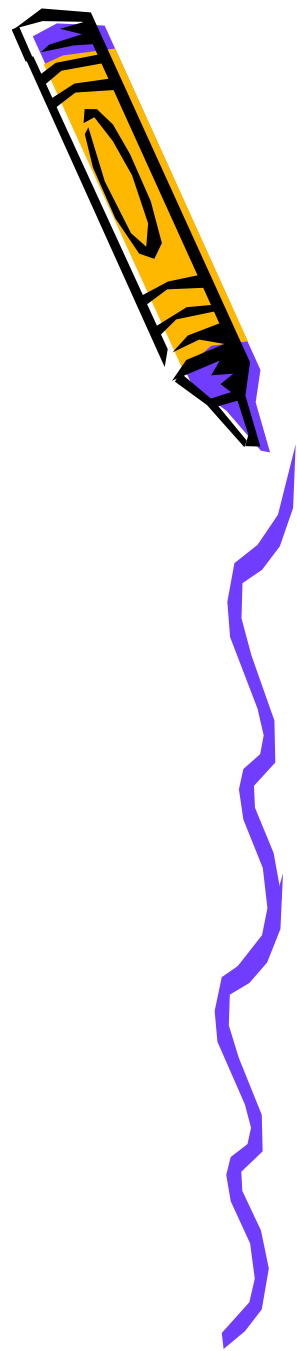
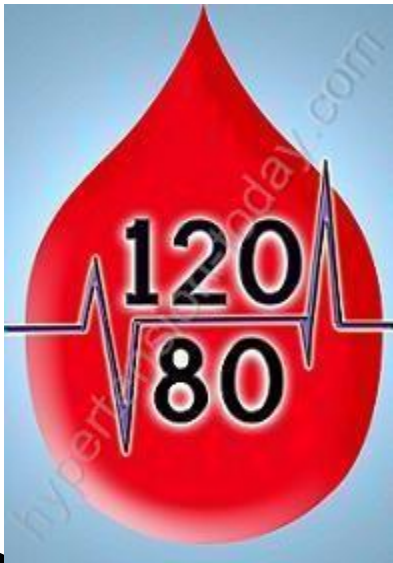


سرسبز

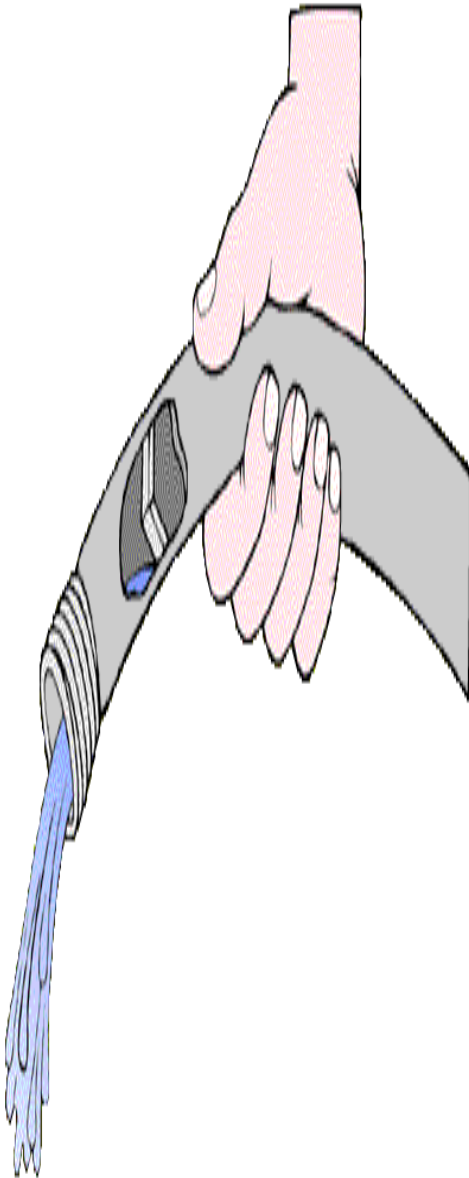
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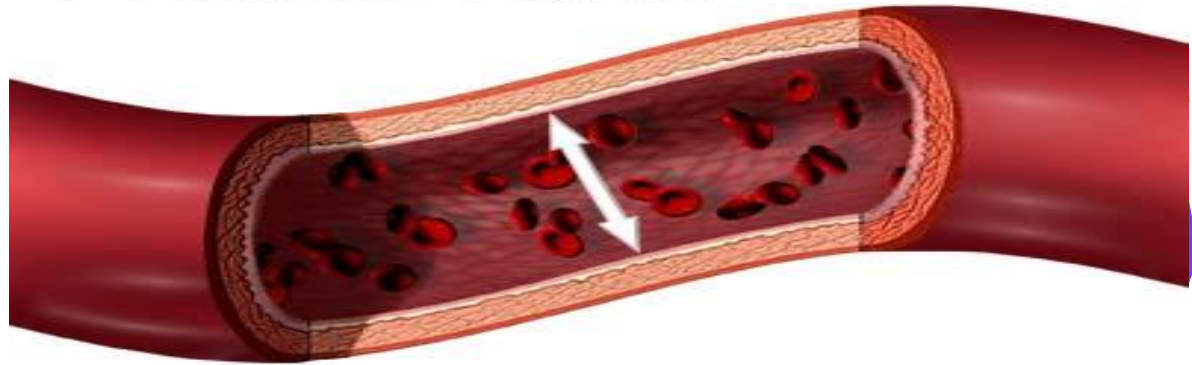
HTN



فشار خون چیست؟



Blood pressure is the measurement
of force applied to artery walls



ADAM





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Review Article | Published: 05 February 2020

The global epidemiology of hypertension

Katherine T. Mills, Andrei Stefanescu & Jiang He 



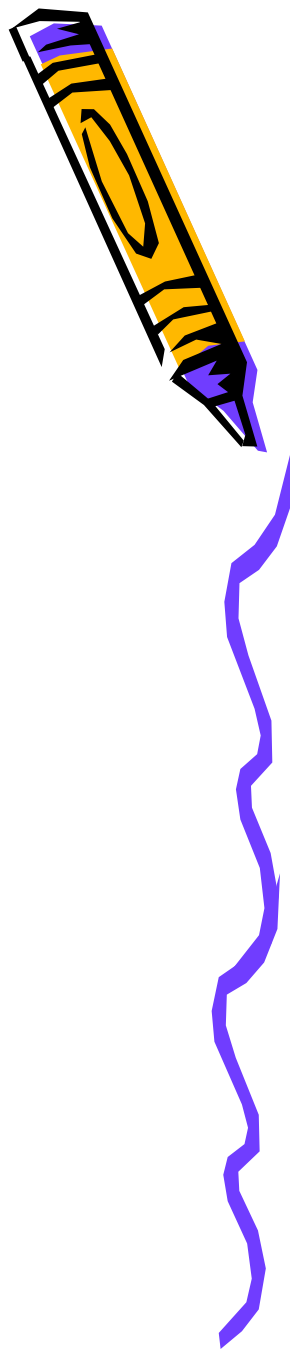
EPIDEMIOLOGY

HTN is the leading cause of:

CVD (CAD, CHF, CVA, PVD)

CKD

Premature death



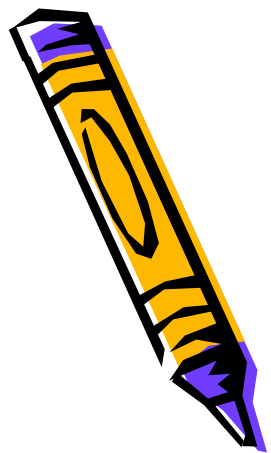
HTN

definition:

constant or has **decreased** slightly
(over the past four decades)

By contrast:

Prevalence has increased, especially in
LMICs (low- and middle-income countries)

