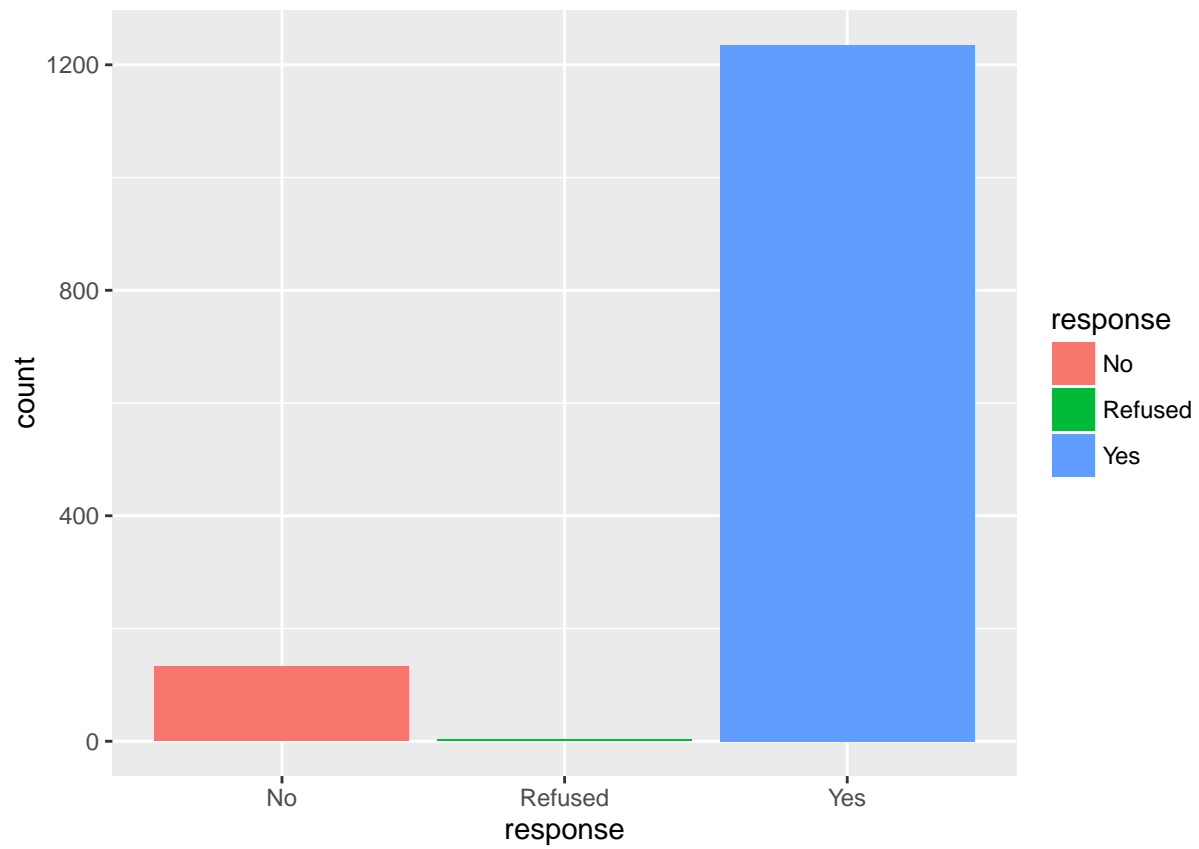
Q4. Does your job require you to have a lot of contact with the public?

```
##                                     Q4
## No, I don_t work                  :779
## No, my job does not require much contact with the public:620
## Refused                          : 18
## Yes                              :751
```



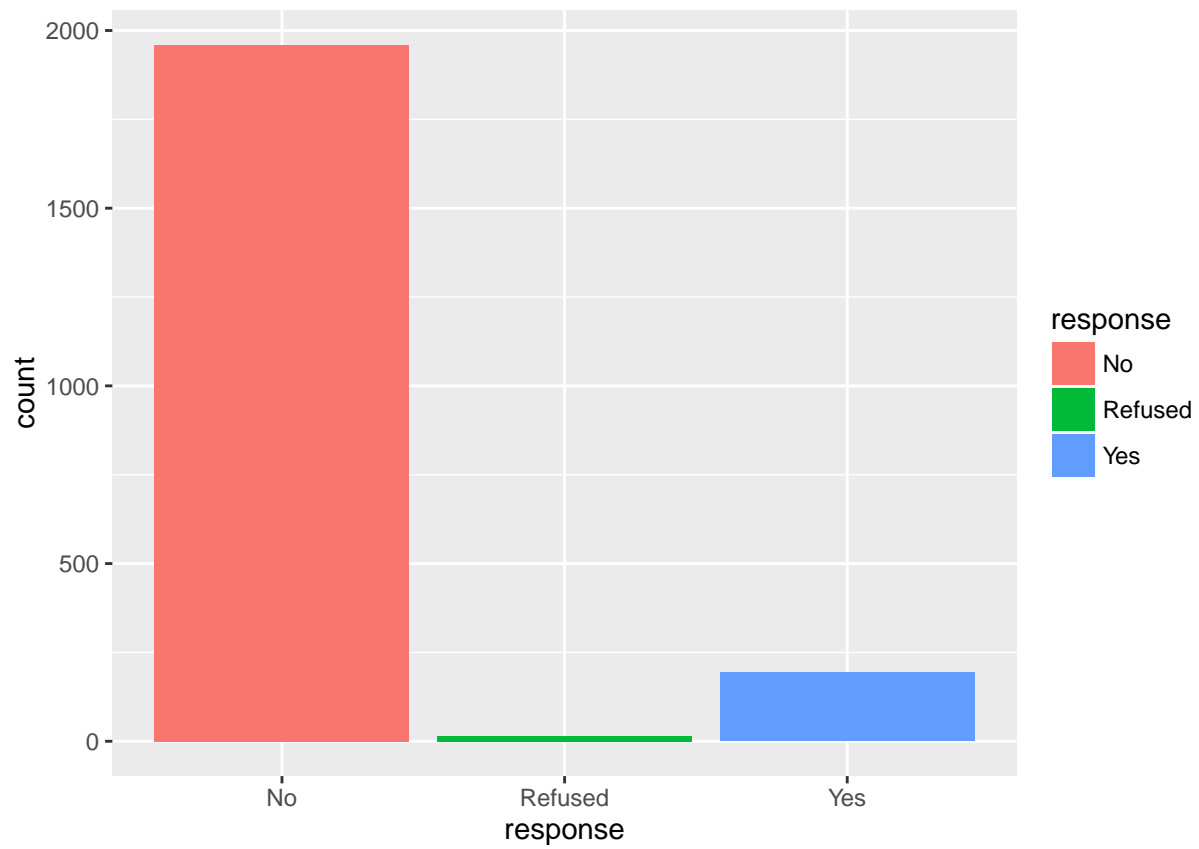
Q5. Do you have a car that you can use to travel to work?

```
##      Q5
## No      : 133
## Refused:   3
## Yes     :1235
## NA's    : 797
```

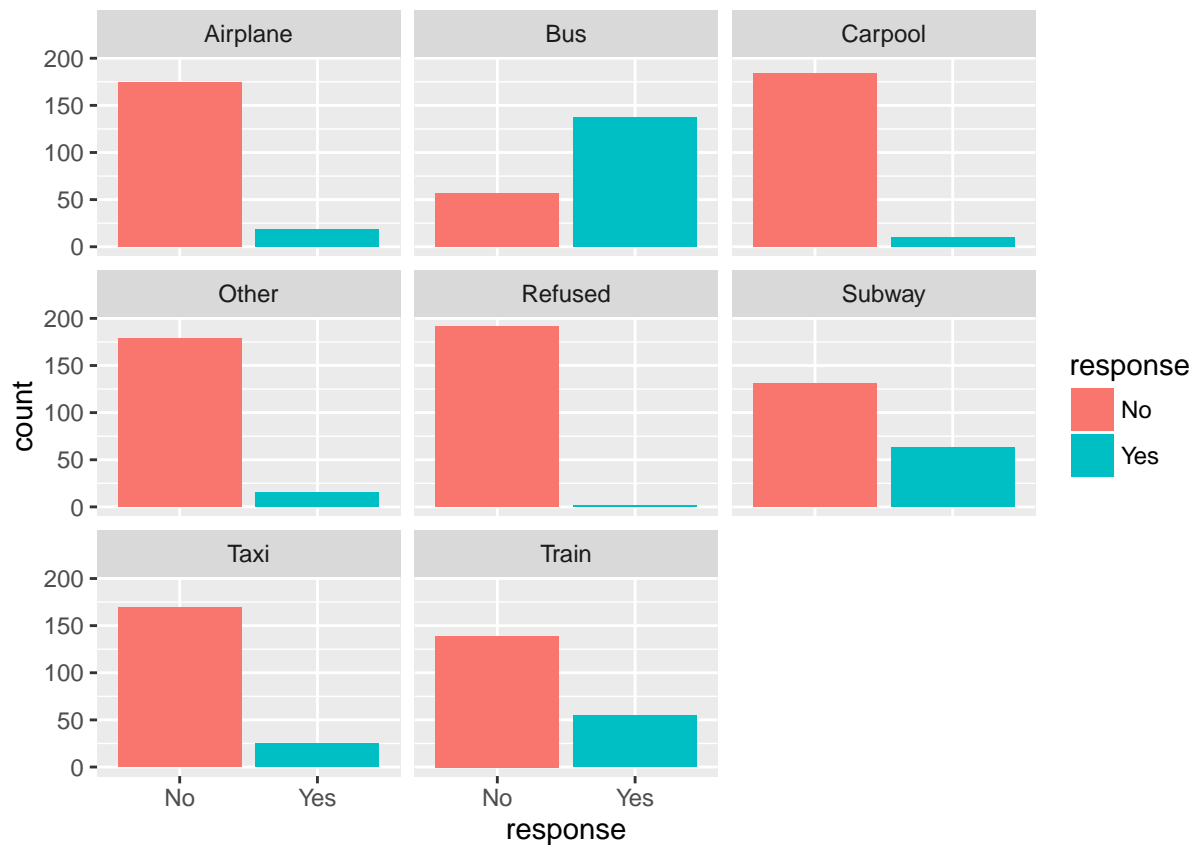


Q6. Do you regularly use public transportation?

```
##      Q6
## No      :1959
## Refused:  15
## Yes     : 194
```



Q7. What types of public transportation do you regularly use?



```
##      Bus      Carpool      Subway      Train      Taxi      Airplane
## No   :  57   No   : 184   No   : 131   No   : 139   No   : 169   No   : 175
## Yes  : 137   Yes  :  10   Yes  :  63   Yes  :  55   Yes  :  25   Yes  :  19
## NA's:1974   NA's:1974   NA's:1974   NA's:1974   NA's:1974   NA's:1974
##
##
##
##
##      Other      Refused      Other text
## No   : 179   No   : 192      :2153
## Yes  :  15   Yes  :   2   bike,walk:  1
## NA's:1974   NA's:1974   car       :  1
##                                     ferry    :  1
##                                     Ferry    :  1
##                                     Horse    :  1
##                                     (Other)  : 10
```

Q8. For what types of activities do you regularly use public transportation?

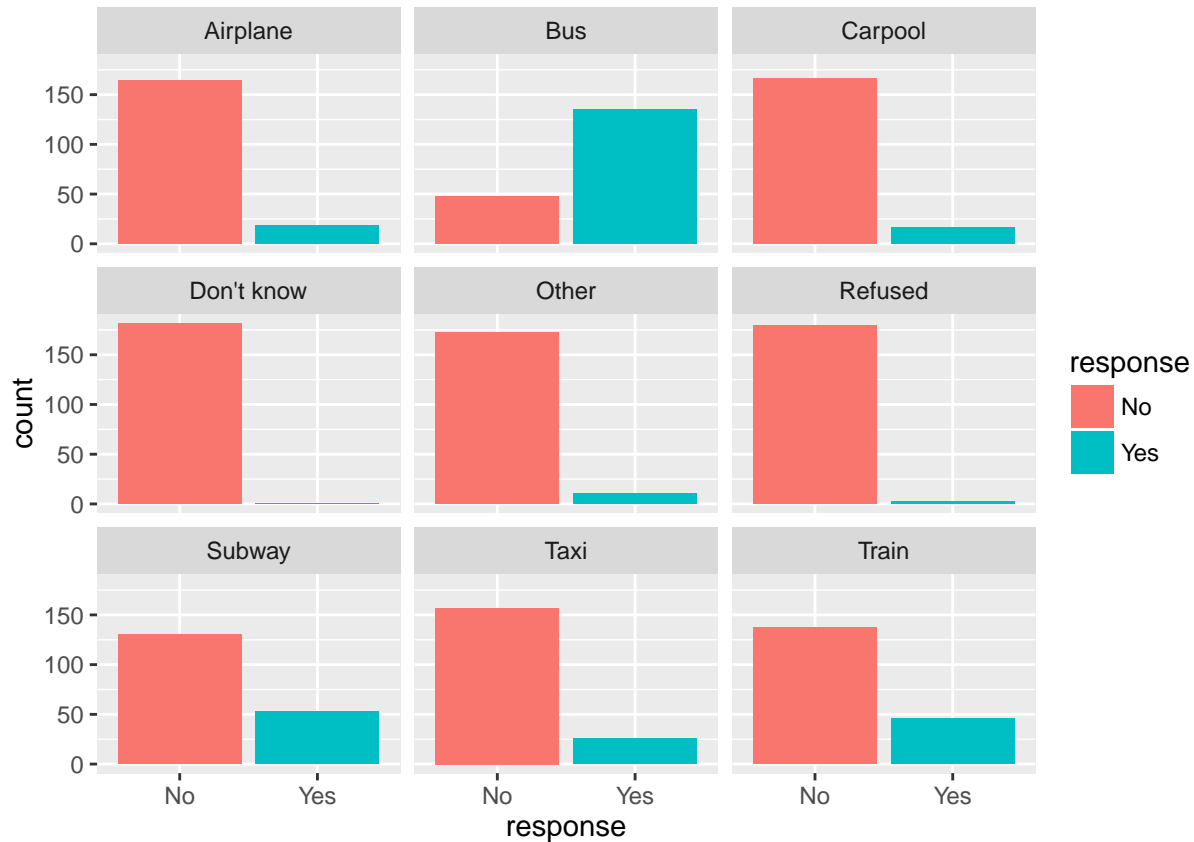


```
##      Work      School      Shopping      Visiting people      Recreation
## No   : 89    No   : 158    No   : 107    No   : 125        No   : 127
## Yes  : 105   Yes  : 36    Yes  : 87    Yes  : 69        Yes  : 67
## NA's:1974   NA's:1974   NA's:1974   NA's:1974        NA's:1974
##
##
##
##
##      Other      Refused      Other text
## No   : 175    No   : 192      :2149
## Yes  : 19     Yes  : 2      church, adult ed : 1
## NA's:1974   NA's:1974   doc. app.      : 1
##
##      Doctor      : 1
##      doctor visits : 1
##      Doctor's appointments: 1
##      (Other)      : 14
```

