

Oriskany Health Days Community Outreach Program
Sponsored by the Eagle Rock Rescue Squad
January, 2007

Why measure your blood pressure?

Objectives:

- (1) Blood Pressure Screening for attendees
- (2) Learn why BP is so important to one's health
- (3) Learn how the File-of-Life can save time in an emergency

File of Life – It's very important that you fill this out and post it on your refrigerator. It contains answers to question we must have should we come to your house and have to take you away in an ambulance. Having this information can save valuable minutes when time may be of the essence.

Why a Health Day? – Some of you may already know that Governor Tim Kaine has a new state wide initiative called "Healthy Virginians". He has a website and is making a big push to get all state employees to participate in the program. While the Eagle Rock Rescue Squad has only volunteers and no state employees, we endorse the Governor's initiative because we are pre-hospital health care providers who would prefer not to have you in the back of one of our ambulances. So we are sponsoring a series of monthly health days to emphasize just how important it is that you take good care of your health. We're initiating a pilot program here in Oriskany and if it is well received and considered valuable, we'll not only continue the series, but repeat it in other parts of the "first-due" area covered by the Eagle Rock Volunteer Rescue Squad.

Deaths/Mortality – I'd like to begin my talk about blood pressure (BP) by asking you to tell me what you think is the leading cause of death among men in America? Now let me ask you what you think is the leading cause of death among women? Well if you answered Heart Disease to both you are right. Many women think that Cancer causes the most deaths each year among women. Besides most women know they tend to have less heart attacks than men. But the fact is heart disease is the #1 killer of women. To make matters worse, women lose the protection of their hormones when go into menopause. So the defense they had over men up to that time disappears and their death rate equals that of men thereafter.

If you notice in the National Center of Health Statistics figure below, Stroke is the third leading cause of death. Many doctors lump this disease in with heart disease because the cause are the same. Heart Disease, Stroke and Peripheral Artery Disease are all related to the buildup of plaque in your arteries. In the case of the heart, it's the coronary arteries getting blocked by plaque that causes heart attacks. In the case of a stroke, it's your carotid arteries that get blocked and in the case of poor leg circulation, it's your femoral arteries. So add both Heart disease and Stroke together and you'll find 43% of deaths

each year are caused by clogged arteries (vascular disease). Unfortunately, that percentage is much higher when you look only at deaths for folks over 55.



Deaths/Mortality

(Data are for U.S. for year 2004)

- Number of deaths: 2,398,343
- Death rate: 816.7 deaths per 100,000 population
- Life expectancy: 77.9 years
- Number of deaths for leading causes of death:**
- Heart disease: 654,092
- Cancer: 550,270
- Stroke (cerebrovascular diseases): 150,147
- Chronic lower respiratory diseases: 123,884
- Accidents (unintentional injuries): 108,694
- Diabetes: 72,815
- Alzheimer's disease: 65,829
- Influenza/Pneumonia: 61,472
- Nephritis, nephrotic syndrome, and nephrosis: 42,762
- Septicemia: 33,464

So what does all this have to do with your blood pressure? It's because your blood pressure is one of the leading controllable risk factors for Heart Disease, Stroke and Peripheral Artery Disease. So if you can keep your blood pressure within normal limits, you can decrease your risk of dying from the nation's number one killer.

I. Definitions – Alright so who can tell me what normal blood pressure is and what the terms systolic and diastolic mean?

Systolic BP – is the pressure your heart creates in your arteries when it pumps blood into your arteries.

Diastolic BP – is the pressure in your arteries when you heart rests.

BP is by convention measured in millimeter of mercury because that is the gauge that was always used until someone found out that mercury was dangerous to have around.

Normal BP in non-diabetic adults and those without chronic kidney disease is:

Less than 120 mmHg (systolic) AND
Less than 80 mmHg (diastolic)

Normal BP or Goals of treatment for diabetic adults and those with chronic kidney disease is:

Less than 130 mmHg (systolic) AND
Less than 80 mmHg (diastolic)

Pre-Hypertension is when your BP is:

120-139 mmHg (systolic) OR
80-89 mmHg (diastolic)

Hypertension is when your BP is:

140 mmHg (systolic) or higher OR
90 mmHg (diastolic) or higher

Hypertension is further divided into two stages:

Stage 1: your BP is 140-159 mmHg (systolic) OR 90-99 mmHg (diastolic)
Stage 2: your BP is greater than or equal to 160 mmHg (systolic) OR greater than or equal to 100 mmHg (diastolic)

II. Determination and Confirmation

Your blood pressure will vary with time and activity. It's lowest when you're asleep. It rises following a meal and certainly rises with exercise and activity.

III. Prevalence

About 1 out of every 3 people have high blood pressure in America. Unfortunately, about 30 % of those with high blood pressure don't know it. Of those who do know they have high blood pressure only about a third have it under control.

Now that's pretty scary when you realize just how dangerous it is to have high blood pressure.

High blood pressure is also more frequently found in older people. About two-thirds of people over 65 have high blood pressure.

Also more men than women have high blood pressure before the age of 55. But after that, the statistics reverse and more women start having higher blood pressure than men.

IV. Types of High Blood Pressure

Secondary – which represents only 5% can be cured. Those falling in this category usually have some disease like kidney disease, tumors or are taking illegal drugs. When the disease is cured, their high blood pressure goes away.

Primary – which represents about 95% can't be cured because the cause is unknown. Fortunately, their high blood pressure can be controlled through medication, weight loss, sodium reduction and exercise.

V. Control

High Blood Pressure is called a silent disease. There are not symptoms or warnings until major damage to the heart, brain, kidneys and eyes occur. Remember, high blood pressure is one of the most important causes of heart attacks and strokes as well as heart and kidney failure.

So how do we get this beast under control? Well fortunately there are two ways. Go on Medication or change your Lifestyle.

Medication – Through the miracle of modern medical research there are now medicines you can take to bring high blood pressure down to the normal range. But like most all medicines, there can be side effects. So you and your doctor may need to experiment to find the right medicine. If you go this route, it's important to take the medicine exactly as prescribed by a doctor. Then report any side effects immediately so a new medicine can be found with no, or minimal, side effects.

Lifestyle Changes – Well as you know medicine costs money so if you have the determination and will power can lower you blood pressure yourself and perhaps end up a happier person and save even more money by not eating as much food. Basically the steps involved are:

1. Weight reduction
 2. Sodium intake reduction
 3. Increased physical exercise and activity
 4. Cutting back or eliminating alcohol consumption
1. **Lose weight** if you are overweight or obese. Thin people are less likely to have high blood pressure. Besides, even if you don't have high blood pressure losing weight increases risk of a heart attack or a stroke. And don't forget, if you're too heavy, the Oriskany Rescue crew might not be able to get you onto a stretcher or lift you into an ambulance.

How do you find out if you are overweight or obese? Well look at the table below which gives your Body Mass Index as function of your height and weight. All you have to know is your weight and height. Use these two numbers and find your Body Mass Index or BMI. If your BMI is between 25 and 29 then you're overweight. If your BMI is greater than 30, then you are obese. If over 40, you're

“Extremely Obese”. “Overweight” and “Obese” may not be words you like to hear, but the word “dead” is far worse.

	Normal						Overweight					Obese						Extreme Obesity										
BMI	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Height (inches)							Body Weight (pounds)																					
58	91	96	100	105	110	115	119	124	129	134	138	143	148	153	158	162	167	172	177	181	186	191	196	201	205	210	215	220
59	94	99	104	109	114	119	124	128	133	138	143	148	153	158	163	168	173	178	183	188	193	198	203	208	212	217	222	227
60	97	102	107	112	116	123	128	133	138	143	148	153	158	163	168	174	179	184	189	194	199	204	209	215	220	225	230	235
61	100	106	111	116	122	127	132	137	143	148	153	158	164	169	174	180	185	190	195	201	206	211	217	222	227	232	238	243
62	104	109	115	120	126	131	136	142	147	153	158	164	169	175	180	186	191	196	202	207	213	218	224	229	235	240	246	251
63	107	113	118	124	130	135	141	146	152	158	163	169	175	180	186	191	197	203	208	214	220	225	231	237	242	248	254	259
64	110	116	122	128	134	140	145	151	157	163	169	174	180	186	192	197	204	209	215	221	227	232	238	244	250	256	262	267
65	114	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	210	216	222	228	234	240	246	252	258	264	270	276
66	118	124	130	136	142	148	155	161	167	173	179	186	192	198	204	210	216	223	229	235	241	247	253	260	266	272	278	284
67	121	127	134	140	146	153	159	166	172	178	185	191	198	204	211	217	223	230	236	242	249	255	261	268	274	280	287	293
68	125	131	138	144	151	158	164	171	177	184	190	197	203	210	216	223	230	236	243	249	256	262	269	276	282	289	295	302
69	128	135	142	149	155	162	169	176	182	189	196	203	209	216	223	230	236	243	250	257	263	270	277	284	291	297	304	311
70	132	139	146	153	160	167	174	181	188	195	202	209	216	222	229	236	243	250	257	264	271	278	285	292	299	306	313	320
71	136	143	150	157	165	172	179	186	193	200	208	215	222	229	236	243	250	257	265	272	279	286	293	301	308	315	322	329
72	140	147	154	162	169	177	184	191	199	206	213	221	228	235	242	250	258	265	272	279	287	294	302	309	316	324	331	338
73	144	151	159	166	174	182	189	197	204	212	219	227	235	242	250	257	265	272	280	288	295	302	310	318	325	333	340	348
74	148	155	163	171	179	186	194	202	210	218	225	233	241	249	256	264	272	280	287	295	303	311	319	326	334	342	350	358
75	152	160	168	176	184	192	200	208	216	224	232	240	248	256	264	272	279	287	295	303	311	319	327	335	343	351	359	367
76	156	164	172	180	189	197	205	213	221	230	238	246	254	263	271	279	287	295	304	312	320	328	336	344	353	361	369	377

By the way, if you have a BMI greater than 25 AND your waist is greater than 40 inches for men or 35 inches for women, then you are at even greater risk of having high blood pressure and all the problem it creates.

So change your eating habits. Start eating lots of fruits and vegetables. Cut down on meat and fatty foods.

2. **Reduce Sodium Consumption** – The National Health Institute released a study in 2000 which put to rest all the controversy about the effect of sodium intake on blood pressure. The study showed, and I quote, that “the lower the amount of sodium in the diet, the lower the blood pressure, for both those with and without hypertension. The lowest sodium level tested, which produced the lowest blood pressure, was well below the currently recommended level of 2400 mg per day.”

I found that very startling when I first read it. Here’s why. Just one teaspoon of salt, and I mean one measured teaspoon, contain 2300 mg of salts and that is the amount of salt in our recommended daily allowance. So if you put salt on your food at the table, and/or in the food you cook, and eat salty snacks you might be

consuming 5000 to 10,000 or more mg of sodium each day. I know we use salt for seasoning, but we're paying for it dearly.

3. **Increase Aerobic Physical Activity** – Actually this is not as hard as it sounds. We live in a beautiful place where we can walk and enjoy nature. The more you walk the better you feel and the easier it is to lose weight. When you're in town, walk up and down the stairs. Don't use elevators or escalators. Walk over and see you neighbor. Stand while you talk, don't sit down. Buy yourself some weights and exercise with them even morning.
4. **Limit Alcohol** – drink in moderation or not at all.
5. **STOP SMOKING**. Actually this should be the first item on the list of things to reduce your risk for all the major diseases.