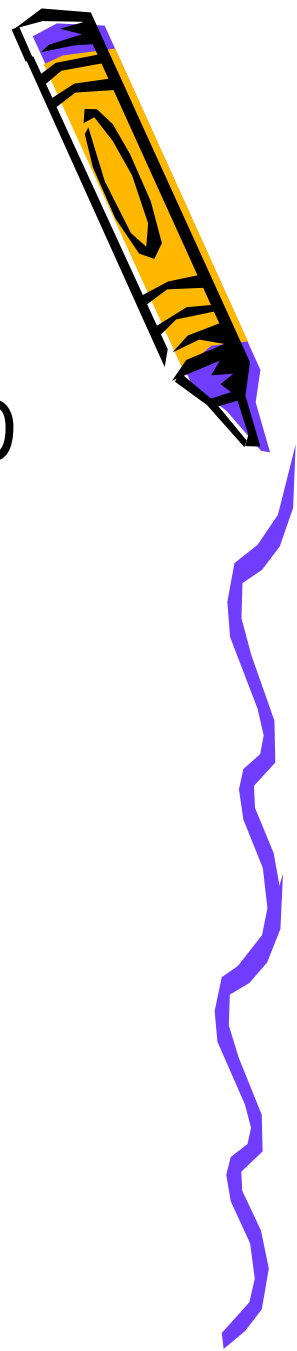


Prevalence

- 31.1% of adults (1.39 billion) in 2010
- in LMICs (31.5%, 1.04 billion people)

higher than

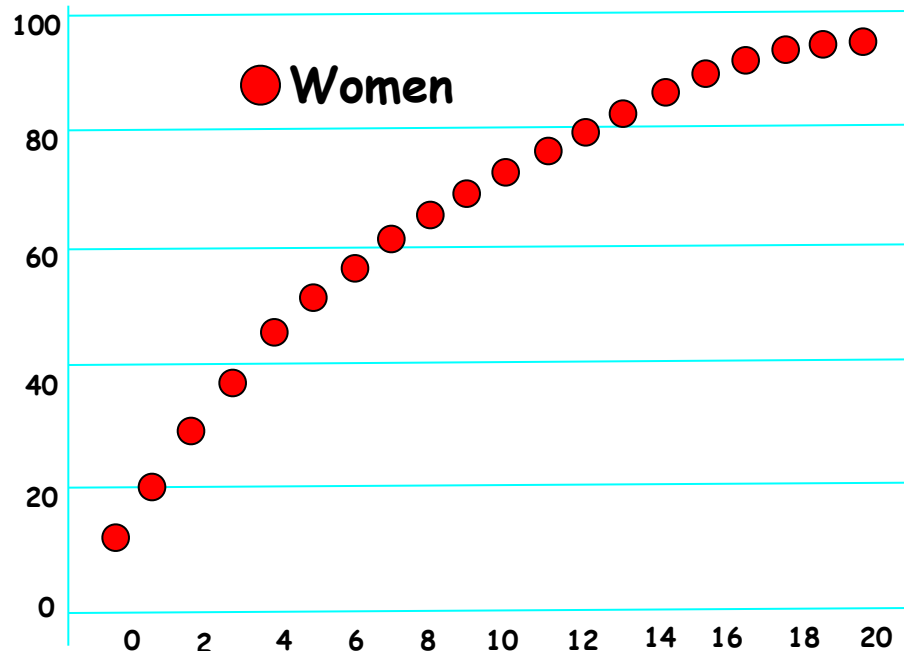
- in HICs (28.5%, 349 million people).



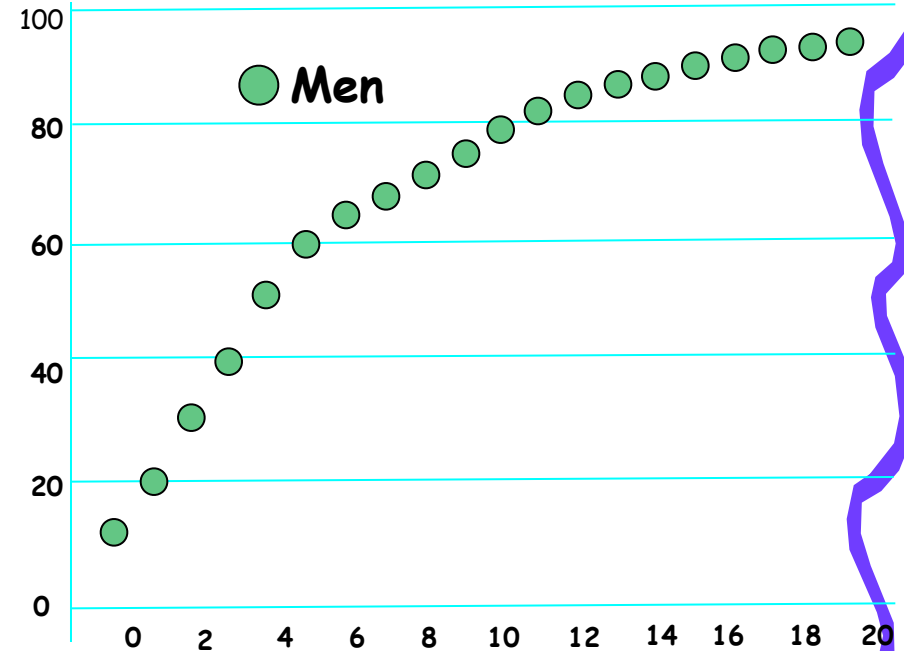
Hypertension in Normotensive Women and men aged 65 years



