

# FRAMINGHAM Ten-Year Coronary Heart Disease Risk (%) UNTREATED BLOOD PRESSURE

**WOMEN: Non-Smoking**



BP (systolic)	TC/HDL*	AGE (years)					
		50-54	55-59	60-64	65-69	70-74	75-79
120-129	4	1	2	2	4	5	6
	5	2	2	3	5	6	8
	6	2	3	4	6	8	11
130-139	4	2	2	3	5	6	8
	5	2	3	4	6	8	11
	6	3	4	5	8	11	14
140-159	4	2	3	4	6	8	11
	5	3	4	5	8	11	14
	6	4	5	6	11	14	17
≥160	4	3	4	5	8	11	14
	5	4	5	6	11	14	17
	6	5	6	8	14	17	22

<span style="background-color: #2e8b57; width: 15px; height: 10px; display: inline-block;"></span> LOW RISK
<span style="background-color: #ffff00; width: 15px; height: 10px; display: inline-block;"></span> MODERATE RISK
<span style="background-color: #ff4500; width: 15px; height: 10px; display: inline-block;"></span> HIGH RISK

**MEN: Non-Smoking**



BP (systolic)	TC/HDL	AGE (years)						
		40-44	45-49	50-54	55-59	60-64	65-69	70-74
120-129	4	1	3	5	8	10	12	16
	5	3	5	8	10	12	16	16
	6	4	6	10	12	16	20	20
130-139	4	2	4	6	10	12	16	20
	5	4	6	10	12	16	20	20
	6	5	8	12	16	20	25	25
140-159	4	2	4	6	10	12	16	20
	5	4	6	10	12	16	20	20
	6	5	8	12	16	20	25	25
≥160	4	2	5	8	12	16	20	25
	5	5	8	12	16	20	25	25
	6	6	10	16	20	25	≥30	≥30

**WOMEN: Smoking**



BP (systolic)	TC/HDL	AGE (years)					
		50-54	55-59	60-64	65-69	70-74	75-79
120-129	4	5	5	5	6	6	8
	5	6	6	6	8	8	11
	6	8	8	8	11	11	14
130-139	4	6	6	6	8	8	11
	5	8	8	8	11	11	14
	6	11	11	11	14	14	17
140-159	4	8	8	8	11	11	14
	5	11	11	11	14	14	17
	6	14	14	14	17	17	22
≥160	4	11	11	11	14	14	17
	5	14	14	14	17	17	22
	6	17	17	17	22	22	27

**MEN: Smoking**



BP (systolic)	TC/HDL	AGE (years)						
		40-44	45-49	50-54	55-59	60-64	65-69	70-74
120-129	4	6	10	12	16	16	16	20
	5	12	16	20	20	20	20	20
	6	16	20	25	25	25	25	25
130-139	4	8	12	16	20	20	20	25
	5	16	20	25	25	25	25	25
	6	20	25	≥30	≥30	≥30	≥30	≥30
140-159	4	8	12	16	20	20	20	25
	5	16	20	25	25	25	25	25
	6	20	25	≥30	≥30	≥30	≥30	≥30
≥160	4	10	16	20	25	25	25	≥30
	5	20	25	≥30	≥30	≥30	≥30	≥30
	6	25	≥30	≥30	≥30	≥30	≥30	≥30

\*TC/HDL – total cholesterol to high-density lipoprotein ratio

# FRAMINGHAM Ten-Year Coronary Heart Disease Risk (%) BLOOD PRESSURE AFTER TREATMENT

**WOMEN: Non-Smoking**



BP (systolic)	TC/HDL	AGE (years)						
		50-54	55-59	60-64	65-69	70-74	75-79	
120-129	4	2	3	4	6	8	11	
	5	3	4	5	8	11	14	
	6	4	5	6	11	14	17	
130-139	4	3	4	5	8	11	14	
	5	4	5	6	11	14	17	
	6	5	6	8	14	17	22	
140-159	4	4	5	6	11	14	17	
	5	5	6	8	14	17	22	
	6	6	8	11	17	22	27	
≥160	4	5	6	8	14	17	22	
	5	6	8	11	17	22	27	
	6	8	11	14	22	27	≥30	

LOW RISK
MODERATE RISK
HIGH RISK

**MEN: Non-Smoking**



BP (systolic)	TC/HDL	AGE (years)						
		40-44	45-49	50-54	55-59	60-64	65-69	70-74
120-129	4	2	4	6	10	12	16	20
	5	4	6	10	12	16	20	25
	6	5	8	12	16	20	25	25
130-139	4	2	5	8	12	16	20	25
	5	5	8	12	16	20	25	25
	6	6	10	16	20	25	≥30	≥30
140-159	4	2	5	8	12	16	20	25
	5	5	8	12	16	20	25	25
	6	6	10	16	20	25	≥30	≥30
≥160	4	3	6	10	16	20	25	≥30
	5	6	10	16	20	25	≥30	≥30
	6	8	12	20	25	≥30	≥30	≥30

**WOMEN: Smoking**



BP (systolic)	TC/HDL	AGE (years)						
		50-54	55-59	60-64	65-69	70-74	75-79	
120-129	4	8	8	8	11	11	14	
	5	11	11	11	14	14	17	
	6	14	14	14	17	17	22	
130-139	4	11	11	11	14	14	17	
	5	14	14	14	17	17	22	
	6	17	17	17	22	22	27	
140-159	4	14	14	14	17	17	22	
	5	17	17	17	22	22	27	
	6	22	22	22	27	27	≥30	
≥160	4	17	17	17	22	22	27	
	5	22	22	22	27	27	≥30	
	6	27	27	27	≥30	≥30	≥30	

