```
In [8]:
       import pandas as pd
        # Load the dataset
        df = ("heart_disease_health_indicators_BRFSS2015 2 (1).csv")
        data = pd.read_csv(df)
        # Display the first few rows of the dataset to understand its structure
        print(data.head())
            HeartDiseaseorAttack HighBP HighChol CholCheck
                                                                  BMI
                                                                       Smoker
                                                                                Stroke
        0
                                0
                                         1
                                                   1
                                                               1
                                                                   40
                                                                             1
                                                                                      0
        1
                                0
                                                                   25
                                         0
                                                   0
                                                               0
                                                                             1
                                                                                      0
        2
                                0
                                                   1
                                                               1
                                                                             0
                                                                                      0
                                         1
                                                                   28
         3
                                0
                                         1
                                                   0
                                                               1
                                                                   27
                                                                             0
                                                                                      0
         4
                                         1
                                0
                                                   1
                                                                   24
                                                                             0
            Diabetes PhysActivity Fruits ... AnyHealthcare NoDocbcCost GenHl
        th
                   0
                                  0
                                                                1
                                                                              0
                                           0
        0
        5
         1
                   0
                                  1
                                           0
                                                                0
                                                                              1
         3
         2
                   0
                                  0
                                           1
                                             . . .
                                                                1
                                                                              1
         5
         3
                                                                1
                   0
                                  1
                                           1
                                                                              0
                                             . . .
         2
         4
                   0
                                  1
                                           1 ...
                                                                1
                                                                              0
        2
            MentHlth
                      PhysHlth DiffWalk
                                            Sex
                                                      Education Income
                                                 Age
        0
                  18
                             15
                                         1
                                              0
                                                   9
                                                                        3
                                                   7
                   0
                                                                        1
        1
                              0
                                         0
                                              0
                                                               6
        2
                  30
                             30
                                         1
                                              0
                                                   9
                                                               4
                                                                        8
         3
                                         0
                                              0
                                                  11
                                                               3
                                                                        6
                   0
                              0
```

[5 rows x 22 columns]

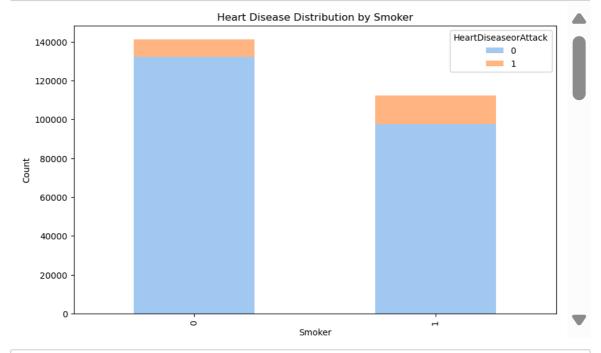
```
In [10]: # Define a function to plot pie charts
def plot_pie_chart(column):
    plt.figure(figsize=(8, 8))
    data[column].value_counts().plot.pie(autopct='%1.1f%%', startangle=90,
    plt.title(f'Distribution of {column}')
    plt.ylabel('')
    plt.show()

# Plot pie charts for Smoker, PhysActivity, Fruits, and Veggies
plot_pie_chart('Smoker')
plot_pie_chart('PhysActivity')
plot_pie_chart('Fruits')
plot_pie_chart('Veggies')
```

1

```
In [12]: # Define a function to plot stacked bar charts
    def plot_stacked_bar_chart(column):
        cross_tab = pd.crosstab(data[column], data['HeartDiseaseorAttack'])
        cross_tab.plot(kind='bar', stacked=True, figsize=(10, 6), color=sns.col
        plt.title(f'Heart Disease Distribution by {column}')
        plt.xlabel(column)
        plt.ylabel('Count')
        plt.show()

# Plot stacked bar charts for Smoker, PhysActivity, Fruits, and Veggies
        plot_stacked_bar_chart('Smoker')
        plot_stacked_bar_chart('PhysActivity')
        plot_stacked_bar_chart('Fruits')
        plot_stacked_bar_chart('Veggies')
```



In [ ]: