

Reduce the Risk of Heart Disease

Risk factors that can be changed

The Center of Disease Control (CDC) reports that more than 61 million Americans have some form of Cardio-Vascular Disease (CVD), including high blood pressure, coronary heart disease, stroke, congestive heart failure, and other conditions. More than 2,600 Americans die each day of CVD. In addition, CVD cost the nation an estimated \$329.2 billion in 2002, including health expenditures and lost productivity. These are just some of the reasons risk assessments and preventive activities need to be encouraged as part of an overall health plan.



Cigarette/Tobacco Smoke – Cigarette smoking is the greatest risk factor of sudden cardiac death. A smoker’s risk of heart attack is more than twice that of nonsmokers.

Smoking is the single largest preventable cause of heart disease in the United States.

Tobacco smoke contains high levels of carbon monoxide. Carbon monoxide affects the heart by decreasing the amount of oxygen the blood is able to carry. This means that the heart, lungs, brain, and other vital organs do not always receive enough oxygen to perform everyday functions. At the same time, nicotine causes an increase in heart rate and blood pressure. Over time, this causes wear and tear on the cardiovascular system. People who use tobacco are more likely to have heart attacks, high blood pressure, blood clots, strokes, hemorrhages, aneurysms, and other disorders of the cardiovascular system.



High Blood Cholesterol Levels – The risk of coronary artery disease rises as blood cholesterol levels increase. When other risk factors such as high blood pressure and cigarette smoke are present, this risk increases even more.

ATP III Classification of Total, LDL, and HDL Cholesterol (mg/dL)


Total Cholesterol	
<200	Desirable
200-239	Borderline High
240	High
LDL Cholesterol	
<100	Optimal
100-129	Near Optimal/Above Optimal
130-159	Borderline High
160-189	High
190	Very high
HDL Cholesterol (higher is better)	
<40	Low
60	High



High Blood Pressure – High blood pressure increases the heart’s workload, causing it to enlarge and weaken over time. It also increases the risk of stroke, heart attack, kidney failure and congestive heart failure. When someone with high blood pressure is overweight, smokes, has high blood cholesterol levels or diabetes, the risk of heart attack increases several times.

Categories for Blood Pressure Levels (For Adults 18 and older) (In mmHg, millimeters of mercury)

Category	Systolic (Top number)	Diastolic (Bottom number)
Normal	Less than 120	Less than 80
Prehypertension	120-139	80-89
High Blood Pressure		
Stage 1	140-159	90-99
Stage 2	160 or higher	100 or higher


 **Physical Inactivity** – Even modest levels of low intensity physical activity are beneficial if done regularly and long term. Exercise can help control blood cholesterol, diabetes and obesity as well as help to lower blood pressure.


Exercise not only helps fight heart disease. For sedentary people, just adding a little exercise to your daily routine reduces the risk of high blood pressure, osteoporosis, breast and colon cancer, depression, anxiety and stress. Ideally, you should exercise three to five times a week for 20-50 minutes within your target heart rate. However, your health can benefit simply by accumulating 30 minutes of moderate activity per day, such as stair climbing, walking to work, or gardening.

Body Mass Index Reference Chart


Find your height on the left and weight across-Above where they meet is your BMI

Height Inches	Underweight (<18.5)			Ideal (19-24)					Overweight (25-29)					Obese (>30)				
	BMI	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
4'10"	58"	91	96	100	105	110	115	119	124	129	134	138	143	148	153	158	162	167
4'11"	59"	94	99	104	109	114	119	124	128	133	138	143	148	153	158	163	168	173
5'0"	60"	97	102	107	112	118	123	128	133	138	143	148	153	158	163	168	174	179
5'1"	61"	100	106	111	116	122	127	132	137	143	148	153	158	164	169	174	180	185
5'2"	62"	104	109	115	120	126	131	136	142	147	153	158	163	169	175	180	186	191
5'3"	63"	107	113	118	124	130	135	141	146	152	158	164	169	175	180	186	191	197
5'4"	64"	110	116	122	128	134	140	145	151	157	163	169	174	180	186	192	197	204
5'5"	65"	114	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	210
5'6"	66"	118	124	130	136	142	148	155	161	157	173	179	186	192	198	204	210	216
5'7"	67"	121	127	134	140	146	153	159	166	172	178	185	191	198	204	211	217	223
5'8"	68"	125	131	138	144	151	158	164	171	177	184	190	197	203	210	216	223	230
5'9"	69"	128	135	142	149	155	162	169	176	182	189	196	203	209	216	223	230	236
5'10"	70"	132	139	146	153	160	167	174	181	188	195	202	209	216	222	229	236	242
5'11"	71"	136	143	150	157	165	172	179	186	193	200	208	215	222	229	236	243	250
6'0"	72"	140	147	154	162	169	177	184	191	199	206	213	221	228	236	242	250	258
6'1"	73"	144	151	159	166	174	182	189	197	204	212	219	227	235	242	250	257	265
6'2"	74"	148	155	163	171	179	186	194	202	210	218	225	233	241	249	256	264	272
6'3"	75"	152	160	168	176	184	192	200	208	216	224	232	240	248	256	264	272	279
6'4"	76"	156	164	172	180	189	197	205	213	221	230	238	246	254	263	271	279	287

 **Obesity** – People with an excessive amount of body fat are more likely to develop heart disease even if they have no other risk factors. Excess weight increases the strain on the heart; it influences blood pressure and cholesterol. It is recommended that Body Mass Index (BMI) range between 18.5 – 24.9.

 **Stress** –A relationship does exist between coronary heart disease and chronic stress.

Evidence suggests a relationship between the risk of cardiovascular disease, environmental and psychosocial factors. Acute and chronic stress can affect other risk factors and behaviors, such as high blood pressure and cholesterol levels, smoking, physical inactivity and overeating.

 **Substance Abuse** – People with a history of substance abuse, particularly cocaine and alcohol abuse, place themselves at risk for heart disease.

If you have any of these risk factors, talk with your doctor and develop a preventive heart disease health plan.