Q9. Do other members of your household regularly use public transportation?

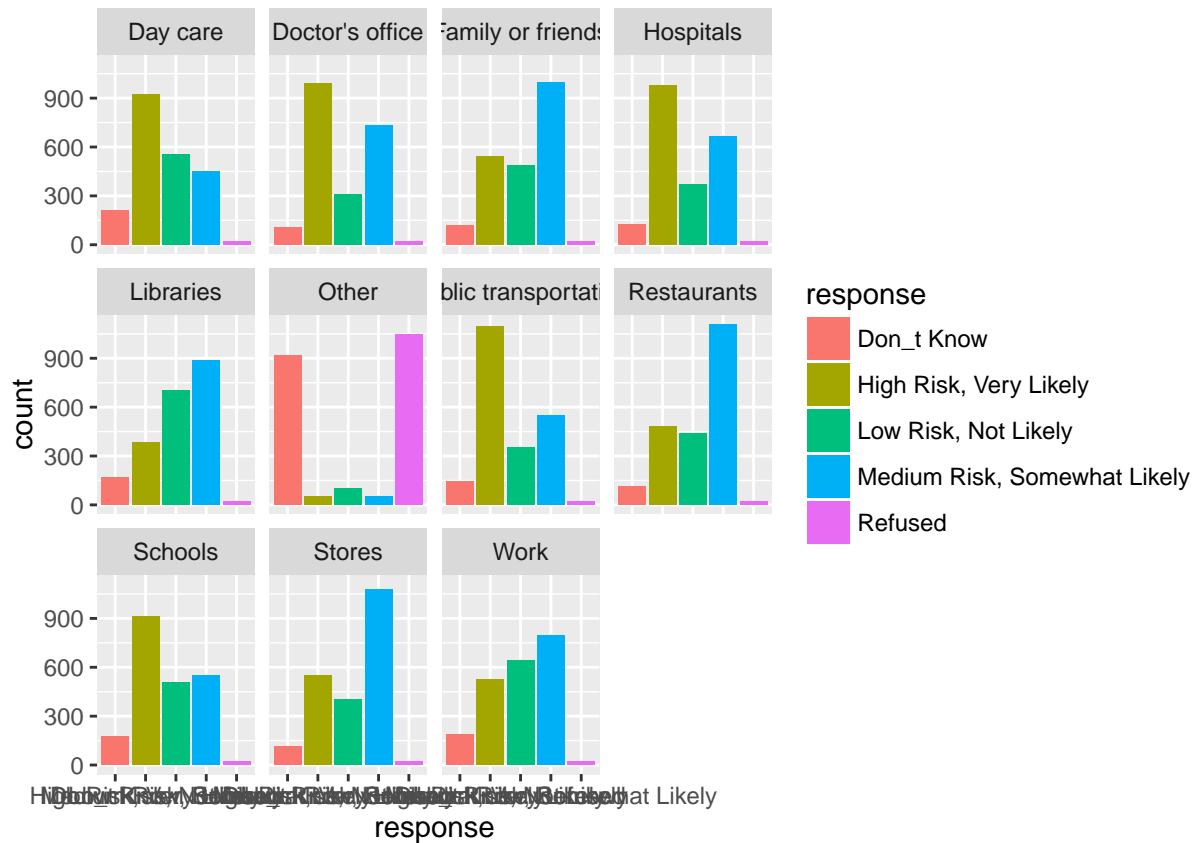
```
##      Q9
## Don't know: 32
## No       :1935
## Refused  : 18
## Yes      : 183
```


Q10. What types of public transportation do other members of your household regularly use?



```
##      Bus      Carpool      Subway      Train      Taxi      Airplane
## No   : 48    No   : 166   No   : 130   No   : 137   No   : 157   No   : 164
## Yes  : 135   Yes   : 17    Yes   : 53    Yes   : 46    Yes   : 26    Yes   : 19
## NA's:1985   NA's:1985   NA's:1985   NA's:1985   NA's:1985   NA's:1985
##
##
##
##
## Don't know  Other      Refused      Other text
## No   : 182   No   : 172   No   : 180      :2157
## Yes  : 1     Yes   : 11    Yes   : 3     None   : 2
## NA's:1985   NA's:1985   NA's:1985   car    : 1
##                                     ferry   : 1
##                                     Ferry   : 1
##                                     Horse   : 1
##                                     (Other): 5
```