Risk of Hypertension %



Risk of Hypertension %



Years to Follow-up

Years to Follow-up



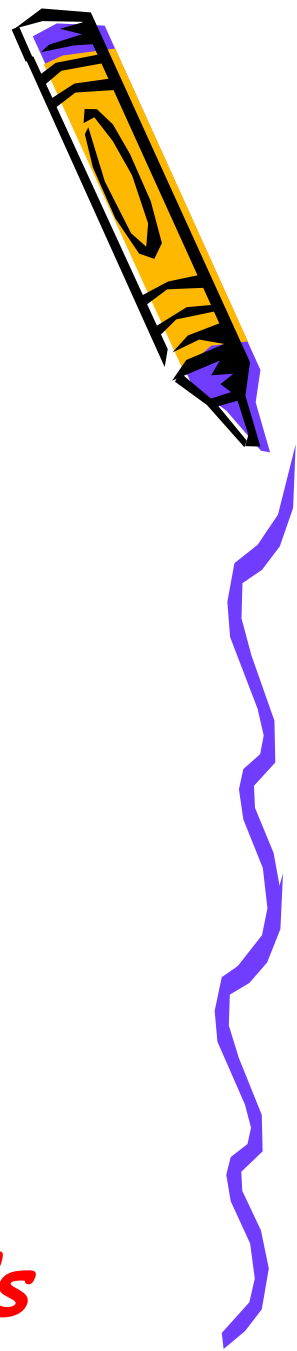
Despite the increasing prevalence

The proportions of hypertension awareness

Treatment

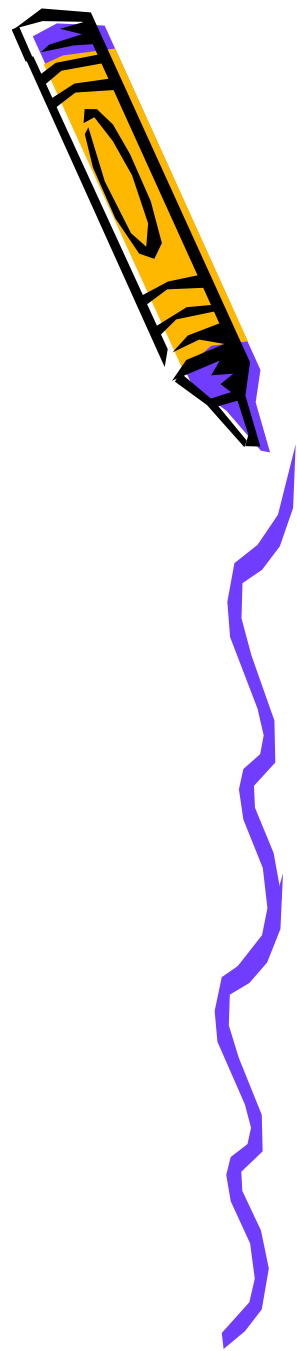
BP control

are low, particularly in LMICs

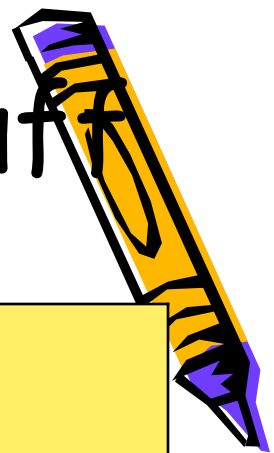


Recommended Technique for Measuring Blood Pressure (cont.)

