Stroke

Everything you need to know!

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A Deaf Health Talk – DHCC Partnership with REAP

Overview

- Introduction
- The normal brain
- Types of stroke and results of stroke
  - Ischemic
  - Hemorrhagic
- How to spot stroke
- Treatments
- How to prevent stroke
- Discussion and Questions

Introductions…

Who are you?
What do you hope to learn tonight?

Who am I?

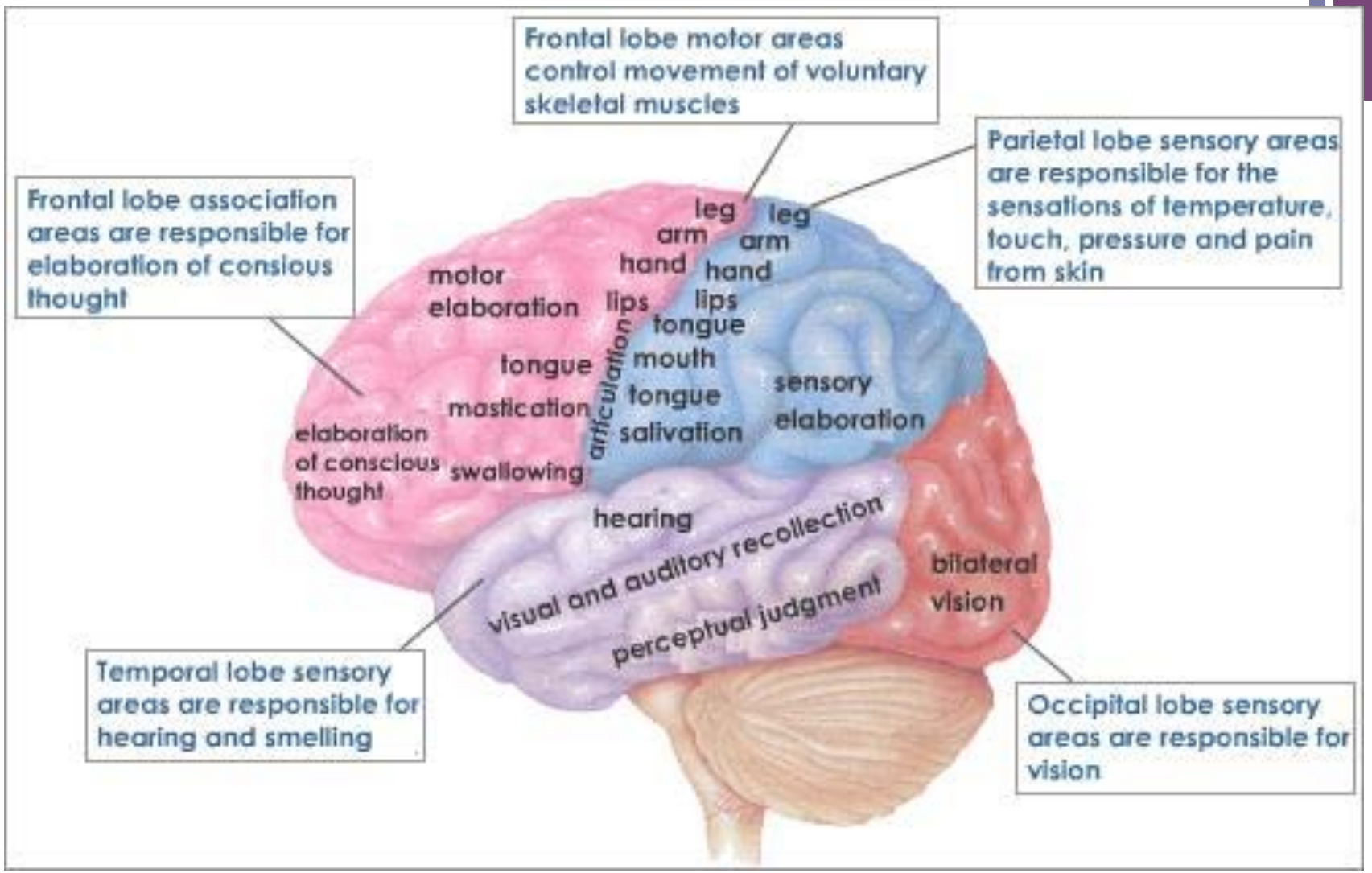
http://www.redbubble.com/people/beehivedezines/works/11165034-balloon-brain

Stroke Facts

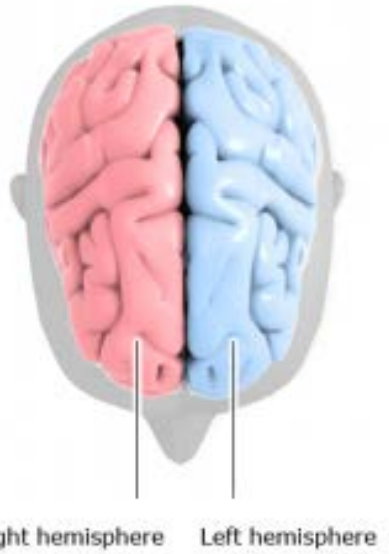
- Every year, nearly 800,000 people have a stroke
  - ¾ of these strokes are first events
  - ¼ of these strokes happen to people who have already had a previous stroke
- 130,000 Americans die from these strokes annually – that's the equivalent of one every 4 minutes.
- Stroke is the 4th leading cause of death in America
- The most common kind of stroke is one which blocks blood vessels in the brain.
- Stroke at any age - 35% of people who are hospitalized for stroke are under 65.

