Stroke Prevention
Habits to Follow Before and After

Michelle Vallelunga, RN, MS, CNRN, SCRN
Data Coordinator, Upstate Comprehensive Stroke Center

Rebecca Hausserman, RD, CDN, CNSC
Lead Dietitian
Morrison Healthcare at Upstate University Hospital

An Ounce of Prevention is Worth a Pound of Cure
- Benjamin Franklin -
(National Stroke Association Video)

• https://www.youtube.com/watch?v=nxwu9z1bhU0
Stroke Facts

• **STROKE IS THE NEW “Heart Attack”**
• 5th leading cause of death per CDC (down from 4th last year)
• **795,000 Americans** have a stroke every year
• **130,000** of those die every year (that’s 16%)
• 30-50% have lifelong disability
• Race and Ethnicity are a factor
• Stroke risk increases with age **BUT**, a stroke can occur
• at any age (including pediatrics)
• Men are at increased risk over women
• Stroke costs US estimated **$34,000,000,000**

*By the end of this talk roughly 60 Americans will have suffered a stroke*

Has Stroke touched you?

• Have you had a Stroke or TIA?
• Are you a caregiver for a Stroke Survivor?
• Had a parent or family member who has had a Stroke?
• Have heart issues?
• Did your doctor say you were at risk for Stroke?

• https://www.facebook.com/KnowStroke/videos/10100464097152459/
Stroke: What is it?

• Stroke is referred to as “brain attack.”
• Stroke is a sudden neurological deficit caused by interruption of blood flow to the brain.
• Manifestations of the stroke depend on which region or extent of brain affected.
• Brain has blood vessels. Like a tree, big branches and small ones which carry nutrients. If larger blood vessels are blocked more of the brain can be damaged.
Stroke Types

An interruption of blood flow to the brain which leads to brain injury.

Ischemic = “blockage”: 85%

Hemorrhagic = “bleeding”: 15%
“Mini-stroke”? Or TIA

• aka “Transient ischemic attack” (TIA)
• Warning sign of a future stroke – up to 40% of TIA patients will have a future stroke
• Symptoms of TIAs are the same as stroke
• TIA symptoms can resolve within minutes or hours
• TIA is a medical emergency!!!!!
What puts me at risk?

Risk factors

- Inactivity
- Binge drinking & substance misuse
- Age
- Family history and ethnicity
- High blood pressure
- Heart disease
- Diabetes
- Previous strokes & TIAs
- Oral contraception & HRT
- Obesity: unhealthy eating
- Smoking

Knowing changes everything."
Stroke Risk Factors

Non Modifiable – Know About

- Age
- Ethnicity
- Race
- Family History
- Previous Stroke/TIA

Modifiable - CAN Make a Difference

- Smoking
- Alcohol and Drug Misuse
- Obesity and Unhealthy Eating
- High Blood Pressure
- Heart Disease
Women: Unique Stroke Risk

- High Blood Pressure - more likely
- Pregnancy
- Oral Contraceptive Use
- Post Menopausal Hormones
- Migraines
- Depression and Stress
Stroke is Preventable! Think Lucky “7”

- **Lifestyle:** 4
  - Eat Stroke/Heart Healthy **Diet** – watch cholesterol
  - **Exercise**/Lose Weight
  - Drink **Alcohol** in moderation
  - Quit **Smoking**
- **Medical:** 3
  - Lower **Blood Pressure**
  - Follow MD instructions for **Atrial Fibrillation**
  - Manage **Diabetes**
Diet: 3 Prong Attack

- Low Sodium
- Low Saturated Fat and Cholesterol
- Carbohydrate Moderation
Diet: Monitoring Sodium

• Ditch the salt shaker!
  – Use herbs and spices when cooking
• Watch out for processed foods
  – Breads/crackers are a big source of hidden sodium
• Opt for fresh or frozen vegetables
  – Rinse off canned options
Diet: Cutting the Fat!

