

## Dentistry as Primary Care



# Importance of, and How to, Complete Blood Pressure Screenings in Dental Settings

Melissa Kainz MSN, RN  
February 9, 2022



Center for Rural Health  
University of North Dakota  
School of Medicine & Health Sciences



Dentistry as Primary Care  
Center for Rural Health  
University of North Dakota

## Disclosures

- I have no disclosures regarding financial relationships, commercial interests, or funding from commercial support or external sources.
- Where appropriate, I have referenced sources for the information provided.



Dentistry as Primary Care  
Center for Rural Health  
University of North Dakota

## Objectives

- Discover how oral health and overall health are connected.
- Learn the importance of blood pressure screening in hypertension identification.
- Identify actions to take an accurate blood pressure reading.



3

## Oral Health and Overall Health Connection

- North Dakota Oral Health has a focus on prevention and education
- Oral Health and overall health are connected

**Severe tooth loss was 50% higher in people with:**

|                             |                      |
|-----------------------------|----------------------|
| Asthma                      | Heart disease        |
| Diabetes                    | Liver condition      |
| Emphysema                   | Rheumatoid arthritis |
| Fair or poor general health | Stroke history       |

compared to people without these chronic conditions.

**Tooth loss is preventable.** Primary care providers can educate their patients with chronic diseases about their increased risk for tooth loss, and screen and refer them for dental care.

<https://bit.ly/3epebJw>



4

## Blood Pressure Screening Importance in the Dental Setting

**Hypertension**-In North Dakota, nearly 1 in 3 (29.8%) adults are diagnosed with hypertension.

- Hypertension, or high blood pressure (BP), increases the risk of heart disease and stroke if left uncontrolled.
- Sometimes known as the “silent killer,” it often has no symptoms and requires screening to detect it.

**Barriers**-limited access to care options, siloed approaches to care, and health inequity (U.S. Department of Health and Human Services, 2020).

Content Supporting References: (American Heart Association, 2019), (CDC, 2020), (North Dakota behavioral risk factor surveillance system, 2019), (U.S. Department of Health and Human Services, 2020)



## Importance of Blood Pressure

- The first part of hypertension control is awareness, which includes screening.
- The CDC (2020) recommends that individuals be screened regularly for hypertension.
- Screening for hypertension can increase awareness of the condition and hypertension awareness must occur prior to successful treatment and control.

Content Supporting References: (CDC, 2020), (U.S. Department of Health and Human Services, 2020)

# Importance of Blood Pressure Screening in the Dental Setting

- The dental setting provides a unique opportunity to screen patients who may not see a healthcare provider on a regular basis
- In 2019, 64.9% of adults aged 18 and over in the United States had at least one dental visit in the past year
- RADM Timothy Ricks advocates for blood pressure screenings in the dental setting to improve chronic disease management



Content Supporting References: (American Heart Association, 2019), (CDC, 2020), (Ricks, 2021), (U.S. Department of Health and Human Services, 2020)

## Taking Blood Pressure Measurement in the Dental Office

- Screen all patients, ages 18 and over, by taking an accurate blood pressure reading.
- The American Heart Association recommends upper arm blood pressure monitors for the most accurate readings.

### Blood Pressure Categories



| BLOOD PRESSURE CATEGORY                               | SYSTOLIC mm Hg (upper number) |        | DIASTOLIC mm Hg (lower number) |
|---|-------------------------------|--------|--------------------------------|
| NORMAL  | LESS THAN 120                 | and    | LESS THAN 80                   |
| ELEVATED  | 120-129                       | and    | LESS THAN 80                   |
| HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1            | 130-139                       | or     | 80-89                          |
| HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2            | 140 OR HIGHER                 | or     | 90 OR HIGHER                   |
| HYPERTENSIVE CRISIS (consult your doctor immediately) | HIGHER THAN 180               | and/or | HIGHER THAN 120                |

