

# Hypertension and Obesity at the Health Fairs

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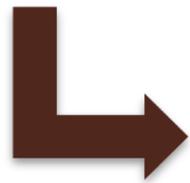


**DOCS**  
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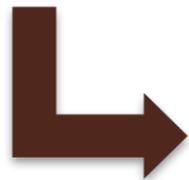
***DOCS Lecture Series***

# What is Screening? (vs. Diagnosis)

***Identification*** of an unrecognized disease or risk factor in a seemingly ***healthy, asymptomatic population***



Early intervention



Decrease morbidity  
and mortality

# Criteria for a Screening

## **Disease with**

- High prevalence
- High impact on morbidity and mortality
- Effective early treatment

## **Test is**

- Simple, safe, acceptable to patients
- Cost-effective
- Highly sensitive → diseased will test positive
- Highly specific → healthy will test negative

# Vitals Station



# Hypertension

Classification	SBP (mm Hg)		DBP (mm Hg)
Normal	<120	AND	<80
Pre-HTN	120-139	AND	80-89
Stage 1	140-159	OR	90-99
Stage 2	>160	OR	>100

- Highly prevalent
- Most people are asymptomatic
- Complications: **CV, Ophtho, Neuro, Renal**
- Early interventions work!
  - **Lifestyle modifications**
    - *DASH diet/reduced salt intake, exercise/weight loss, reduced EtOH*
  - **Pharmacologic**
    - *Thiazides,  $\beta$ blockers, Ca-channel blockers, ACEi/ARB*

# Hypertension Screening

## **Screen for HTN with BP Measurement**

- Safe, cheap
- Highly sensitive
- Specific, albeit less – random fluctuations

**OVERALL: USPSTF Grade A for adults**

# Screening at the health fair

- Sitting in the chair, supported back, feet on the floor, arm supported at heart level
- Appropriate sized blood pressure cuff
- Take blood pressure in both arms
  
- SBP is the point at which the first of two or more sounds is heard
- DBP is the point before the disappearance of the sounds

# HTN at the Health Fair

## REMEMBER: Screening vs. Diagnosis

Classification	DOCS Rec	General Rx
Normal	No referral	None
Pre-HTN	Counsel and referral	Lifestyle modifications
Stage 1	Counsel and referral	Lifestyle mod + pharm
Stage 2 Stage 2 + symptomatic	High risk Referral Physician consult	Lifestyle mod + pharm x2

# Counseling

- Lifestyle Modifications
  - Weight reduction
  - DASH eating plan
  - Dietary sodium reduction
  - Physical activity
  - Moderation of alcohol consumption

# Hypertension diagnosis

- Diagnosis of HTN is based on the average of two properly taken blood pressure measurements at two or more office visits.

# Obesity and BMI

- **Obesity** - An excessive amount of body fat, which increases the risk of medical illness and premature death
- **BMI** - A measurement of the relative composition of lean body mass and body fat; calculated as weight in kilograms/(height in meters)<sup>2</sup>
  - Used as a quick and easy measure of overweight and obesity

# Obesity

Classification	BMI kg/m <sup>2</sup>
Underweight	<18.5
Normal	18.5-24.9
Overweight	25-29.9
Obesity	30-39.9
Morbid Obesity	>40

## Common Complications of Obesity

CAD	CVA
Cholelithiasis	Degen. Joint
Eating disorder	Hyperlipidemia
HTN	Infertility
Malignancies	Irregular menses
Mood disorder	PCOS
OSA	DM2

- Highly prevalent

  - *33.3% adult men, 35.3% adult women, 16% 2 to 19 year olds*

- Early intervention works!!

  - Dietary restriction + Exercise + Behavior therapy**

# Obesity & The Metabolic Syndrome

Definition: state of insulin resistance characterized by abdominal obesity, dyslipidemia, elevated BP, impaired fasting glucose

Present in:

- 5% of normal weight
- 22% of overweight
- 60% of obese

**At least 3 of the following for Dx**

Waist circumf: M >40", F >35"

TG >150 mg/dL

HDL: M <40 mg/dL, F <50 mg/dL

BP > 130/85 mm Hg

Fasting blood glucose > 110 mg/dL

**REMEMBER: Screening vs. Diagnosis**

# Obesity Screening at the Health Fair

**BMI = weight (kg) / height<sup>2</sup> (m<sup>2</sup>)**

- Safe, cheap
- Sensitive, specific

**DOCS rec for overweight/obese:**

- Educate/Counsel on diet and exercise
- Refer to PCP

# Sources

- Case Files: Family Medicine
- Step-Up To Medicine
- Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure

**Thank you!**

**Have Fun at Little Haiti!**