Q11. How do you rate your risk of getting influenza if you visited each of the following locations?



```
##
## Work
## Don't Know :185
## High Risk, Very Likely :524
## Low Risk, Not Likely :643
## Medium Risk, Somewhat Likely:795
## Refused : 21
##
## Schools
## Don't Know :178
## High Risk, Very Likely :909
## Low Risk, Not Likely :508
## Medium Risk, Somewhat Likely:551
## Refused : 22
##
## Day care
## Don't Know :214
## High Risk, Very Likely :924
## Low Risk, Not Likely :554
## Medium Risk, Somewhat Likely:454
## Refused : 22
##
## Stores
## Don't Know : 115
## High Risk, Very Likely : 551
## Low Risk, Not Likely : 405
## Medium Risk, Somewhat Likely:1076
## Refused : 21
##
## Restaurants
## Don't Know : 111
## High Risk, Very Likely : 483
## Low Risk, Not Likely : 442
## Medium Risk, Somewhat Likely:1111
## Refused : 21
##
## Libraries
## Don't Know :169
## High Risk, Very Likely :386
## Low Risk, Not Likely :700
## Medium Risk, Somewhat Likely:890
## Refused : 23
##
## Hospitals
## Don't Know :123
## High Risk, Very Likely :982
## Doctor's office
## Don't Know :110
## High Risk, Very Likely :994
```

```

## Low Risk, Not Likely :374 Low Risk, Not Likely :308
## Medium Risk, Somewhat Likely:669 Medium Risk, Somewhat Likely:733
## Refused : 20 Refused : 23
##
##
## Public transportation
## Don_t Know : 147
## High Risk, Very Likely :1093
## Low Risk, Not Likely : 353
## Medium Risk, Somewhat Likely: 551
## Refused : 24
##
##
## Family or friends Other
## Don_t Know : 121 Don_t Know : 915
## High Risk, Very Likely : 541 High Risk, Very Likely : 51
## Low Risk, Not Likely : 485 Low Risk, Not Likely : 104
## Medium Risk, Somewhat Likely:1000 Medium Risk, Somewhat Likely: 54
## Refused : 21 Refused :1044
##
##
## Other text
## :1997
## church : 13
## Church : 13
## none : 8
## gym : 7
## n/a : 4
## (Other): 126

```

Q13. Do you get the flu vaccine?

```

## Q13
## No, never :819
## Refused : 18
## Yes, every year:908
## Yes, some years:423

```

Q12. Which of the following actions do you take to avoid getting sick?



```
## Avoid touching my eyes Avoid touching my nose Avoid touching my mouth
## Always : 653 Always : 613 Always : 758
## Never : 324 Never : 349 Never : 300
## Refused : 23 Refused : 23 Refused : 25
## Sometimes:1168 Sometimes:1183 Sometimes:1085
##
##
##
## Wash my hands with soap Use hand sanitizers Clean the surfaces in my home
## Always :1774 Always :911 Always :1132
## Never : 52 Never :278 Never : 115
## Refused : 25 Refused : 22 Refused : 22
## Sometimes: 317 Sometimes:957 Sometimes: 899
##
##
##
## Clean the surfaces at work Eat nutritious food Get adequate rest
## Always :752 Always : 895 Always : 899
## Never :544 Never : 107 Never : 114
## Refused : 30 Refused : 22 Refused : 25
## Sometimes:842 Sometimes:1144 Sometimes:1130
##
##
##
## Get recommended vaccine Take preventive medicine
## Always :1041 Always :425
## Never : 564 Never :831
```

```

## Refused : 23          Refused : 22
## Sometimes: 540        Sometimes:890
##
##
##
## Cover my nose and mouth with a surgical mask
## Always : 218
## Never :1568
## Refused : 24
## Sometimes: 358
##
##
##
## Avoid contact with people who are sick Avoid crowded places
## Always : 765          Always : 406
## Never : 153           Never : 413
## Refused : 22          Refused : 27
## Sometimes:1228        Sometimes:1322
##
##
##
## Other          Other text
## Always : 91          :2022
## Never : 472 none : 7
## Refused :1518 stay home : 4
## Sometimes: 87 avoid sick people: 3
## N/A : 3
## nothing : 3
## (Other) : 126

```

Q14. How much do you pay to get an influenza vaccine?

```

## Q14
## $0 :970
## $30 to $60 : 54
## Don't know : 80
## Less than $30:222
## More than $60: 4
## Refused : 1
## NA's :837

```

Q15. Are you more likely to get a vaccine if others around you get a vaccine?

```

## Q15
## No, less likely : 70
## No, no effect :878
## Refused : 2
## Yes, more likely:381
## NA's :837

```

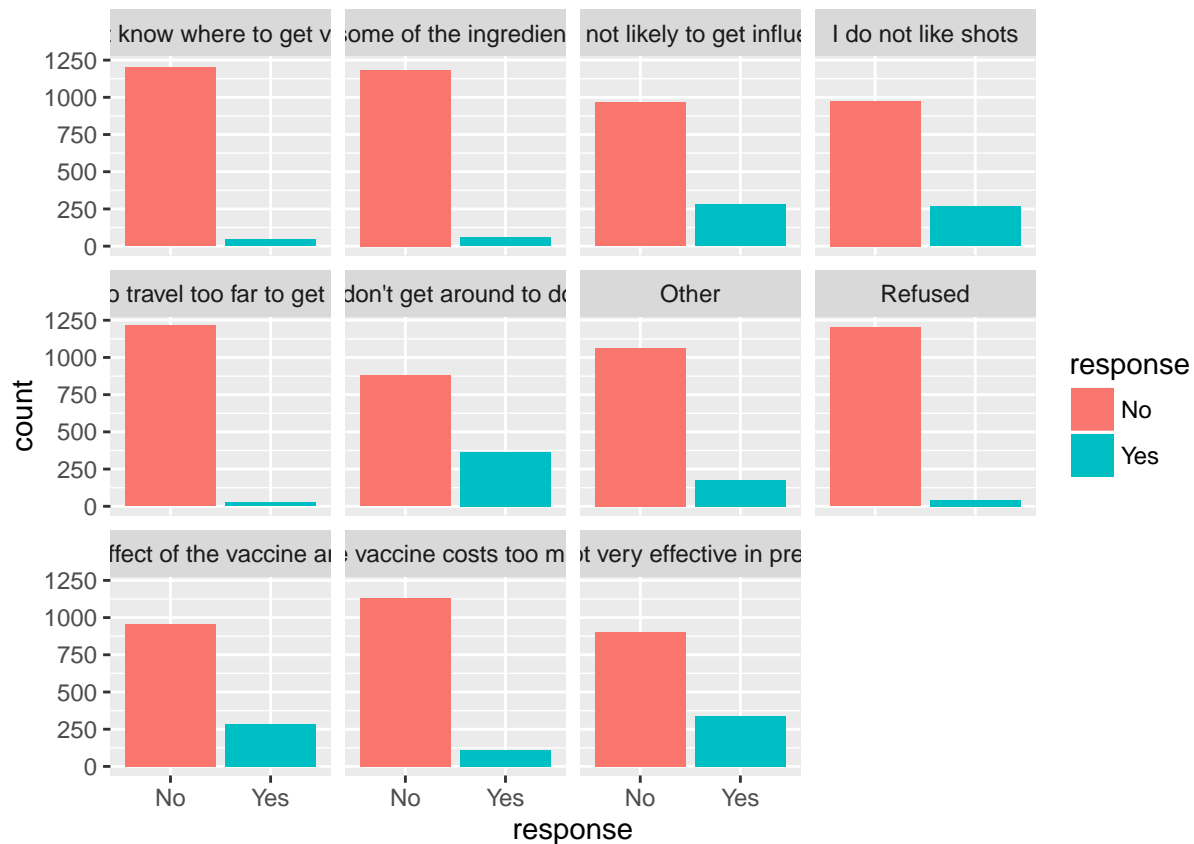
Q16. Are you more likely to get a vaccine if others around you do not get a vaccine?

```
##           Q16
## No, less likely :101
## No, no effect   :904
## Refused        : 13
## Yes, more likely:313
## NA's           :837
```