- Select a device with an appropriate size cuff



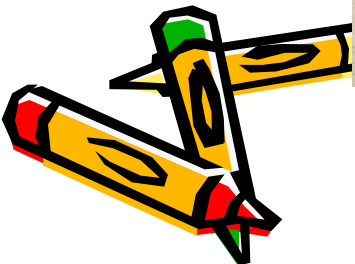
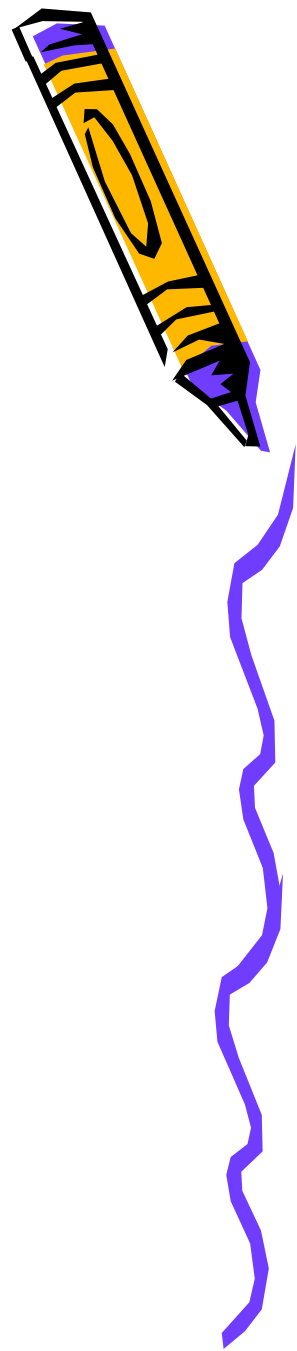
Use an appropriate size cuff