http://www.cdc.gov/stroke/facts.htm

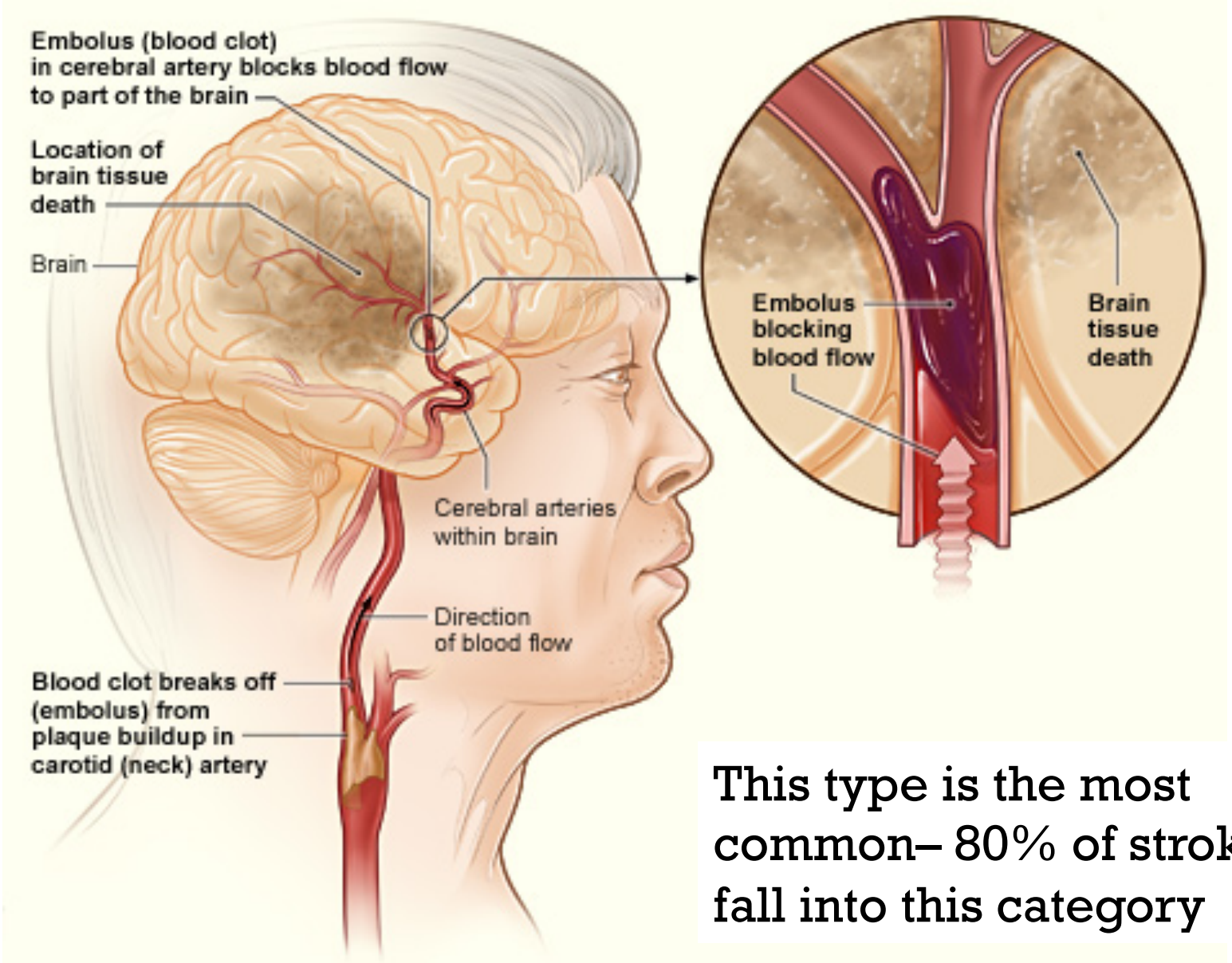
+ Normal Anatomy



Normal Anatomy (cnt'd)



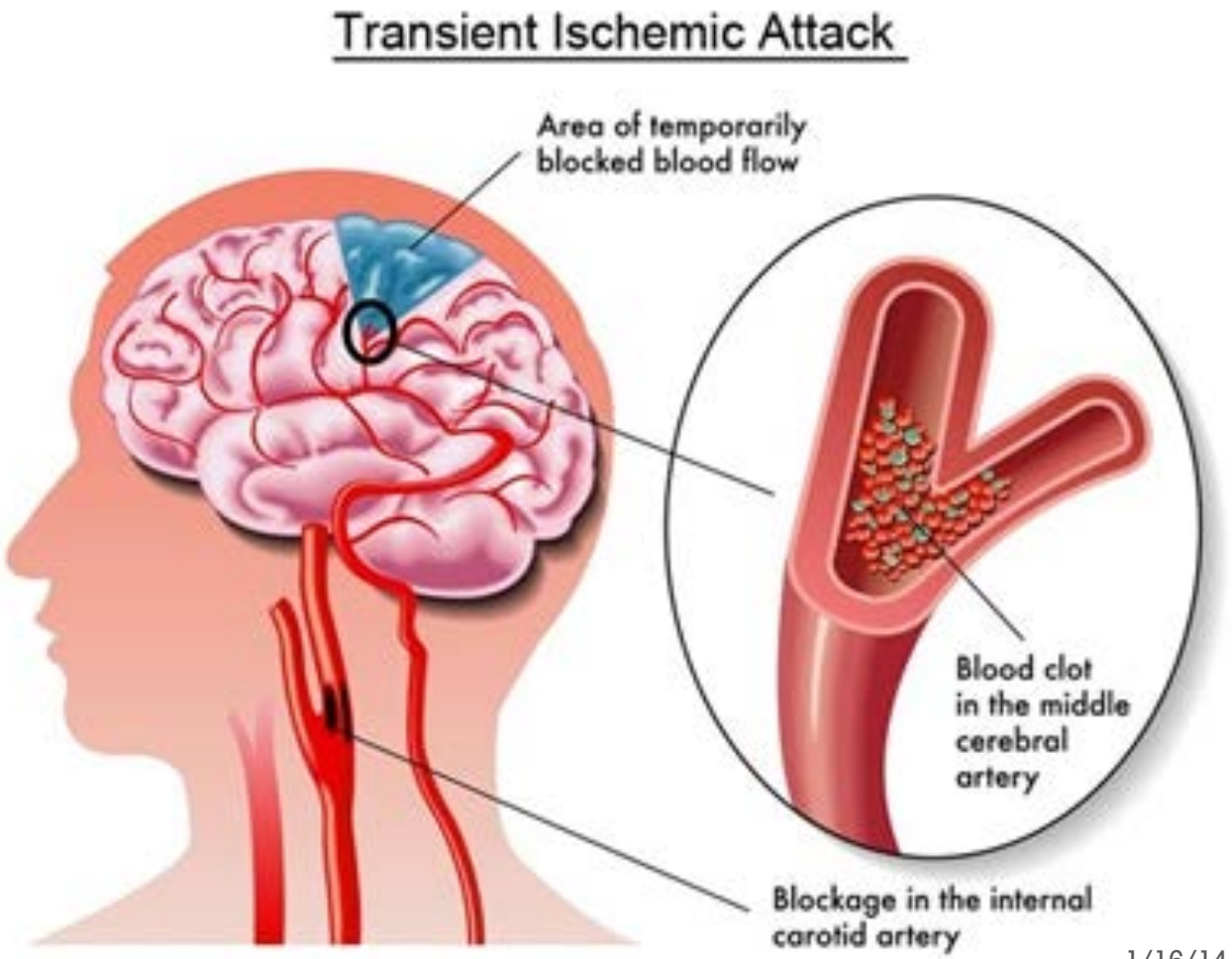
+ Ischemic Stroke



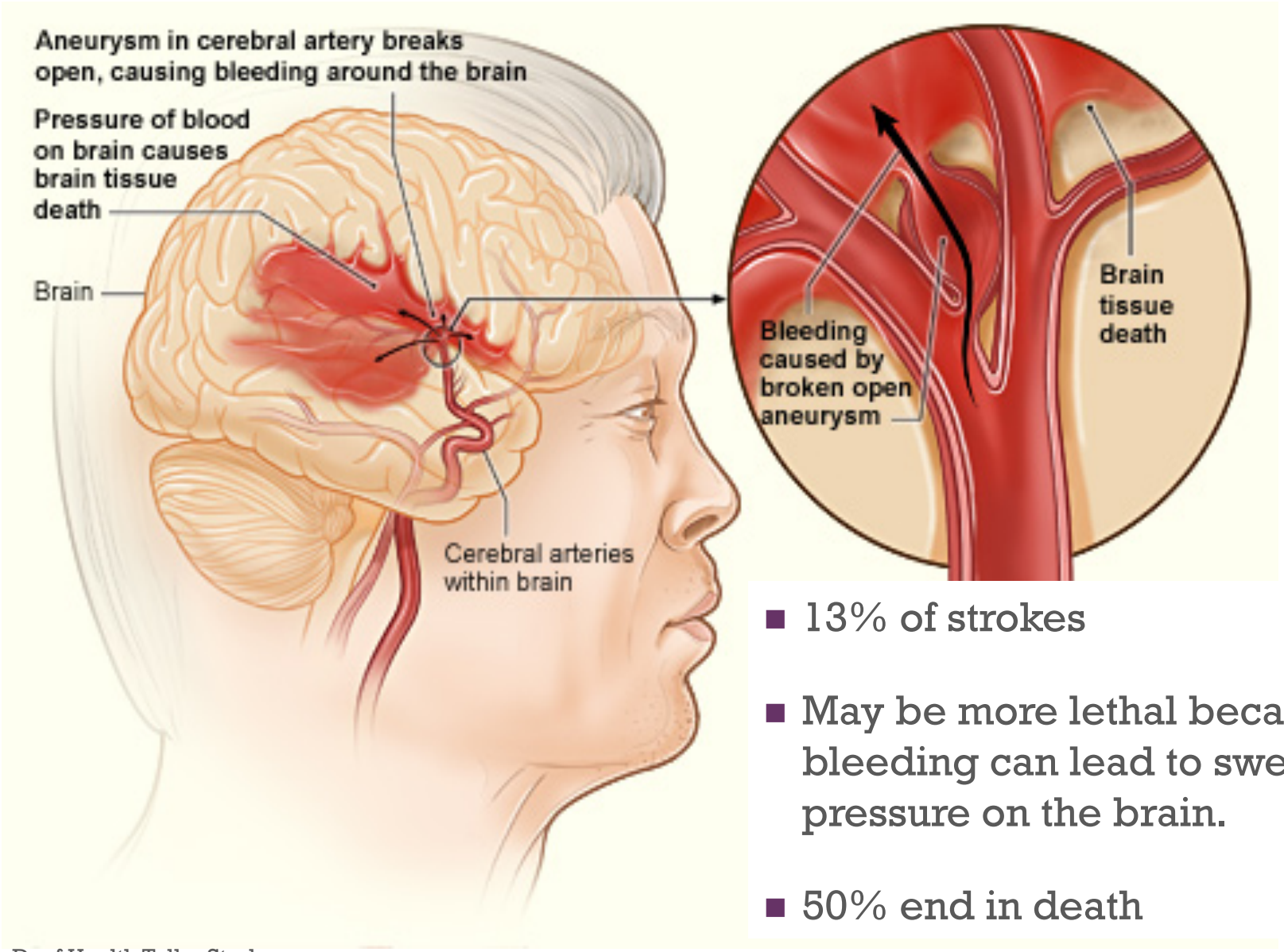
This type is the most common– 80% of strokes fall into this category

Transient Ischemic Attack (TIA) (aka mini-stroke)

- A type of Ischemic Stroke, but the effects are not permanent. May be a WARNING for full stroke.
- 20% of strokes are preceded by a TIA



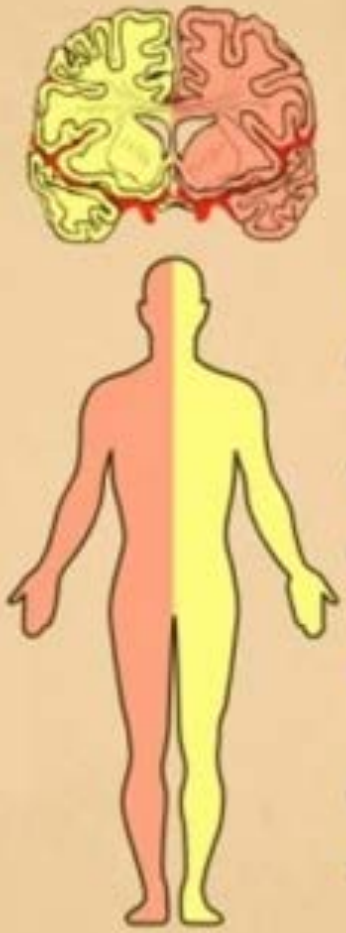
+ Hemorrhagic Stroke



- 13% of strokes
- May be more lethal because bleeding can lead to swelling / pressure on the brain.
- 50% end in death

Stroke Effects

Right brain controls the left side of the body



Left brain controls the right side of the body

Loss of consciousness or coma

The worst headache in your life

Double vision

Loss of vision

Slurred speech or loss of speech

Numbness of face, arm, leg on one side

Weakness of face, arm, leg on one side

Loss of balance or coordination

Giddiness with any of the symptoms

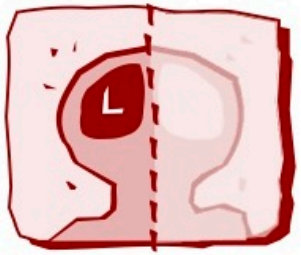
Deaf Specific Effects

Sign Language and Stroke

We created many new tests of sign language comprehension and production.

Here are some of the things we found out with our tests:

- People with strokes on the left side of the brain often have problems with sign language.



- They might not understand signs.

- They might not be able to produce signs.

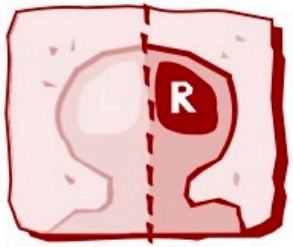
- Some of these people could still use gesture and mime.

These results show that sign language, like speech, is usually processed by the left side of the brain.

Deaf Stroke Project http://www.city.ac.uk/deafstrokes

Deaf Specific Effects

People with strokes on the right side of the brain have fewer problems with sign language.



But, they often find visual tasks difficult

Some could not draw

Some could not recognise faces

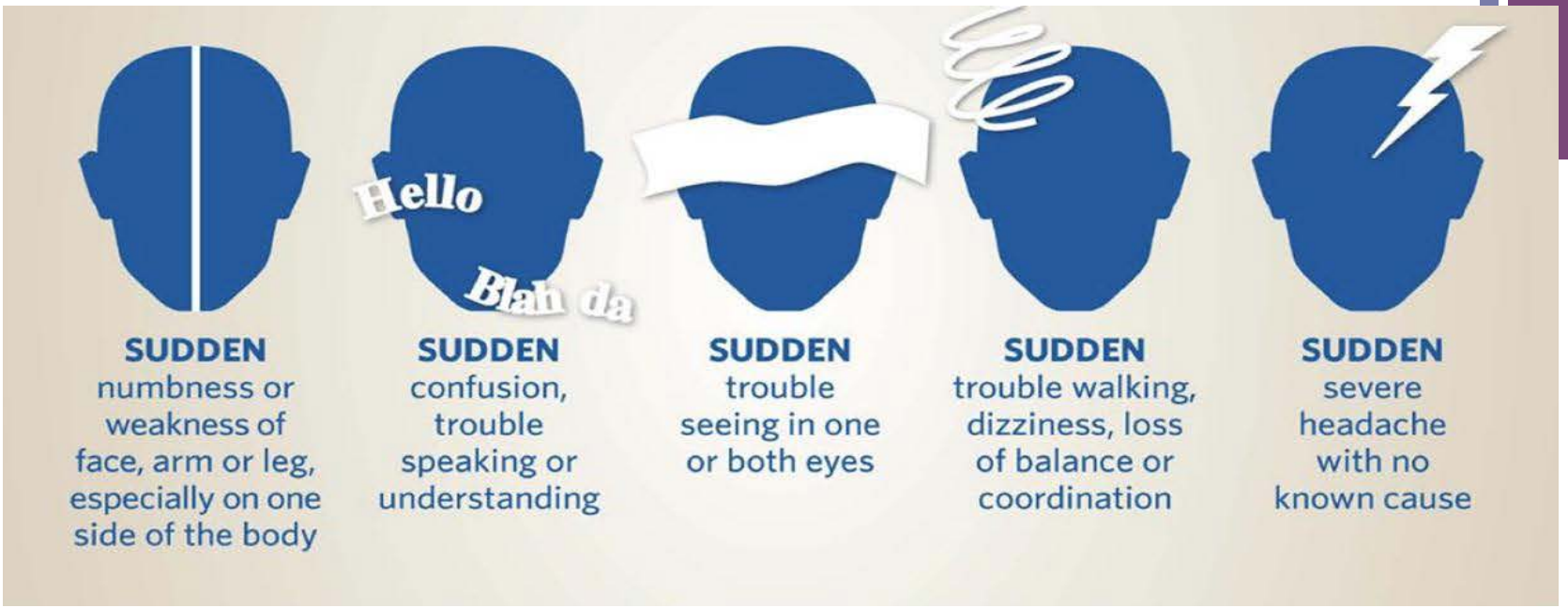
These visual problems affected signing. For example:

Some people missed sign language information on the face. They didn't know if someone was asking a question or making a negative face.

These results show that visual skills of the right side of the brain are important for sign language.

Deaf Stroke Project http://www.city.ac.uk/deafstrokes

Symptoms



- Numbness/weakness on ONE SIDE of the body
- Sudden confusion
- Sudden vision problems
- Sudden dizziness/lack of coordination
- Sudden SEVERE headache and vomiting

Recognize the Warning Signs

http://www.strokeassociation.org/STROKEORG/

+ Acute Treatments

- There is no cure
  - Nothing can regrow brain cells once they have died
  - EVERY SECOND COUNTS - the faster the clot is treated, the less damage there may be.
  - Recovery may be slow as various parts of the brain take over responsibilities
- Urgent Medications
  - Anti-thrombotic therapy, TPA
  - "Blood thinners" and medications like Aspirin, coumadin, etc. which reduce clotting and or break up existing clots
- Surgical
  - Carotid endarterectomy – removing fatty deposits
  - Artery "clips"

