

Division of  
Rehabilitation  
Services



Providing  
Vocational  
Rehabilitation  
Services  
to Persons  
With a  
Sensory  
Disability.

Deaf

Hard of hearing

DeafBlind

Blind

Visually Impaired

# Population definition - Hearing Loss

- D/deaf = Person may or may not have residual hearing. This includes persons who rely on residual hearing and speech to communicate and those who use sign language to communicate. Persons who are Deaf refers to persons who are part of Deaf culture.
- Hard of hearing = Person has some residual hearing. This person typically does not use sign language to communicate but relies on written text and residual hearing to communicate with others. Many late-deafened individuals fall into that category.
- DeafBlind = Person has a combination of BOTH vision and hearing loss. These persons have varying degrees of residual vision and hearing. Some DeafBlind individuals rely on residual speech and hearing to communicate. Others utilize Braille. Then there are those who use various types of tactile communication to obtain information about the environment

**\*NOTE: for the purpose of this presentation, Deaf persons are used to refer to all of the above populations**

# Poll question #1

In the U.S, what percent of the population has a hearing loss?

1%

20%

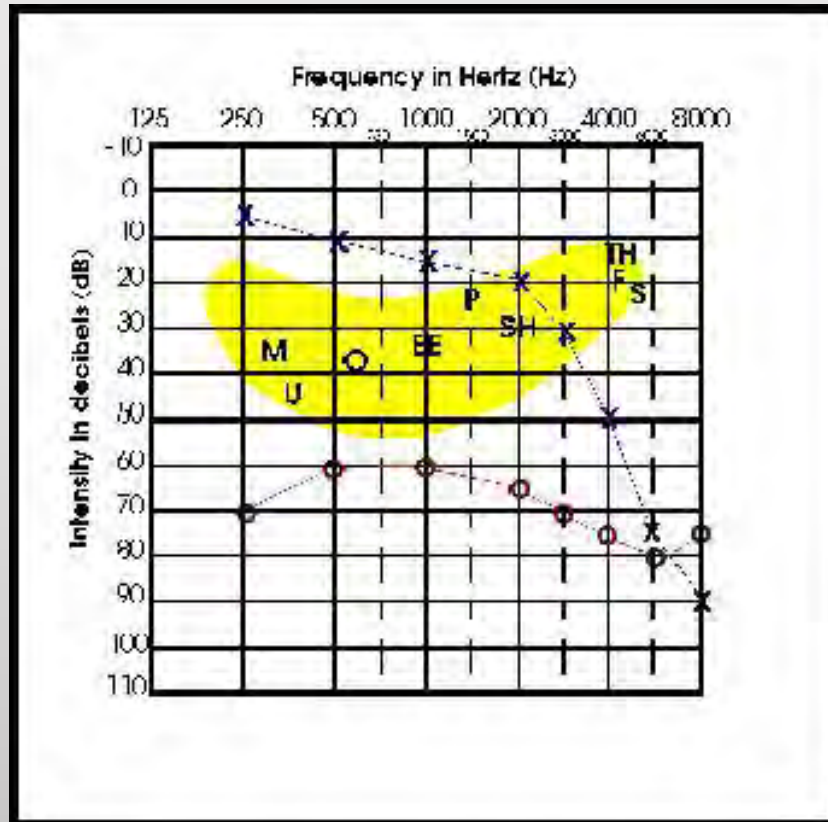
13%

And the answer to poll  
question 1 is.....

# Hearing loss & age

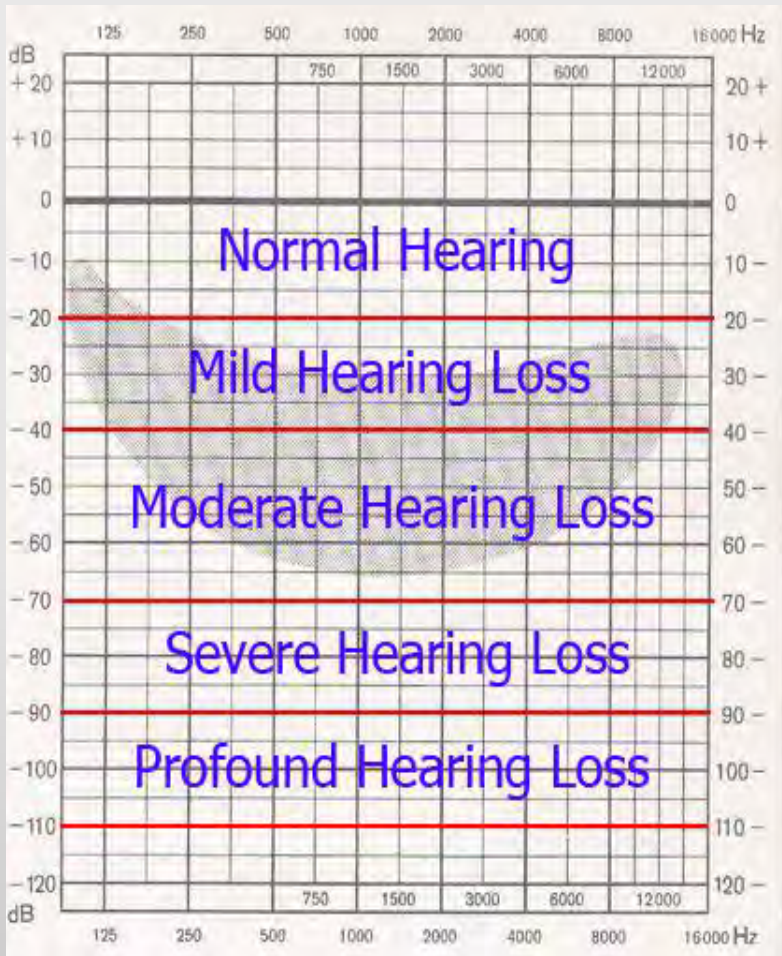
- Thirteen percent (13%) of the population has some form of hearing loss.
- Twenty percent (20%) of persons in their 20's have hearing loss. This is often caused by working around machinery without ear protection or listening to loud music. This will worsen with age.
- Twenty-five (25%) of persons 65+ have hearing loss.