- Plant-based meals
  - Load up on the fruits and veggies!
- Cook with vegetables oils
- Low or non-fat dairy
- Choose lean protein
  - Poultry
  - Limit red meat intake (beef, pork)
    - Select lean cuts
  - Go for the fish!
    - Goal for twice a week
- RUN from Trans Fats!!!!!
Diet: Carbohydrates in Moderation

- Chose whole grain options
  - High in fiber
- Reduce processed carbohydrates
  - Stay away from white bread, pasta, and rice
- Cut back or cut out added sugars
  - NO SODA!
- Limit the sweets!
Exercise- AHA Recommendations

• 150 minutes **Moderate** exercise each week
  5 – 30 minute sessions (walking dog, washing car, raking leaves dancing for x min)
• 75 minutes **Vigorous** exercise each week
• 3--- 25 minute sessions (running, race walking, swimming,
Exercise: What Counts?

Does not have to be ALL or NOTHING…..

• Walk the Dog or Walk to a Destination
• Walk your child/grandchild: spice it up! scavenger hunt, new parks, Mall walk – Club
• Join a team
• Combine with TV time: Jog in place, or use treadmill for a 30 min during your favorite show
• Take the stairs
• Dance/Zumba/Ballroom
• Water Aerobics
• Music while doing chores (Weed, dust, sweep, vacuum)
• Seasonal activities: ice skating in winter, biking in summer
• Walk during lunch breaks at work, Desk exercises
Exercise: Tips for Success

- Do it when you are most energetic
- Schedule it like an appointment or meeting
- Ask a partner to go with you
- Keep a gym bag packed or lay out clothes night before
- Start Triggers – reminders—a time of day, place, or cue—that kick off an automatic reaction (sneakers by the bed)
- Try a mindfulness approach – pay attention to your body
- Keep a log
Alcohol: How Much?

- Alcohol use has been linked to stroke in many studies. Drinking too much alcohol can increase blood pressure and the risk of stroke. Aim to drink in moderation – no more than two drinks a day for men and one drink a day for women.
- www.stroke.org
- Consult your MD or provider

One drink is equal to:
- 12 ounces of beer
- 5 ounces of wine (1 glass)
- 1 ¼ to 1 ½ ounces of liquor
Tobacco Use and Smoking

• Smoking doubles the risk of stroke when compared to a nonsmoker. Smoking increases clot formation, thickens blood, and increases the amount of plaque buildup in the arteries.

• If you smoke, try as hard as possible to stop. Ask your doctor about quit-smoking aids like nicotine patches, counseling, and programs that are available to you. Quitting smoking can be difficult, so don’t give up if you are not successful the first time you try.

• **www.nysmokefree.com** 1-866-NY Quits : Online Community “QuiNitY” Sign up for Messaging, Calls, Online Journal, Medication discounts and assistance, Local Support Groups in each County.

• **Upstate’s HealthLink Quit and Stay** Quit Cessation Program [http://www.upstate.edu/hospital/healthlink/smokefree/](http://www.upstate.edu/hospital/healthlink/smokefree/)

• **www.stroke.org**
Stroke and High Blood Pressure

- LEADING CAUSE of all Strokes
- “Silent Killer” no symptoms
- High Impact Condition: all over the body
- 3 of 4 1st time Strokes have high BP
- Biggest Bang for your Stroke Buck !!!!!!!

<table>
<thead>
<tr>
<th>Blood Pressure Category</th>
<th>Systolic mm Hg (upper #)</th>
<th>and</th>
<th>Diastolic mm Hg (lower #)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>less than 120</td>
<td>and</td>
<td>less than 80</td>
</tr>
<tr>
<td>Prehypertension</td>
<td>120 – 139</td>
<td>or</td>
<td>80 – 89</td>
</tr>
<tr>
<td>High Blood Pressure</td>
<td>140 – 159</td>
<td>or</td>
<td>90 – 99</td>
</tr>
<tr>
<td>(Hypertension) Stage 1</td>
<td></td>
<td>or</td>
<td>100 or higher</td>
</tr>
<tr>
<td>High Blood Pressure</td>
<td>160 or higher</td>
<td>or</td>
<td>Higher than 110</td>
</tr>
<tr>
<td>(Hypertension) Stage 2</td>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Hypertensive Crisis</td>
<td>Higher than 180</td>
<td>or</td>
<td>Higher than 110</td>
</tr>
</tbody>
</table>