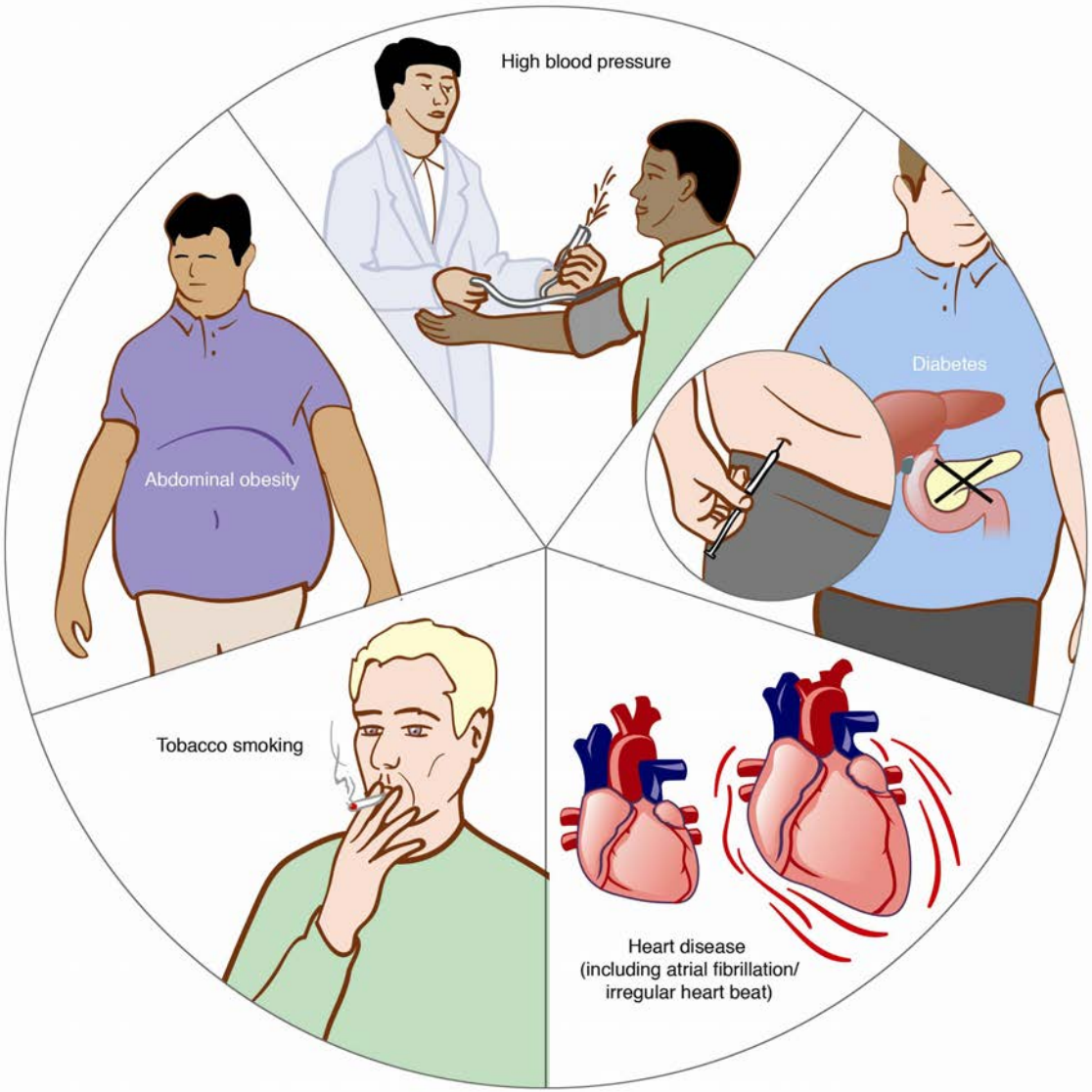
Chronic Treatment / Rehabilitation

- Chronic Medications
  - "Blood thinners" and medications like Aspirin, coumadin, etc. which reduce clotting and or break up existing clots
- Therapy / Rehab
  - Physical therapy – gross movement
  - Occupational therapy – fine movement
  - Speech therapy – swallowing, chewing, etc

