

2003 Behavioral Risk Factor  
Surveillance System Results



**GRANVILLE AND VANCE COUNTIES**  
**2004**  
**State of the County**  
**Health Report**

**Produced by**  
**Granville-Vance District Health Department**  
**In association with**  
**LiveWell Granville: A Healthy Carolinians Partnership**

## What is the Behavioral Risk Factor Surveillance System?

The Behavioral Risk Factor Surveillance System (BRFSS) was developed by the Centers for Disease Control and Prevention (CDC) and state health departments in the early 1980s.

The BRFSS –

- Assesses adult health-risk behaviors and health practices
- Targets adults 18 years and older
- Can be administered in multiple languages
- Provides state, regional, and local level estimates for targeting high-risk groups
- Is the largest and longest running telephone health survey in the world

In 1984, only 14 states including North Carolina participated in the BRFSS. By 1994, all states, the District of Columbia and three U.S. territories were participating in the BRFSS. For the 2003 survey, the North Carolina BRFSS Program conducted a total of 9,455 interviews in both English and Spanish. This was the largest number of interviews ever completed by the North Carolina BRFSS.

## How was the BRFSS completed?

In order to have a large enough adult population to be surveyed, the Granville-Vance District and Franklin County Health Departments joined together to form one of 9 multi-county partnerships that was surveyed in 2003 by the North Carolina BRFSS program.

- 479 surveys were completed for the Franklin-Granville-Vance (FGV) region
- An ongoing monthly telephone survey used random digit dialing (RDD)
- Interviewers used the Computer Assisted Telephone Interviewing (CATI) system
- Data entry was completed during the interview, via CATI
- Data is analyzed on a calendar year basis
- The questionnaire changes each year, beginning in January
- A probability sample of non-institutionalized adults in households w/ telephones was used
- Results for each question are broken out by sex, race, Hispanic origin and language (English, Spanish-only), age group, education level, household income, county & region
- 5 counties, 9 multi-county partnerships, and 4 regions were surveyed. Data was further divided into western, eastern, and piedmont regions of NC.

Weighting the data is an essential part of the BRFSS data processing. The data are weighted for the probability of selection of a telephone number, the number of adults (18+ yrs.) in a household, and the number of phones in a household. Additional weights are developed for non-coverage, i.e. households with no telephones, and for differences between the sample characteristics and the state population characteristics.

A final weight is assigned to each respondent so that the weighted proportion and weighted number of respondents by sex, age, and race matches the state population. Use of the weighted data allows us to generalize the results of the BRFSS Survey to the North Carolina population of adults, ages 18 and older, with household telephones.

### **The survey is made up of core, optional, and state added questions.**

For the NC 2003 survey, 179 questions were asked addressing the following topics:

Health status	Health care access	Arthritis/disability
Asthma	HIV/AIDS	Violence
Adult Immunization	Chronic Diseases	Weight control
Tobacco/alcohol	Physical Activity/Eating	

The survey results presented are estimates and are not actually as precise as they appear. With any estimate based on a random sample, there is a margin of error. For the Franklin-Granville-Vance region, the margin of error is about 5%. This means that the true value lies somewhere between the sample estimate plus or minus 5 percent. If results are broken out by age or race, the margin of error increases as a function of the smaller sample size.

Results are available for all counties and regions surveyed, as well as for NC and the United States. This report lists some of the results for the FGV region compared with NC, the US, and the Piedmont region of North Carolina. When Healthy People 2010 objectives overlapped with BRFSS questions, those objectives are listed in the last column for comparison and long-range goal purposes.

### The Piedmont region includes the following counties

Alamance	Davie	Lincoln	Rowan
Alexander	Durham	Mecklenburg	Stanly
Anson	Forsyth	Montgomery	Stokes
Cabarrus	Franklin	Moore	Union
Caswell	Gaston	Orange	Vance
Catawba	Granville	Person	Wake
Chatham	Guilford	Randolph	Warren
Cleveland	Iredell	Richmond	Vance
Davidson	Lee	Rockingham	Yadkin

The following table shows the breakdown of the population in our 3 county region that was interviewed as compared with the population interviewed across the state as a whole. Areas where the values differ significantly are in red. The FGV region has a higher percent of people that were black, high school/GED educated, and earning <\$50,000 than were surveyed for all of NC.