Q17. Do you get a vaccine to protect yourself, protect others, or protect yourself and others?

```
##           Q17
## Protect myself      :381
## Protect myself and others:921
## Protect others      : 22
## Refused             : 7
## NA's               :837
```

Q18. What are the reasons you would not get an influenza vaccine?



```
## The vaccine costs too much
## No :1132
## Yes : 110
## NA's: 926
##
##
```

```

##
##
## The vaccine is not very effective in preventing influenza
## No :903
## Yes :339
## NA's:926
##
##
##
## I am not likely to get influenza Do not know where to get vaccine
## No :964 No :1199
## Yes :278 Yes : 43
## NA's:926 NA's: 926
##
##
##
## The side effect of the vaccine are too risky
## No :958
## Yes :284
## NA's:926
##
##
##
## I am allergic to some of the ingredients in the vaccine
## No :1184
## Yes : 58
## NA's: 926
##
##
##
## I do not like shots I just don't get around to doing it
## No :976 No :878
## Yes :266 Yes :364
## NA's:926 NA's:926
##
##
##
## I have to travel too far to get vaccine Other Refused
## No :1216 No :1064 No :1200
## Yes : 26 Yes : 178 Yes : 42
## NA's: 926 NA's: 926 NA's: 926
##
##
##
## Other text
## :1991
## no need : 3
## 70's swine flu vacc : 1

```

```
## Always get sick when I get the shot : 1
## because : 1
## because i get treatments to lower and over active immune system.: 1
## (Other) : 170
```

Q19. Do you have health insurance?

```
## Q19
## No : 154
## Refused: 20
## Yes :1994
```

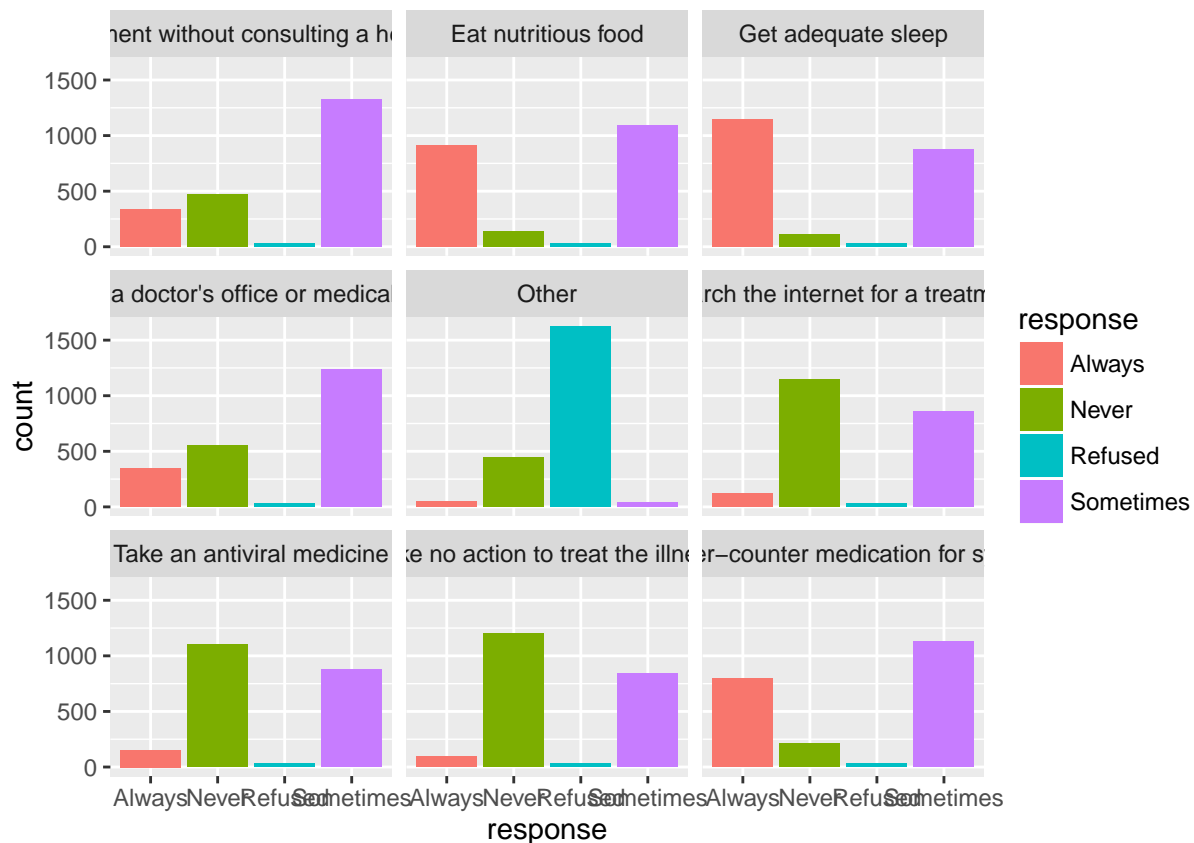
Q20. How effective do you think the influenza vaccine is in protecting people from becoming sick with influenza?

```
## Q20
## Don't know :228
## It varies from season to season:433
## Not effective :144
## Refused : 19
## Somewhat effective :961
## Very effective :383
```

Q21. Are influenza vaccines covered by your health insurance?

```
## Q21
## Don't know : 500
## No : 55
## Refused : 4
## Yes, but only part of the cost is paid: 153
## Yes, the full cost is paid :1282
## NA's : 174
```