+ Prevention


Regular checks
Low sodi
diet
High blood pressure
Heart disease
Risk of strokes

+ Risk Factors for Stroke



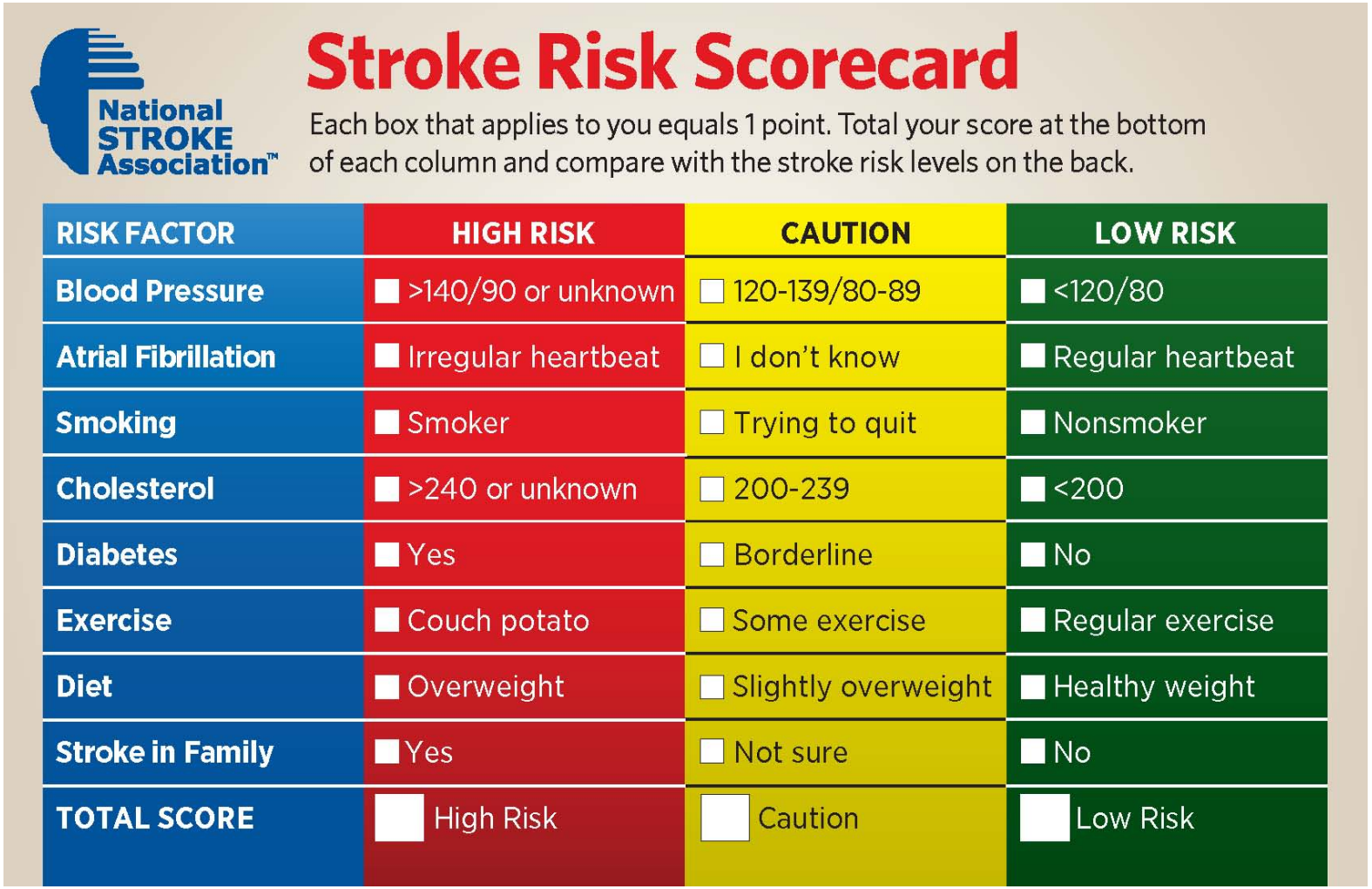
Cardinal Stroke Risk Factors

[CDC blood pressure control video]

What is "Normal"

- Blood Pressure
  - 120/80 or Less. Dangerous at 140/90 or higher
- Total Cholesterol
  - 200 or less. Dangerous at 240 or greater
- Sugar (Fasting Glucose & Hemoglobin A1c)
  - Glucose: 110 or less. Dangerous at 300-500
  - A1c: Less than 5.7%. Diabetes at 6.5% or higher
- Dietary Sodium
  - 2,300 mg per day (healthy); 1,500 or less if you have risk factors for stroke / have had a stroke or heart attack

+ Stroke Risk Scorecard



National STROKE Association™

Stroke Risk Scorecard

Each box that applies to you equals 1 point. Total your score at the bottom of each column and compare with the stroke risk levels on the back.

RISK FACTOR	HIGH RISK	CAUTION	LOW RISK
Blood Pressure	☐ >140/90 or unknown	☐ 120-139/80-89	☐ <120/80
Atrial Fibrillation	☐ Irregular heartbeat	☐ I don't know	☐ Regular heartbeat
Smoking	☐ Smoker	☐ Trying to quit	☐ Nonsmoker
Cholesterol	☐ >240 or unknown	☐ 200-239	☐ <200
Diabetes	☐ Yes	☐ Borderline	☐ No
Exercise	☐ Couch potato	☐ Some exercise	☐ Regular exercise
Diet	☐ Overweight	☐ Slightly overweight	☐ Healthy weight
Stroke in Family	☐ Yes	☐ Not sure	☐ No
TOTAL SCORE	☐ High Risk	☐ Caution	☐ Low Risk

+ Scoring


National STROKE Association™
Risk Scorecard Results
High Risk ≥3: Ask about stroke prevention right away.
Caution 4-6: A good start. Work on reducing risk.
Low Risk 6-8: You're doing very well at controlling stroke risk!

Risk Reduction

To reduce your risk:

- Know your blood pressure. Discuss treatment with your health care provider.
- Find out whether you have atrial fibrillation.
- If you smoke, stop.
- Find out if you have high cholesterol. Discuss treatment with your health care provider.