### Characteristics of Population Interviewed for BRFSS 2003

	Franklin-Granville-Vance		North Carolina	
	Number	Percent	Number	Percent
<b>Total</b>	479	100	9455	100
Male	178	51.5	3478	47.9
Female	301	48.5	5977	52.1
White	290	56.6	6938	74.7
Black	166	36.0	1874	17.3
Other Minority	22	7.4	606	8.0
18-44 years	188	53.2	3786	51.5
45-64 years	191	32.4	3384	31.6
65+ years	100	14.4	2215	16.9
<High School	101	18.8	1604	16.6
High School/GED	188	45.0	2836	29.4
Post HS/College	185	36.2	4986	54.0
<\$50,000	270	73.3	5122	65.8
\$50,000+	89	26.7	2169	34.2
Employed	256	57.4	5196	59.7
Out of Work	33	6.2	398	4.4
Retired	109	15.8	2274	18.1
Other	79	20.6	1576	17.8

The table below is a sampling (63/179) of the survey results. Complete BRFSS results are available on the internet at [www.schs.state.nc.us/SCHS/healthstats/brfss/2003/index.html](http://www.schs.state.nc.us/SCHS/healthstats/brfss/2003/index.html)

Results show the percent of respondents that answered “yes” to the questions addressing the topics listed below. Responses are color-coded based upon whether FGV is “better” or “worse” than the state. Green indicates areas of strength, and red indicates areas of need for our 3 county region. For some it is not clear. “Trying to lose weight” can show a consciousness about a healthy weight, or reflect a high rate of overweight, an inappropriate focus on weight loss. For these topics, the values are in black.

An asterisk by the percent listed in the FGV column indicates that the value falls outside the margin of error, and therefore represents a significant difference between our counties’ and the state responses.

### 2003 Franklin-Granville-Vance (FGV) Behavioral Risk Factor Surveillance System

Responses by Topic for FGV, the NC Piedmont region, North Carolina and the United States

	Topic	FGV (%)	Piedmont (%)	NC (%)	US (%)	Healthy People 2010 Objective
	<b>Health Status/Health Care Access</b>					
1	Perceived fair or poor health	20.6*	17.1	18.9	16.2	
2	Poor mental health days	12.7*	11.3	11.5	13.3	
3	Restricted activity days (8+ days in past 30)	8.9	6.3	7.8	8.2	
4	No health insurance (18 – 64 yrs old)	23.4*	18.2	20.2	18.1	0%
5	No health insurance (ages 18+)	20.6*	15.8	17.4	15.4	
6	Needed to see MD but couldn’t because of cost	18.2*	14.1	14.9	12.0	
	<b>Chronic Diseases</b>					
7	Told by MD have some form of arthritis	27.2	26.4	28.5	27.1	
8	MD suggested wt loss (to help arthritis symptoms)	23.8	17.2	18.1		
9	MD suggested phys. activity (to help w/symptoms)	45.4	40.4	41.2		
10	Ever diagnosed with asthma	8.3*	10.6	11.3	12.0	
11	Ever told by MD have diabetes	4.6*	7.4	8.1	7.5	
12	Ever had a blood test for diabetes	52.8*	60.9	61.9		
13	Ever told by health professional have high BP	37.3*	27.2	28.6	25.8	
14	Currently taking medicine for high BP	56.2*	75.3	76.0	75.5	
15	Ever had blood cholesterol checked	71.6*	79.0	77.9	77.8	
16	Told by MD that blood cholesterol high	32.4	33.9	34.0	33.6	
	<b>Disability, Falls, and Aging</b>					
17	Have some type of disability	31.0*	25.4	28.5		
18	Limited activity b/c of physical or emotional probs	18.9*	15.5	17.9	18.8	
19	Have trouble learning/remembering b/c of health	13.3*	10.4	12.0		
20	Had a fall in the past 3 months (ages 45+)	12.6	10.6	11.9	12.7	
21	Injured in the fall (small sample size → ?able reliability)	57.6	38.3	39.2	38.2	
22	Provided care to a relative w/long term illness	25.9	24.3	25.0		
	<b>Immunization</b>					
23	Had flu shot in past year (ages 18+)	34.2	33.4	32.9		
24	Had flu shot in past year (ages 65+)	60.6	69.7	68.8	69.2	80%
25	Ever had a pneumonia shot (ages 65+)	53.7*	68.4	66.6	63.6	90%

	Topic	FGV (%)	Piedmont (%)	NC (%)	US (%)	HP 2010 Objective
	<b>Physical Activity</b>					
26	Getting no leisure time physical activity (PA)	30.6*	23.7	25.0	24.6	20%
27	Does not meet recommendation for PA	65.0	62.4	62.3	54.1	
28	Get adequate vigorous PA per week	20.1	20.3	19.3	25.6	30%
	<b>Tobacco Use</b>					
29	Current smoker	24.9	23.3	24.8	22.2	12%
30	Current smokeless tobacco user	2.8*	4	3.8	3.4	
31	Quit 1 day or longer in past year	42.7	54.8	52.6	53.6	
32	Advised by health professional in past yr to quit	68.2	77.3	76.1	71.1	
33	Smoking not allowed in the home	54.3*	70.4	69.7	71.5	
34	Worksites prohibit smoking in public & work areas	64.1*	78.3	77.5	73.4	
35	Support for tobacco tax (any amount)	70.3	73.0	72.2		
	<b>Risk Factors</b> (PA & smoking listed above)					
36	Overweight or obese (Body Mass Index >25.0)	68.7*	59.9	61.0	59.4	
37	Obese (Body Mass Index >30) for ≥ 20 yrs old	32.9*	23.0	24.5	23.3	15%
38	5 or more drinks on 1+ occasion in past 30 days	12.1*	8.9	8.6	15.8	6%
39	Cholesterol never checked / checked >5 yrs ago	31.3*	24.2	25.3	26.1	
40	Less than 5 daily servings of fruits/vegetables	81.1*	76.8	76.8	76.5	
	<b>HIV/AIDS</b>					
41	Ever tested for HIV (< 64 yrs old)	44.1*	47.6	47.1	45.8	
42	A preg woman w/HIV can be treated to help baby	50.4*	54.1	53.5	55.7	
43	Counseled abt condom use to prevent STDs (past yr)	12.1*	11.8	11.4	12.4	
	<b>Weight Control</b>					
44	Now trying to lose weight	34.3*	39.6	38.6	40.0	
45	Using activity to lose or avoid gaining weight	56.4*	65.8	65.1	69.1	
46	Eating less kcals/fat to lose or avoid gaining weight	40.1*	38.1	37.4		
47	Advised about weight by health prof in past year	16.3*	14.9	14.3	17.3	
48	In past 2 yrs, taken OTC weight loss pills	6.1*	8.4	8.9		
49	In past 2 yrs, taken MD prescribed weight loss pills	1.8*	2.1	2.3		
	<b>Cardiovascular Disease – knowledge &amp; behavior</b>					
50	Knew all stroke symptoms	14.9*	18.2	16.9	18.5	
51	Knew all heart attack symptoms	7.2*	11.7	10.6	11.4	
52	Hist. of cardiovascular dis. (CVD) including stroke	7.8	7.3	8.1	8.0	
53	History of a stroke	2.1*	2.4	2.6	2.3	
54	History of a heart attack	4.4*	3.6	4.1	4.0	
55	Eat less high fat/chol foods to lower CVD risk	71.7	72.9	71.4	66.5	
56	Eat more fruits/veggies to lower CVD risk	64.0*	73.4	73.6	72.1	
57	Be more active to lower CVD risk	70.8	71.1	70.0	67.3	
58	Take aspirin daily or every other day (ages 35+)	37.0	34.6	35.7	32.2	
59	Of those taking aspirin, do so to ↓ the risk of stroke	76.4	81.3	80.9	73.6	
60	Take aspirin to ↓ the chance of a heart attack	81.3	86.4	86.6	85.1	
	<b>Sun Exposure/Assault</b>					
61	Had sunburn in past 12 months	13.9*	21.9	21.9		
62	Of those sunburned-had ≥4 burns in past 12 mo's	10.8	16.4	17.2		
63	Ever Physically Assaulted	16.8*	18.2	18.4		

## What Can the BRFSS Do?

The Granville County Community Health Assessment was completed in December 2002 and the Vance County Community Health Assessment was completed in July 2004. As a result of this process, priority areas for each county were determined. Work groups have been formed to address each of the priority areas. Three priority areas were chosen for Granville County.

- Preventing chronic disease through expanded health promotion activities
- Narrowing the disparity gap between whites and non-whites
- Improving resources for, and care of, children and youth

Two areas were chosen for Vance County.

- Obesity and attention to lifestyle
- Sexuality education and teen pregnancy

### **The BRFSS can add insight about behaviors among residents and their health care providers.**

Results can help target the efforts of the priority area workgroups. However, because the BRFSS focuses on residents 18 years and older, the information does not directly apply to the Children and Youth, nor the Teen Pregnancy, workgroup. The Youth Behavior Risk Survey (YRBS) is more suitable for these groups. Nonetheless, much can be learned from the beliefs and behaviors of the adults with whom our children live. Additional data is available in the full document on race, gender, education, and income as well as other subsets for many questions. This can clarify target populations and disparity issues.

### **Many of the topics relate directly to the Health Promotion and Obesity priority areas.**

In a short report it is not possible to analyze all questions listed above.

However, the areas merit a brief explanation beyond the results stated in the table.

**Health Care Access/Status** (items 1-6) – 1 in 5 FGV residents over 18 years (an estimated 7600+), compared with 1 in 6 NC adults, have no health insurance coverage. Additionally, nearly 1 in 5 needed medical care but couldn't afford it, regardless of whether they were insured or not. One in eleven residents had restricted activity due to poor physical or mental health.

**Diabetes** (items 10, 11) – Although the percent of respondents diagnosed with diabetes is much lower than the state, the percent of people that have been tested for diabetes is also much lower. More people might be diagnosed if more were tested.

**Cholesterol** (items 15, 16) – These results are similar to those for diabetes. If more were tested in FGV, more might be diagnosed. One has to know about risk factors to be able to manage them.

**Blood Pressure** (items 13, 14) – 30% more FGV than NC respondents were told they have high blood pressure; yet, of these, only 56% are taking medications (26% less than the state average). This could increase the risk for a cardiovascular event if the result is uncontrolled blood pressure.

**Physical Activity** (items 25-27) – Regular physical activity decreases the risk for chronic diseases and obesity. Although 71% of respondents report being active to reduce CVD risk, 65% do not meet basic physical activity requirements. In our 2 counties, the rates of death from cancer, stroke, and heart disease all exceed the state's rates (2004 Vance Co. Community Assessment [VCA-04]). Nearly 70 percent of responders are overweight or obese, which also contributes to chronic diseases. Being active can help reverse these trends. Physical activity is being addressed by both the Health Promotion and the Obesity Workgroups in our counties.

**Disability/Immunizations** (items 17-25) – Nearly 1/3 of FGV respondents reported some type of disability, and 1/4 are caring for a family member with a long term illness – issues that affect quality of life and daily stress levels. While more FGV residents 18 years and older received flu shots than the state average, less residents over 65 years old received flu or pneumonia vaccines. Only 1/10 residents received their vaccine at the health department. Improving flu and pneumonia vaccination rates could improve our counties' death rate which exceeds NC's (VCA-04).

**Tobacco** (items 29-35) – Tobacco use is a major risk factor for our early deaths from stroke, heart disease, or cancer (and gateway risk behavior for our youth), yet less of our health providers advise smokers to quit and less of our businesses limit smoking on their properties-both actions that influence behavior. At the same time, 70% of FGV respondents do favor increasing the tobacco tax, which is proven to decrease use, especially among youth.

**Risk Factors** (items 27, 29, 36-40) – FGV respondents are generally heavier, less active, eat less fruits and vegetables, are less likely to get their cholesterol checked, and 40% more likely to binge drink than NC residents overall (nearly 70% of binge drinkers do so in their own or a friend's home). 1/4<sup>th</sup> of FGV and NC adults currently smoke. These behaviors can all be modified to decrease the risk for disease and premature death.

**HIV/AIDS** (items 41-43) – Only 44% of people <65 yrs old have been tested for HIV, and only 12% are being counseled by their health providers to use condoms to prevent STD's. Yet for 1999-2001, the death rate from AIDS in Granville and Vance Counties far exceeded the state's rate (VCA-04). Increasing condom use can decrease disease transmission rates, and treatment can decrease death rates (but one must be tested for the disease in order to know that treatment is needed).

**Weight Control** (items 44-49) – Only 1/3 of respondents are trying to lose weight, yet 2/3<sup>rd</sup> are overweight or obese. More health professionals advised FGV residents to lose weight than statewide. This may be a factor of having more proactive professionals, or simply that FGV residents are heavier. Not many FGV residents use over the counter (OTC) or prescribed meds for weight control. Of those that do, more than 3 times as many use OTC's than prescribed meds (so are likely not to be medically supervised). FGV has more people over 45 years old, more high wage earners, and more women that are obese than NC does in general. People in FGV with diabetes, high cholesterol, and high blood pressure are also more likely to be obese than other residents.

**Cardiovascular Disease (CVD)** (items 50-60) – Less FGV than state residents know all the symptoms for a stroke or heart attack (early treatment can improve the outcome of an event). Those at risk could be encouraged to learn them. Many residents avoid high fat foods and are active to decrease CVD risk, but less than the state average eat fruits and vegetables to do so – a low cost way to improve immunity and lower cancer and high blood pressure (as well as CVD) risk.

**Sun Exposure/Assault** (items 61-63) – Nearly 40% less FGV residents were sunburned at all, or 4+ times, in the previous year compared with the state. Of these, more whites, women, 18-44 year olds, and higher income residents were likely to be affected. Also, less residents in FGV were assaulted than in the state. Of the assaults committed, 45% were by ex-spouses or partners. More males and 70% more high income residents in FGV than in the state were assaulted. More people told friends/family (58%) than law enforcement/no one (27%/25% respectively).

### **What Can You Do?**

Join a workgroup to address some of these issues.

The more community members work together to address our health issues,

The more likely chosen interventions will be effective.

Contact the Granville-Vance District Health Department for more information.

Oxford – 919.693.2141 or Henderson – 252.492.7915