Q22. Do you do any of the following when you have influenza symptoms?



```
## Go to a doctor's office or medical clinic
## Always : 349
## Never : 552
## Refused : 32
## Sometimes:1235
##
##
##
## Decide on treatment without consulting a health practitioner
## Always : 335
## Never : 473
## Refused : 31
## Sometimes:1329
##
##
##
## Search the internet for a treatment Get adequate sleep
## Always : 126 Always :1147
## Never :1148 Never : 115
## Refused : 33 Refused : 31
## Sometimes: 861 Sometimes: 875
##
##
##
## Eat nutritious food Take-over-counter medication for symptoms
## Always : 909 Always : 796
## Never : 135 Never : 210
```

```

## Refused : 33      Refused : 32
## Sometimes:1091    Sometimes:1130
##
##
##
## Take an antiviral medicine Take no action to treat the illness
## Always : 153      Always : 96
## Never :1103       Never :1199
## Refused : 35      Refused : 34
## Sometimes: 877    Sometimes: 839
##
##
##
##      Other      Other text
## Always : 54      :2046
## Never : 448      none : 6
## Refused :1628    dont know : 2
## Sometimes: 38    drink lots of fluids : 2
##                  eat chicken noodle soup: 2
##                  n/a : 2
##                  (Other) : 108

```

Q23. Which of the following actions do you take when you have influenza symptoms to avoid someone else from getting sick?



```

## Stand away from people Avoid public places Avoid public transportation

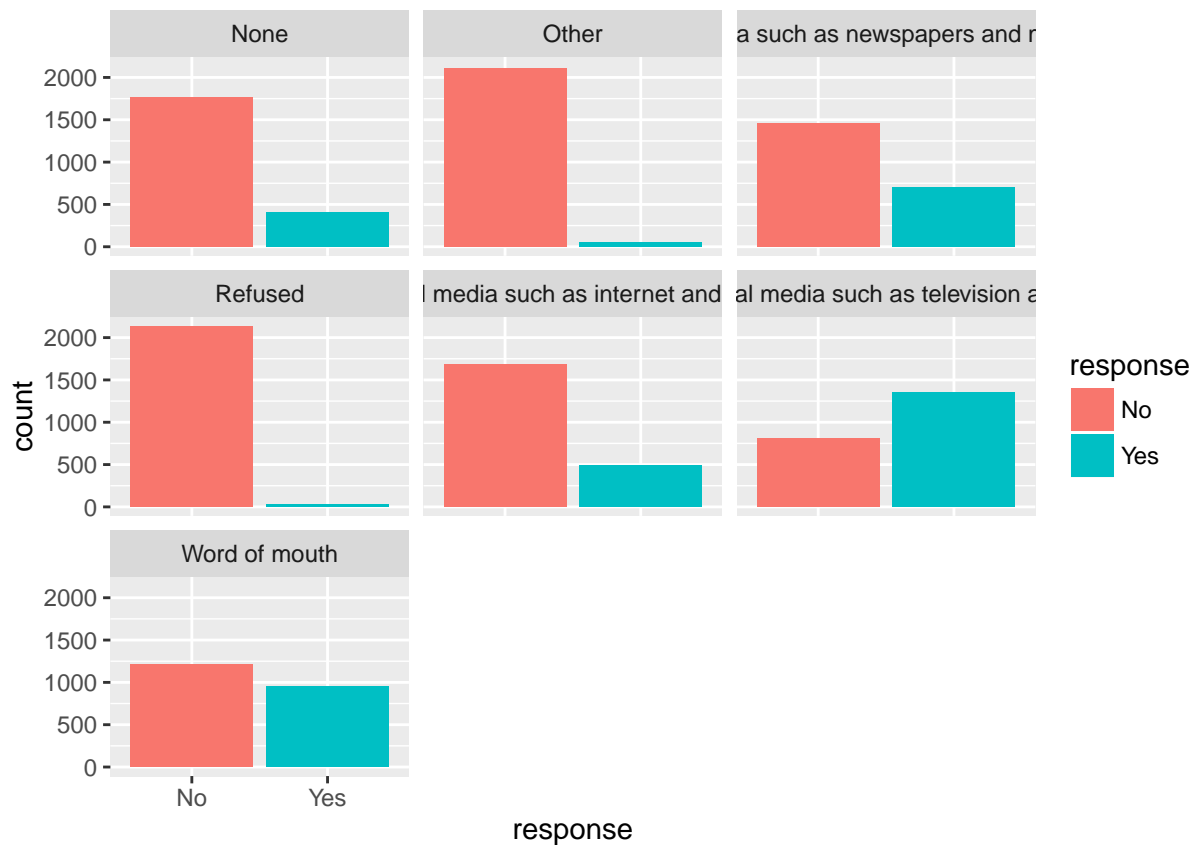
```

```

## Always :1006      Always : 897      Always :1342
## Never : 135       Never : 196       Never : 245
## Refused : 31      Refused : 31      Refused : 31
## Sometimes: 996    Sometimes:1044    Sometimes: 550
##
##
##
## Stay at home Wash my hands with soap more often Use hand sanitizers
## Always : 869      Always :1559      Always :1014
## Never : 163       Never : 92       Never : 299
## Refused : 30      Refused : 29      Refused : 30
## Sometimes:1106    Sometimes: 488    Sometimes: 825
##
##
##
## Clean the surfaces in my home Clean the surfaces I use at work
## Always :1151      Always :856
## Never : 153       Never :508
## Refused : 32      Refused : 32
## Sometimes: 832    Sometimes:772
##
##
##
## Cover my nose and mouth with a surgical mask
## Always : 267
## Never :1463
## Refused : 29
## Sometimes: 409
##
##
##
## Cover my nose and mouth when I sneeze or cough      Other
## Always :1717      Always : 54
## Never : 81       Never : 421
## Refused : 29      Refused :1665
## Sometimes: 341    Sometimes: 28
##
##
##
## Other text
## :2078
## none : 6
## stay in bed: 3
## dont know : 2
## na : 2
## never had : 2
## (Other) : 75

```

Q24. What sources of information do you recall hearing or seeing about influenza outbreaks?



```
## Print media such as newspapers and magazines
## No :1460
## Yes: 708
##
##
##
##
## Traditional media such as television and radio
## No : 811
## Yes:1357
##
##
##
## Social media such as internet and blogs Word of mouth None
## No :1680 No :1213 No :1764
## Yes: 488 Yes: 955 Yes: 404
##
##
##
## Other Refused Other text
## No :2114 No :2138 :2114
## Yes: 54 Yes: 30 CDC : 2
```

```
##          doctor      :    2
##          Internet    :    2
##          Online news:    2
##          work        :    2
##          (Other)     :   44
```