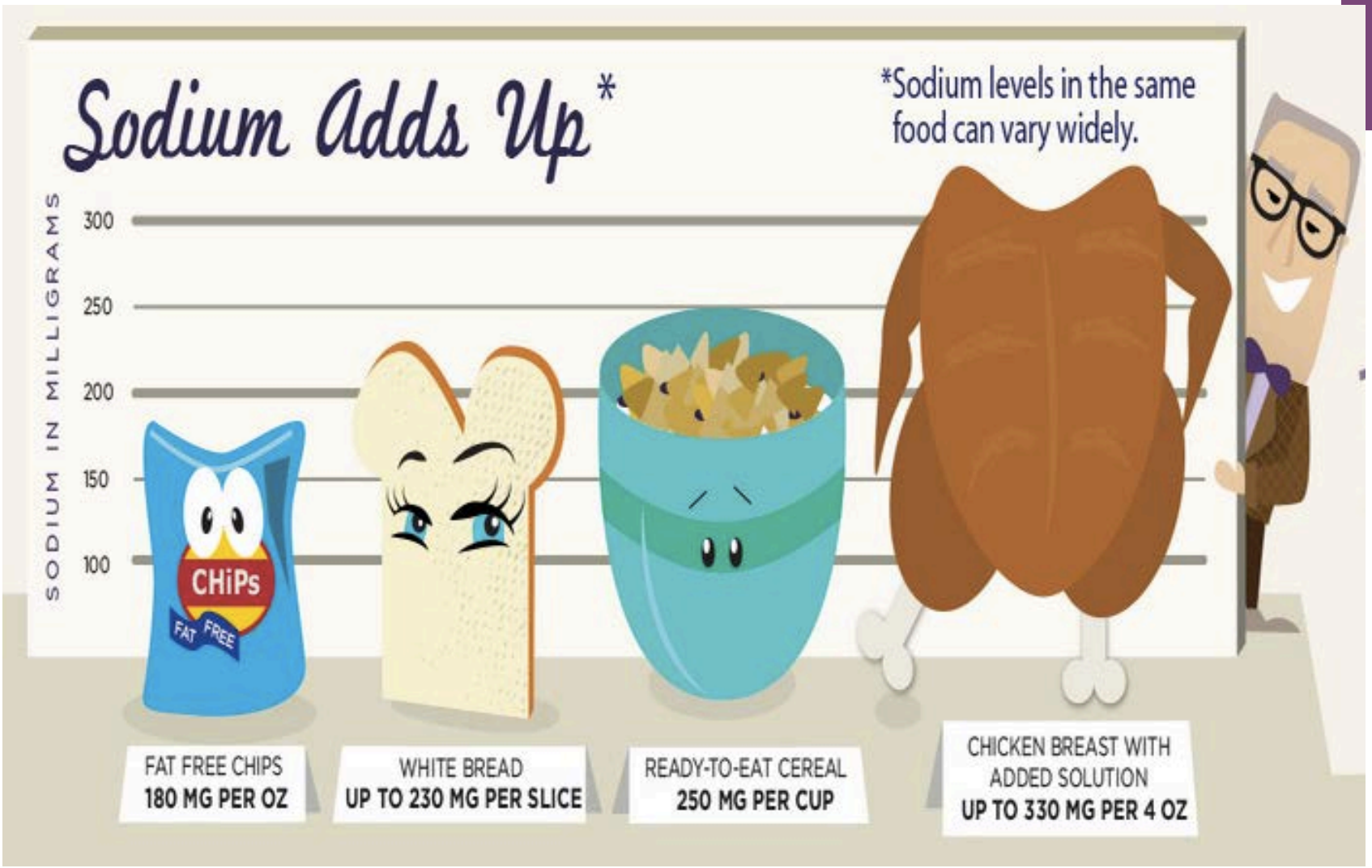
+ Risk Reduction

To reduce your risk:

- If diabetic, follow recommendations to control your diabetes.
- Include exercise in your daily routine.
- Enjoy a lower-sodium (salt), lower-fat diet.
- Reduce alcohol consumption. 1 drink per day for women / 2 for men.
- Avoid cocaine / "crystal meth" and similar drugs – major cause of stroke in young people.

'All I'm saying is you should cut down a bit !'

+ Sodium Sources



http://www.cdc.gov/salt/

Resources

- 28 Days to a Healthier Heart -
  4 plans highlight simple changes to reduce your stroke and heart disease risks

  http://www.cdc.gov/salt/healthy_heart_tips.htm

- Medline Plus – a service of the National Institutes of Health –
  Online interactive tutorials about various illnesses, tests, etc. Stroke and MUCH more can be found here.

  http://www.nlm.nih.gov/medlineplus/tutorials/

- Centers for Disease Control –
  Statistics, explanations and health promotion materials

  http://www.cdc.gov/stroke/

- American Stroke Association / American Heart Association –
  Many resources about stroke and heart disease

  http://www.strokeassociation.org/STROKEORG/

Ongoing Research

If you or somebody you know is a Deaf ASL signer who has had a stroke or other brain injury.

OR

If you are a Deaf, Senior ASL signer, please contact us!

Ways to Contact Us:

E-Mail:

DeafStroke@salk.edu

Video Phone:

866.847.8959

Visit Our Website:

www.lcn.salk.edu/asl

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SALK INSTITUTE

Laboratory of Cognitive Neuroscience

If selected to participate, you will be compensated; the first meeting can take up to an hour with the possibility for further contact. Any information obtained about you during your participation in our studies is confidential.