[www.heart.org](http://www.heart.org)
Stroke and High Blood Pressure

• Symptoms: dizziness, facial flushing, nervousness, sweating, difficulty sleeping. Headaches only when BP is very high or hypertensive crisis

• Get checked!
• Medications for >140/90
• Take your meds
Atrial Fibrillation (Afib) Special risk

• Atrial fibrillation is a type of heart rhythm disorder called an ‘arrhythmia’

• Atrial fibrillation is a condition that occurs when there is a fault in the electric activity in the heart muscle, causing the heart to beat irregularly and in an uncoordinated way.

Afib Quadruples Stroke Risk and is more common in women than men after age 75. Women over 75 should be screened for Afib.
Atrial Fibrillation (Afib) Special risk

- **Symptoms** of Afib: Fluttering in the chest, fatigue, rapid heartbeat, dizziness and short of breath
- **Types:** Persistant (7 days) or Intermittant Paroxysymal
- **Treatment** is: Restoring your rhythm, rate control and preventing clots
- **Medications and Procedures**
Diabetes and Stroke

• High Blood Sugar – Insulin resistance
• “Longer you have diabetes higher your risk for stroke- per AHA. 2012 study showed 3% increase in stroke risk each year you have diabetes
• Often related to diabetes ability to damage the blood vessels over time
• Get screened!!!!! 90-130 before meals
• A1C test– average glucose last 3 months <7%
Diabetes and Stroke

- Weight management and Exercise
- Take diabetes meds or insulin as directed
- Regular blood work
- Keep A1C low
- Work with your provider
Stress: Lower it
Your best is good enough

Breathe
Laugh
Meditate
Avoid Stressful situations: say No
Do fun things/Hobbies
Get good sleep/rest
Stroke Signs and Symptoms

- Sudden numbness or weakness, especially on one side of the body
- Sudden confusion, trouble speaking or understanding
- Sudden trouble seeing
- Sudden trouble walking or loss of balance
- Sudden, severe headache
SPOT A STROKE

Stroke Warning Signs and Symptoms

FACE DROOPING  ARM WEAKNESS  SPEECH DIFFICULTY  TIME TO CALL 911

- NO!!! Call 911
- Do NOT try to bring the person yourself
- EMS communicates with the hospital and can help if symptoms worsen
- Do not ignore the symptoms even if they go away!
- Think: when was Last Known Well or Normal?
TIME: Why so important for Stroke?

- tPA or Alteplase only FDA approved treatment
- Approved within a 3 hour window
- tPA works better the faster you give it and this faster treatment leads to better outcomes.
  - [http://www.massgeneral.org/about/newsarticle.aspx?id=5035](http://www.massgeneral.org/about/newsarticle.aspx?id=5035)
  - [http://www.strokeassociation.org/STROKEORG/AboutStroke/Treatment/Stroke-Treatments](http://www.strokeassociation.org/STROKEORG/AboutStroke/Treatment/Stroke-Treatments)
- Procedures such as Clot retrieval are also time sensitive
What is a Comprehensive Stroke Center?

- Certified by DNV Healthcare
- Cares for ALL types of stroke patients
- 24/7 access to Endovascular procedures
- 24/7 on-site Neurosurgical availability
- Three levels of specialized neuroscience nursing care
  - Neuro ICU
  - Neuro Step-down
  - Neuro floor
- Multidisciplinary approach to stroke care across the continuum of the disease process
- Catheter-based therapy for patients beyond the tPA window.
- Only 5 Comprehensive Stroke Centers in NYS
CNY Stroke Support Group

• Meets monthly- third Monday of every month
• Upstate Healthlinks Suite–Rt 298 East Syracuse off Carrier Circle
• All Stroke Survivors and Caregivers welcome not just Upstate patients