Q25. If you received information from the news, internet or other public media that there was an influenza outbreak in your community would you do any of the following?

```
## Stand away from people Avoid public places Avoid public transportation
## Always : 649           Always : 648           Always :1221
## Never  : 217           Never   : 270           Never   : 268
## Refused : 34           Refused : 33           Refused : 36
## Sometimes:1268        Sometimes:1217       Sometimes: 643
##
##
##
##      Stay at home Wash my hands with soap more often Use hand sanitizers
## Always : 484         Always :1477                Always :1077
## Never  : 429         Never   : 99                  Never   : 257
## Refused : 33         Refused : 38                  Refused : 35
## Sometimes:1222      Sometimes: 554                Sometimes: 799
##
##
##
## Clean the surfaces in my home Clean the surfaces I use at work
## Always :1116                Always :902
## Never  : 160                Never   :464
## Refused : 35                Refused : 36
## Sometimes: 857              Sometimes:766
##
##
##
## Cover my nose and mouth with a surgical mask
## Always : 343
## Never  :1286
## Refused : 34
## Sometimes: 505
##
##
##
## Cover my nose and mouth when I sneeze or cough          Other
## Always :1643                Always : 32
## Never  : 90                  Never   : 393
## Refused : 36                  Refused :1722
## Sometimes: 399              Sometimes: 21
##
##
##
##      Other text
##      :2100
## none : 9
## nothing : 3
```

```
## n/a      :    2
## stay home:    2
## -        :    1
## (Other)   :   51
```

Q26. Does your household have children?

```
##          Q26
##   No      :1570
##   Refused:   22
##   Yes      : 576
```

Q27. What actions do you take when a child in your household has influenza symptoms?

```
## Keep the child away from the others in the residence
## Always      : 198
## Never       : 90
## Refused    :   3
## Sometimes: 285
## NA's       :1592
## 
## 
## Keep the child out of school/daycare
## Always      : 377
## Never       : 46
## Refused    :   4
## Sometimes: 149
## NA's       :1592
## 
## 
## Stop child's social activities like play dates          Other
## Always      : 388                                     Always     : 12
## Never       : 41                                       Never      : 93
## Refused    :   3                                       Refused    : 459
## Sometimes: 144                                       Sometimes: 12
## NA's       :1592                                      NA's      :1592
## 
## 
##                                                         Other text
##                                                         :2147
## Consult with the child's doctors.                        : 1
## crawling on floor                                         : 1
## Depending on symptoms id have him wear a mask to help us not get it: 1
## doctor visit                                             : 1
## give supplements & herbs                                : 1
## (Other)                                                  : 16
```

Q28. Are you a single parent?

```
##      Q28
## No      : 490
## Yes     :  86
## NA's:1592
```

Q29. How do you care for a sick child?

```
## A parent brings the child to work A parent stays home
## Always : 7 Always : 266
## Never : 438 Never : 27
## Refused : 4 Refused : 4
## Sometimes: 41 Sometimes: 193
## NA's :1678 NA's :1678
##
##
## Another adult stays home Send the child to school sick
## Always : 68 Always : 1
## Never : 202 Never : 414
## Refused : 4 Refused : 5
## Sometimes: 216 Sometimes: 70
## NA's :1678 NA's :1678
##
##
## Take the child to a relative or friends Other
## Always : 8 Always : 4
## Never : 292 Never : 76
## Refused : 4 Refused : 404
## Sometimes: 186 Sometimes: 6
## NA's :1678 NA's :1678
##
##
## Other text
## :2157
## Because of proper diets and physical training my family stays healthy the year round: 1
## Child stays home alone : 1
## child stays home alone, old enough to take care of himself : 1
## drive to school : 1
## Have the student sleep more and work less (on school stuff). : 1
## (Other) : 6
```

Q30. How do you care for a sick child?

```
## I bring the child to work I stay home Another adult stays home
## Always : 4 Always : 34 Always : 9
## Never : 77 Never : 10 Never : 25
## Sometimes: 5 Sometimes: 42 Sometimes: 52
## NA's :2082 NA's :2082 NA's :2082
##
## Send the child to school sick Take the child to a relative or friends
## Always : 3 Always : 7
## Never : 60 Never : 33
## Sometimes: 23 Sometimes: 46
## NA's :2082 NA's :2082
##
## Other Other text
## Always : 1 :2165
## Never : 14 adult child : 1
## Refused : 68 Hes old enough to stay alone: 1
```

```
## Sometimes: 3 my children are grown : 1
## NA's :2082
```

Q31. How many hours of screen time (time spent watching television, a computer, smartphone, iPad, etc.) do you spend each day on average when you are not sick? Enter 0 if none

```
## Q31 Q31_Codes
## Min. : 0.000 Refused: 52
## 1st Qu.: 2.000 NA's :2116
## Median : 4.000
## Mean : 4.868
## 3rd Qu.: 6.000
## Max. :24.000
## NA's :52
```

Q32. How many hours of screen time do you spend each day on average when you are sick? Enter 0 if none

```
## Q32 Q32_Codes
## Min. : 0.000 Refused: 61
## 1st Qu.: 1.000 NA's :2107
## Median : 4.000
## Mean : 4.267
## 3rd Qu.: 6.000
## Max. :24.000
## NA's :61
```

Q33. How many people, including yourself, reside in your household?

```
## Q33 Q33_Codes
## Min. : 1.00 Refused: 28
## 1st Qu.: 2.00 NA's :2140
## Median : 2.00
## Mean : 2.58
## 3rd Qu.: 3.00
## Max. :14.00
## NA's :28
```

Household members

```
## Q35 Q36 Q36_Codes Q37
## Female :799 Min. :0.000 Don_t know: 61 Min. :0.000
## Male :859 1st Qu.:0.000 Refused : 5 1st Qu.:0.000
## Refused: 5 Median :4.000 NA's :2102 Median :2.000
## NA's :505 Mean :2.873 Mean :2.098
## 3rd Qu.:5.000 3rd Qu.:3.000
## Max. :7.000 Max. :7.000
## NA's :571 NA's :663
## Q37_Codes Q38 Q38_Codes
## Don_t know: 143 Min. :0.0000 Don_t know: 58
```



```

## Refused : 15 1st Qu.:0.0000 Refused : 19
## NA's :2010 Median :0.0000 NA's :2091
## Mean :0.3909
## 3rd Qu.:0.0000
## Max. :7.0000
## NA's :582
## Q39 Q40 Q41
## Don_t know : 84 1 to 2 times :1025 Never :807
## Less than once per year:222 3 to 5 times : 271 Once :400
## More than once per year:593 Never : 226 2 times :191
## Never :100 Don_t know : 87 Don_t know:158
## Once per year :656 6 to 10 times: 32 3 times : 60
## Refused : 8 (Other) : 22 (Other) : 47
## NA's :505 NA's : 505 NA's :505
## Q42
## Don_t know :166
## No, never :567
## Refused : 6
## Yes, always :661
## Yes, sometimes:263
## NA's :505
##
## Q43 Q44 Q44_Codes Q45
## Female : 388 Min. :0.0000 Don_t know: 40 Min. :0.0000
## Male : 431 1st Qu.:1.0000 Refused : 3 1st Qu.:1.0000
## Refused: 9 Median :5.0000 NA's :2125 Median :2.0000
## NA's :1340 Mean :3.669 Mean :2.395
## 3rd Qu.:5.000 3rd Qu.:4.000
## Max. :7.000 Max. :7.000
## NA's :1383 NA's :1419
## Q45_Codes Q46 Q46_Codes
## Don_t know: 70 Min. :0.0000 Don_t know: 42
## Refused : 9 1st Qu.:0.0000 Refused : 9
## NA's :2089 Median :0.0000 NA's :2117
## Mean :0.5727
## 3rd Qu.:0.0000
## Max. :7.0000
## NA's :1391
## Q47 Q48 Q49
## Don_t know : 55 1 to 2 times : 490 Never : 403
## Less than once per year: 125 3 to 5 times : 153 Once : 183
## More than once per year: 232 Never : 83 Don_t know: 93
## Never : 59 Don_t know : 66 2 times : 91
## Once per year : 353 6 to 10 times: 25 3 times : 32
## Refused : 4 (Other) : 11 (Other) : 26
## NA's :1340 NA's :1340 NA's :1340
## Q50
## Don_t know : 100
## No, never : 317
## Refused : 4
## Yes, always : 275
## Yes, sometimes: 132
## NA's :1340