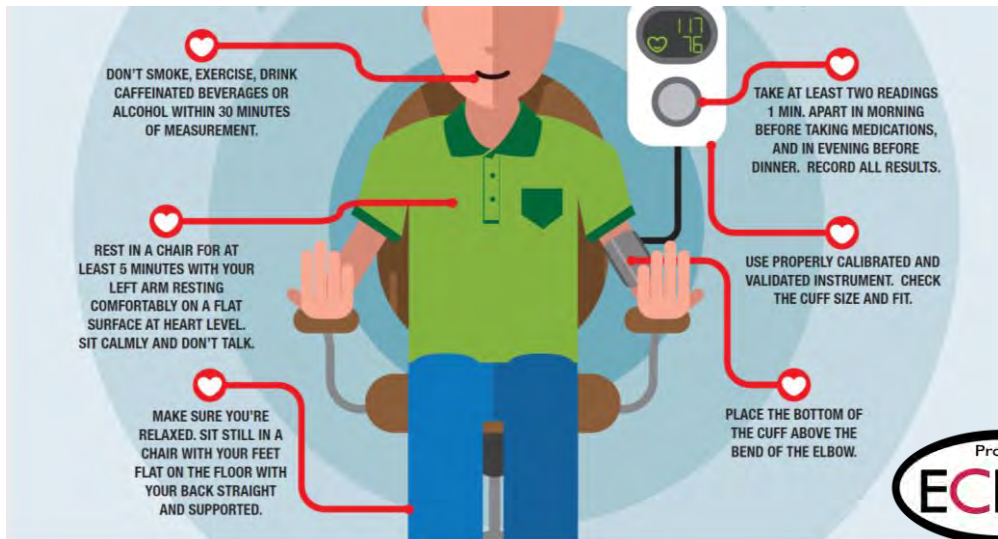
[heart.org/bplevels](http://heart.org/bplevels)



Content Supporting References: (American Heart Association, 2019)



## BP Screening Recommendations



Source: American Heart Association

9



## Referrals

- Make a referral to the patients' primary care provider (medical) for all patients with a blood pressure of 130/80 or higher.
- If the patient does not have a primary care provider, refer to an established referral partner.
- Referral partners can include pharmacy, clinics, and local public health.
- Many healthcare organizations offer BP screenings



Content Supporting References:  
(American Heart Association,  
2019)

10

## Current Dental Office Screening

Jackie Nord, D.D.S  
Spectra Health  
FQHC in Grand Forks, ND



11

## Conclusion

- Oral health and overall health are connected.
- Hypertension is a significant concern in North Dakota and the United States.
- Increased BP screening can assist with awareness and control of hypertension.
- Dental offices provide a unique opportunity to provide BP screenings
- Proper cuff placement and actions prior and during screening can ensure accurate blood pressure readings.



Dentistry as Primary Care  
Center for Rural Health  
University of North Dakota

12

## Questions/Discussion



13

## References

American Heart Association. (2019). Why high blood pressure is a "Silent Killer".  
<https://www.heart.org/en/health-topics/high-blood-pressure/why-high-blood-pressure-is-a-silent-killer>

CDC. (2020). Facts about hypertension. <https://www.cdc.gov/bloodpressure/facts.htm>

North Dakota behavioral risk factor surveillance system. (2019). Hypertension awareness core report.  
<http://www.ndhealth.gov/brfss/data/results/>

Ricks, T. (2021). *RADM Timothy Ricks - dpbh.nv.gov*. Current Issues In Oral Health.  
[https://dpbh.nv.gov/uploadedFiles/dpbhngov/content/Programs/OH/dta/Boards/2021\\_Meetings/2021.06.04%20AC4OH%20RADM%20Timothy%20Ricks%20\(1\).pdf](https://dpbh.nv.gov/uploadedFiles/dpbhngov/content/Programs/OH/dta/Boards/2021_Meetings/2021.06.04%20AC4OH%20RADM%20Timothy%20Ricks%20(1).pdf)

U.S. Department of Health and Human Services. (2020). The Surgeon General's call to action to control hypertension.  
<https://www.cdc.gov/bloodpressure/CTA.htm>

### CONTACT INFORMATION

Julie Reiten  
 Project ECHO Coordinator  
 Center for Rural Health  
[Julie.a.reiten@UND.edu](mailto:Julie.a.reiten@UND.edu)



14