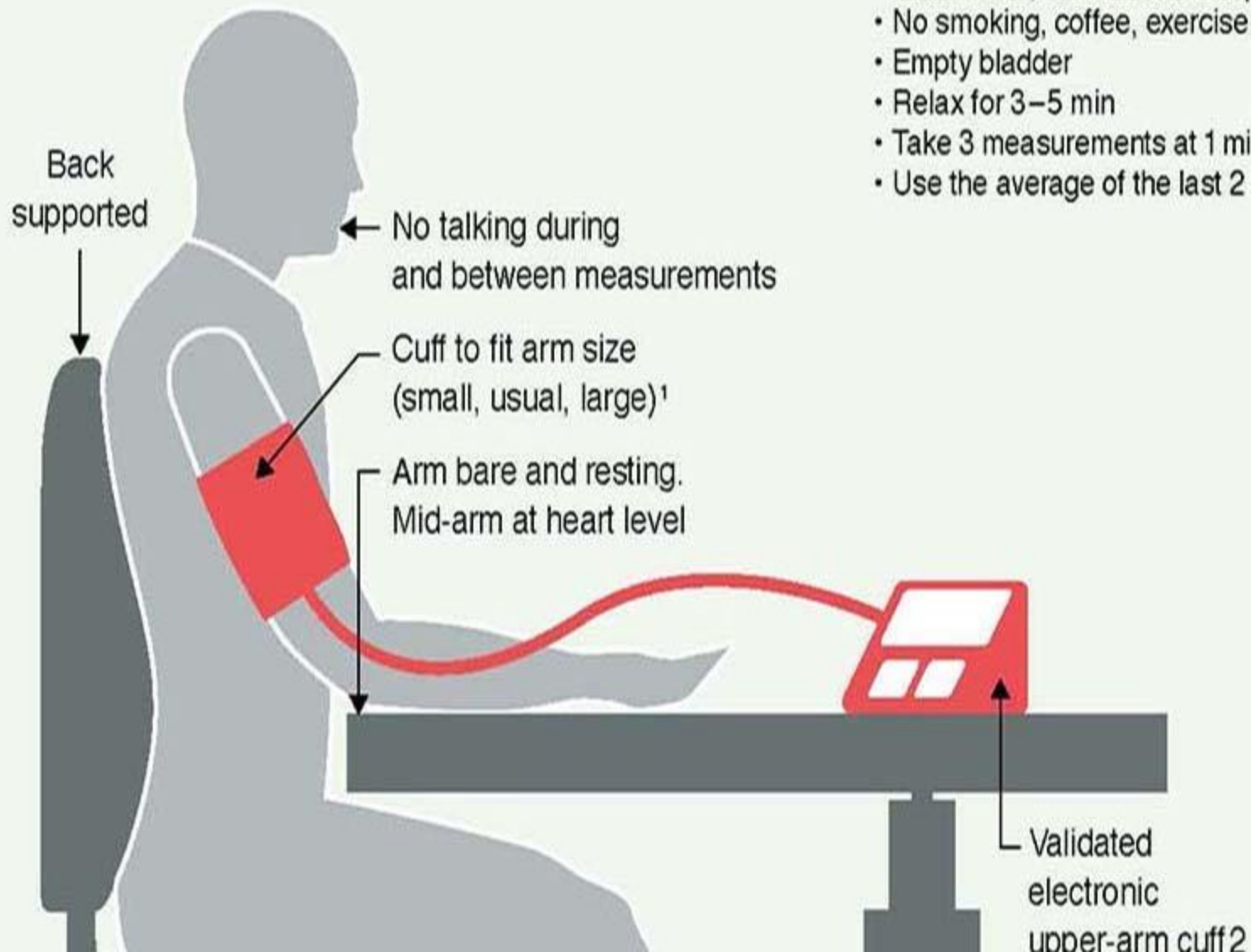


Arm circumference (cm)	Size of Cuff (cm)
From 18 to 26	9 x 18 (child)
From 26 to 33	12 x 23 (standard adult model)
From 33 to 41	15 x 33 (large)
More than 41	18 x 36 (extra large, obese)



Blood Pressure Assessment: Patient position



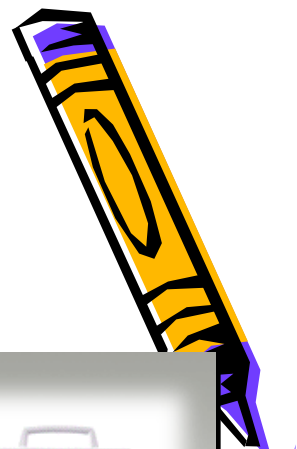


- Quiet room, comfortable temperature
- No smoking, coffee, exercise for 30 min
- Empty bladder
- Relax for 3–5 min
- Take 3 measurements at 1 min intervals
- Use the average of the last 2 measurements

Recommended Equipment for Measuring BP



Recommended Equipment for Measuring Blood Pressure



Automated oscillometric devices:

- Use a validated automated device according to BHS, AAMI or IP clinical protocols.
- For home blood pressure measurement devices, a logo on the packaging ensures that this type of device and model meets the international standards for accurate blood pressure measurement.



AAMI=Association for the Advancement of Medical Instrumentation;
BHS=British Hypertension Society;
IP=International Protocol.



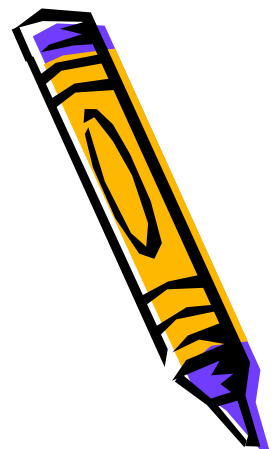


International
Society of
Hypertension

2020 ISH Global Hypertension Practice Guidelines

6th May 2020

www.ish-world.com



for the management of HTN in
adults

(aged 18 years and older)



SBP (mm Hg)	and/or	DBP (mm Hg)	JNC 7⁵	2017 GL⁴
<120	and	<80	Normal BP	Normal BP
120–129	and	<80	Prehypertension	Elevated BP
130–139	or	80–89	Prehypertension	Stage 1 hypertension
140–159	or	90–99	Stage 1 hypertension	Stage 2 hypertension
≥160	or	≥100	Stage 2 hypertension	Stage 2 hypertension

BP should be based on an average of ≥2 careful readings on ≥2 occasions. Adults with SBP or DBP in 2 categories should be designated to the higher BP category.