```

##

HHM1

Q35. What is the gender of this member of the household? Remember, this relates to HHM1_Name who is HHM1_AGE years old.

```
##          Q35
## Female :799
## Male   :859
## Refused:  5
## NA's    :505
```

Q36. On average, how many days per week does this member of your household work or attend day care or school outside of your home?

```
##          Q36          Q36_Codes
## Min.    :0.000   Don't know:  61
## 1st Qu.:0.000   Refused    :   5
## Median :4.000   NA's       :2102
## Mean    :2.873
## 3rd Qu.:5.000
## Max.    :7.000
## NA's    :571
```

Q37. On average, how many days per week does this member of your household participate in social activities outside of your home?

```
##          Q37          Q37_Codes
## Min.    :0.000   Don't know: 143
## 1st Qu.:0.000   Refused    :  15
## Median :2.000   NA's       :2010
## Mean    :2.098
## 3rd Qu.:3.000
## Max.    :7.000
## NA's    :663
```

Q38. On average, how many days per week does this member of your household use public transportation?

```
##          Q38          Q38_Codes
## Min.    :0.0000   Don't know:  58
## 1st Qu.:0.0000   Refused    :  19
## Median :0.0000   NA's       :2091
## Mean    :0.3909
## 3rd Qu.:0.0000
## Max.    :7.0000
## NA's    :582
```

Q39. How frequently does this member of your household visit a doctor's office for wellness appointments?

```
##                Q39
## Don't know      : 84
## Less than once per year:222
## More than once per year:593
## Never           :100
## Once per year    :656
## Refused         : 8
## NA's           :505
```

Q40. How frequently does this member of the household get sick in a typical year?

```
##                Q40
## 1 to 2 times :1025
## 3 to 5 times : 271
## Never       : 226
## Don't know  : 87
## 6 to 10 times: 32
## (Other)     : 22
## NA's       : 505
```

Q41. How many times has this member of your household had influenza or another respiratory illness in the last two years?

```
##                Q41
## Never          :807
## Once           :400
## 2 times        :191
## Don't know:158
## 3 times        : 60
## (Other)        : 47
## NA's          :505
```

Q42. Does this member of your household get an annual influenza vaccine?

```
##                Q42
## Don't know      :166
## No, never       :567
## Refused         : 6
## Yes, always     :661
## Yes, sometimes:263
## NA's           :505
```

HHM2

Q43. What is the gender of this member of the household? Remember, this relates to HHM1_Name who is HHM1_AGE years old.

```
##          Q43
## Female : 388
## Male   : 431
## Refused:  9
## NA's   :1340
```

Q44. On average, how many days per week does this member of your household work or attend day care or school outside of your home?

```
##          Q44          Q44_Codes
## Min.      :0.000   Don_t know:  40
## 1st Qu.:1.000   Refused   :   3
## Median :5.000   NA's      :2125
## Mean     :3.669
## 3rd Qu.:5.000
## Max.     :7.000
## NA's     :1383
```

Q45. On average, how many days per week does this member of your household participate in social activities outside of your home?

```
##          Q45          Q45_Codes
## Min.      :0.000   Don_t know:  70
## 1st Qu.:1.000   Refused   :   9
## Median :2.000   NA's      :2089
## Mean     :2.395
## 3rd Qu.:4.000
## Max.     :7.000
## NA's     :1419
```

Q46. On average, how many days per week does this member of your household use public transportation?

```
##          Q46          Q46_Codes
## Min.      :0.0000   Don_t know:  42
## 1st Qu.:0.0000   Refused   :   9
## Median :0.0000   NA's      :2117
## Mean     :0.5727
## 3rd Qu.:0.0000
## Max.     :7.0000
## NA's     :1391
```

Q47. How frequently does this member of your household visit a doctor's office for wellness appointments?

```
##          Q47
## Don_t know      :  55
## Less than once per year: 125
## More than once per year: 232
## Never           :  59
```

```
## Once per year      : 353
## Refused           : 4
## NA's              :1340
```

Q48. How frequently does this member of the household get sick in a typical year?

```
##           Q48
## 1 to 2 times : 490
## 3 to 5 times : 153
## Never       : 83
## Don't know  : 66
## 6 to 10 times: 25
## (Other)     : 11
## NA's       :1340
```

Q49. How many times has this member of your household had influenza or another respiratory illness in the last two years?

```
##           Q49
## Never      : 403
## Once       : 183
## Don't know : 93
## 2 times    : 91
## 3 times    : 32
## (Other)    : 26
## NA's      :1340
```

Q50. Does this member of your household get an annual influenza vaccine?

```
##           Q50
## Don't know : 100
## No, never  : 317
## Refused    : 4
## Yes, always : 275
## Yes, sometimes: 132
## NA's      :1340
```

Analysis

Q1 vs. Q13 table

Knowing influenza is different from stomach flu; vs. getting the flu vaccine

```
##           Q13
## Q1      No, never Refused Yes, every year Yes, some years
## No      260      4      143      81
## Refused 2      10      4      0
## Yes     557      4      761     342
```

```
## Number of cases in table: 2168
## Number of factors: 2
## Test for independence of all factors:
##  Chisq = 813.4, df = 6, p-value = 1.981e-172
##  Chi-squared approximation may be incorrect
```

to-do:

```
# need to remove NA's, rename columns

# ggplot(q7) + geom_bar(aes(x = option, fill = response), position = "dodge")
# ggplot(data = data) + geom_bar(mapping = aes(x = Q1)) + stat_sum()
```