**MEN: Smoking**



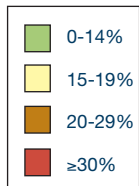
BP (systolic)	TC/HDL	AGE (years)						
		40-44	45-49	50-54	55-59	60-64	65-69	70-74
120-129	4	8	12	16	20	20	20	25
	5	16	20	25	25	25	25	25
	6	20	25	≥30	≥30	≥30	≥30	≥30
130-139	4	10	16	20	25	25	25	≥30
	5	20	25	≥30	≥30	≥30	≥30	≥30
	6	25	≥30	≥30	≥30	≥30	≥30	≥30
140-159	4	10	16	20	25	25	25	≥30
	5	20	25	≥30	≥30	≥30	≥30	≥30
	6	25	≥30	≥30	≥30	≥30	≥30	≥30
≥160	4	10	16	20	25	25	25	≥30
	5	25	≥30	≥30	≥30	≥30	≥30	≥30
	6	≥30	≥30	≥30	≥30	≥30	≥30	≥30

Absolute benefit of treatment should be derived from the risk charts using untreated blood pressure. Use the risk in the blood pressure after treatment charts for initial assessment only when a patient's blood pressure before treatment is unknown. Risk comparison between the untreated and treated blood pressure charts for the same patient may not be valid because the charts are derived from large statistical aggregates.

# UKPDS Risk Calculator for Coronary Heart Disease Risk for Patients with Type 2 Diabetes

## 10-year risk (%) of CHD for patients with five-year history of diabetes compared to baseline risk\*

These Risk Charts are adapted from the UKPDS Risk Engine version 2.0. It should be used in preference to the Framingham Calculator. It does not include calculations based on non-white populations nor for those with atrial fibrillation. For patients with additional risk factors, download the full version at [www.dtu.ox.ac.uk](http://www.dtu.ox.ac.uk)



Derived from: The UKPDS risk engine: a model for the risk of coronary heart disease in Type 2 diabetes (UKPDS 56) Stevens RJ et al. Clinical Science 2001; 101:671-679.

BP: Systolic Blood Pressure  
TC/HDL: Ratio of Total Cholesterol (TC)/High Density Lipoprotein Cholesterol (HDL-C)  
HbA1C: Glycosylated Hemoglobin (Hemoglobin A1c)  
N= normal HbA1C

To estimate CHD risk for 10-year history of diabetes, add 10% (multiply x 1.1).

\*Baseline risk = HbA1C <6%

♂ MALE			AGE 55				AGE 60				AGE 65			
Smoking	BP	TC/HDL	HbA1c(%)				HbA1c(%)				HbA1c(%)			
			N	6	7	8	N	6	7	8	N	6	7	8
🚭	120	4	10	11	13	14	13	15	16	19	17	19	21	24
		5	12	14	16	18	15	18	21	23	21	24	27	30
		6	15	17	19	22	18	22	25	28	25	28	32	35
	140	4	11	12	14	16	14	16	18	20	18	20	23	26
		5	14	15	17	20	16	20	22	25	23	25	28	32
		6	16	18	21	23	20	24	27	30	27	30	34	38
	160	4	12	13	15	17	15	17	19	22	19	22	25	28
		5	15	17	19	21	19	21	24	27	24	27	31	34
		6	18	20	22	25	23	26	29	32	29	32	36	40
🚬	120	4	13	15	17	19	17	19	22	24	22	25	28	31
		5	16	19	21	24	21	24	27	30	27	30	34	38
		6	20	22	25	28	25	29	32	36	32	36	40	44
	140	4	14	16	18	20	18	21	23	26	24	26	30	33
		5	18	20	23	25	23	26	29	32	27	33	37	40
		6	21	24	27	30	27	31	34	38	32	39	43	47
	160	4	15	17	19	22	20	22	25	28	25	28	32	35
		5	19	22	24	27	25	28	31	35	29	35	39	43
		6	23	26	29	32	29	33	37	41	35	41	45	50

♀ FEMALE			AGE 55				AGE 60				AGE 65			
Smoking	BP	TC/HDL	HbA1c(%)				HbA1c(%)				HbA1c(%)			
			N	6	7	8	N	6	7	8	N	6	7	8
🚭	120	4	5	6	7	8	7	8	9	10	9	10	12	13
		5	7	8	9	10	9	10	11	13	12	13	15	17
		6	8	9	11	12	11	12	14	16	14	16	18	20
	140	4	6	7	7	8	8	9	10	11	10	11	13	14
		5	7	8	9	11	10	11	12	14	13	14	16	18
		6	9	10	12	13	12	13	15	17	15	17	19	22
	160	4	6	7	8	9	8	9	11	12	11	12	14	16
		5	8	9	10	12	10	12	13	15	14	15	17	20
		6	10	11	12	14	13	14	16	18	16	19	21	24
🚬	120	4	7	8	9	10	9	11	12	14	12	14	16	18
		5	9	10	12	13	12	13	15	17	15	17	20	22
		6	11	12	14	16	14	16	18	21	19	21	24	26
	140	4	8	9	10	11	10	11	13	15	13	15	17	19
		5	10	11	13	14	13	14	16	18	17	19	21	24
		6	12	13	15	17	15	17	20	22	20	23	25	28
	160	4	8	9	11	12	11	12	14	16	14	16	18	21
		5	11	12	14	15	14	16	18	20	18	20	23	26
		6	13	15	16	19	17	19	21	24	22	24	27	30