BP indicates blood pressure; DBP, diastolic blood pressure; GL, guideline; JNC, Joint National Committee; and SBP, systolic blood pressure.

JNC – 8 Classification of BP

Table 3. Classification of Blood Pressure in Adults (age ≥ 18 years)			
Classification	Systolic Blood Pressure (mmHg)		Diastolic Blood Pressure (mmHg)
Normal	<120	AND	<80
Prehypertension	120-139	OR	80-89
Stage 1 HTN	140-159	OR	90-99
Stage 2 HTN	≥ 160	OR	≥ 100





Blood Pressure Classification

@RxKeySlides

2020
ISH
Guidelines

New!

Category	Systolic (mmHg)		Diastolic (mmHg)
Normal BP	< 130	and	< 85
High-Normal	130 - 139	and/or	85 - 89
Grade 1 HTN	140 - 159	and/or	90 - 99
Grade 2 HTN	≥ 160	and/or	≥ 100

RxKeySlides

2017
ACC/AHA
Guidelines

Category	Systolic (mmHg)		Diastolic (mmHg)
Normal BP	< 120	and	< 80
Elevated	120 - 129	and	< 80
Stage 1 HTN	130 - 139	and/or	80 - 89
Stage 2 HTN	≥ 140	and/or	≥ 90

ISH = International Society of Hypertension
ACC = American College of Cardiology
AHA = American Heart Association

@RxKeySlides

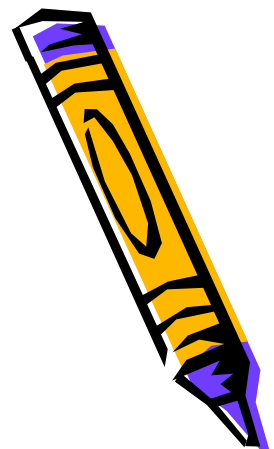


Table 1. Classification of Hypertension Based on Office Blood Pressure (BP) Measurement

Category	Systolic (mm Hg)		Diastolic (mm Hg)
Normal BP	<130	and	<85
High-normal BP	130–139	and/or	85–89
Grade 1 hypertension	140–159	and/or	90–99
Grade 2 hypertension	≥160	and/or	≥100



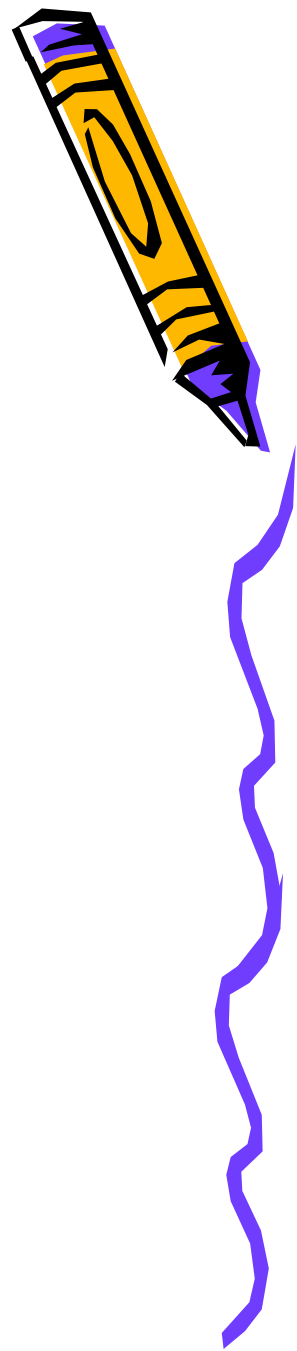


Table 2. Criteria for Hypertension Based on Office-, Ambulatory (ABPM)-, and Home Blood Pressure (HBPM) Measurement

	SBP/DBP, mm Hg
Office BP	≥ 140 and/or ≥ 90
ABPM	
24-h average	≥ 130 and/or ≥ 80
Day time (or awake) average	≥ 135 and/or ≥ 85
Night time (or asleep) average	≥ 120 and/or ≥ 70
HBPM	≥ 135 and/or ≥ 85





Thank you

Your suggestions regarding this presentation is highly appreciated

