The Importance of Hypertension Screening by Dental Providers
An Exciting Day in the Dental Office
Quick Reminder of the Current Blood Pressure Categories

In November of 2017 the American College of Cardiology and the American Heart Association published new high blood pressure guidelines which lowered the threshold for hypertension (Image 1). This new threshold accounts for complications that can occur at lower numbers and allows for earlier intervention. Because the diagnostic threshold for hypertension has been lowered, more people will be classified as having hypertension. Under these new hypertension guidelines, approximately 46 percent of adults in the United States, or more than 103 million adults, are currently considered to have hypertension compared with an estimated 72 million adults under the previous 2003 guidelines.

Image 1. Blood Pressure Categories

<table>
<thead>
<tr>
<th>Blood Pressure Category</th>
<th>Systolic mm Hg (upper number)</th>
<th>Diastolic mm Hg (lower number)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>Less Than 120</td>
<td>Less Than 80</td>
</tr>
<tr>
<td>Elevated</td>
<td>120 - 129</td>
<td>Less Than 80</td>
</tr>
<tr>
<td>High Blood Pressure (Hypertension) Stage 1</td>
<td>130 - 139</td>
<td>80 - 90</td>
</tr>
<tr>
<td>High Blood Pressure (Hypertension) Stage 2</td>
<td>140 or Higher</td>
<td>90 or Higher</td>
</tr>
<tr>
<td>Hypertensive Crisis (consult your doctor immediately)</td>
<td>Higher than 180</td>
<td>Higher than 120</td>
</tr>
</tbody>
</table>

The new guidelines eliminate the category of prehypertension, categorizing patients as having either Elevated (120-129 mm Hg systolic and less than 80 mm Hg diastolic) or Stage 1 hypertension (130-139 mm Hg systolic or 80-89 mm Hg diastolic). While previous guidelines classified 140/90 mm Hg as Stage 1 hypertension, this level is classified as Stage 2 hypertension under the new guidelines.
My Patient
40 year-old male
Clenches/grinds
Has not seen physician in years
Recent endo #18 from a cracked tooth
Screening for Hypertension

- **What I did wrong**
  - We took his Blood Pressure after I starting working on his tooth
  - My assistant forgot to take it when he was seated
  - What if I hadn’t asked as the doctor?
  - Why didn’t the endodontist take his blood pressure before he saw me?

- **What I did right**
  - As someone valuing the screening of BPs, I asked my assistant what his BP was that day
  - I stopped and had a conversation with him. He opened up.
  - I looked at his whole health
  - I referred him to a physician and urgent care and to a therapist
Collaboration is Key

INTERPROFESSIONAL EDUCATION
Transforming the future of collaborative health practice

HEALTH SCHOOLS FORM INTERPROFESSIONAL CURRICULUM WORKGROUP

Seventeen faculty, staff and students from across the health science schools have been appointed to the newly-formed Interprofessional Curriculum Workgroup. The workgroup is charged with examining the curricula and accreditation standards for each of the professions and developing a curricular map for interprofessional education (IPE) across the health science schools.

The workgroup was created by the recently-funded Michigan Center for Interprofessional Education and includes representation from the School of Dentistry, School of Kinesiology, Medical School, School of Nursing, College of Pharmacy, School of Public Health, School of Social Work, and School of Health Professions and Studies (Flint) and two student representatives. It is expected that U-M Dearborn will name representatives in the near future.
- Optometrists
- Pharmacists
- Therapists
- Physical Therapists
- Nurse Practitioners

REPETITION WORKS

LEARNING FROM MANY HELPS SHOW HTN EFFECTS ON OVERALL HEALTH
All major groups of pharmaceuticals, such as diuretics, beta-blockers, angiotensin converting enzyme (ACE) inhibitors, angiotensin receptor blockers (ARBs), and calcium channel blockers, can produce oral side effects including, but not limited to, xerostomia, taste changes, gingival hyperplasia, gingival bleeding, lichenoid reactions, and increased risk of oral infections. Therefore, people who take medications for hypertension may be at increased risk for poor oral health consequences. Additionally, having periodontal disease may interfere with the effectiveness of hypertension therapy.
Patients With Hypertension in the Dental Office

- Patients taking Verapril, Lisinopril (BP)
- Arthritis/Rheumatism
- High Blood Pressure
- Low Blood Pressure
- Cancer
  (Type and when diagnosed?)

- Cavities
What Do our Professional Organizations Say About Taking Blood Pressures?

The American Dental Association (ADA) recommends that all dental care providers become involved in the detection and management of hypertension. The ADA recommendation is for oral health professionals to measure blood pressure of all new patients, all patients at least annually, and patients with diagnosed hypertension at each visit.\(^{10}\)

The American Dental Hygienists’ Association standards for clinical practice outline taking and recording blood pressure as part of a general health history assessment and risk assessment, which would necessitate that registered dental hygienists record this at every initial visit and every recall/recare visit.\(^{11}\)
Screening for Hypertension in the Dental Setting

Screening for hypertension in a dental setting should start when a patient reaches 18 years of age or prior to age 18 if they have a history of hypertension. Separate guidelines for children under 18 years old can be found at: https://www.aap.org/en-us/professional-resources/quality-improvement/Project-RedDE/Pages/Blood-Pressure.aspx.

All pregnant patients, regardless of age, should be screened for hypertension. Hypertensive disorders of pregnancy, such as preeclampsia/eclampsia and gestational hypertension, complicate 6 to 8 percent (6-8%) of pregnancies and can cause significant maternal and fetal morbidity and mortality.12
In Summary

Our Guidance Booklet Says It Best

Hypertension Screening Guidance for Michigan Oral Health Professionals

Why Michigan Oral Health Professionals Should Routinely Measure Blood Pressure

A dental visit may be the only routine care visit that a patient receives. Dental visits provide the perfect opportunity to screen for hypertension and refer patients to their primary care provider for further evaluation. Many patients trust their oral health providers and welcome their interest in their overall health, not only their oral health.
If people don’t know they have hypertension, we need to help them find out. And that is why it’s important for dental professionals to screen for hypertension in the dental office.

Hypertension

Hypertension is diagnosed when blood pressure is consistently high. Hypertension usually has no warning signs or symptoms, and many people do not know they have it. The only way to know if a person has hypertension is to measure their blood pressure. Steps can be taken to control it if it is too high.\(^1\)
Dr. Lisa Knowles
Associate Dental Consultant
Blue Cross Blue Shield of Michigan
Private Practice Dentist
Haslett East Lansing Dental Health & Wellness
Email: Lknowles@bcbsm.com
Blue Cross Phone: 313-448-4140
Office Phone: 517-332-1000