# What is a hearing loss



A hearing loss is plotted on an audiogram with the frequency (pitch) along the horizontal axis, and decibel loss (severity) along the vertical axis.

- A line is drawn along the graph for each ear. Anything above the lines is inaudible. There are "levels" of deafness ranging from slight (16-25 db loss) to profound (91 db loss or more).
- Blue "X line" is the left ear
- Red "O line" is the right ear



The chart next to this shows an audiogram. The area in gray is known as a “speech banana”.

The person’s ability to hear depends on the degree of the hearing loss.



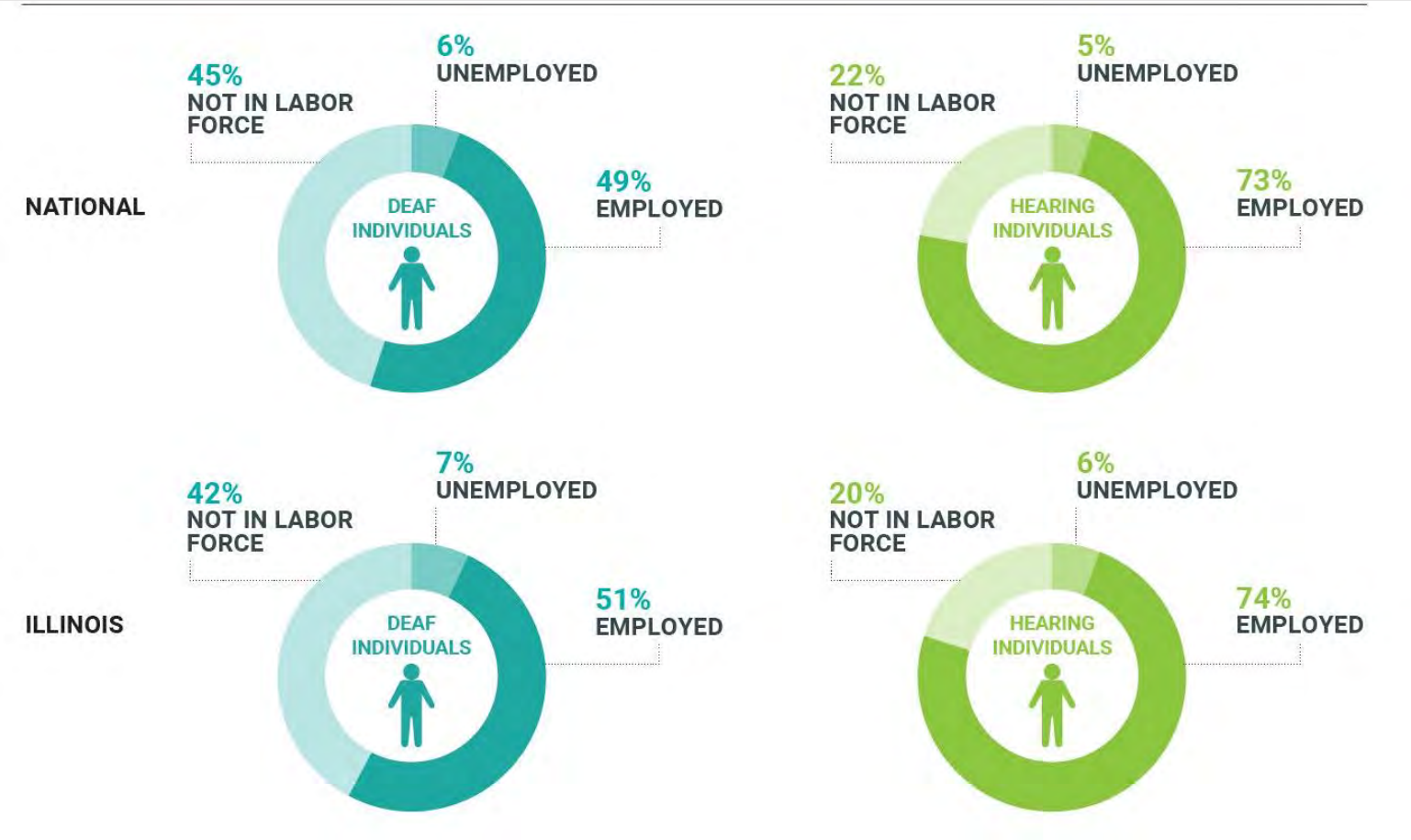
# Deaf persons and employability

- Deaf individuals have higher unemployment rates than hearing counterparts
- This is true, regardless of gender, ethnicity, and age
- Post-secondary training shows that the employment gap is reduced by the attainment of a certificate, degree, or diploma.

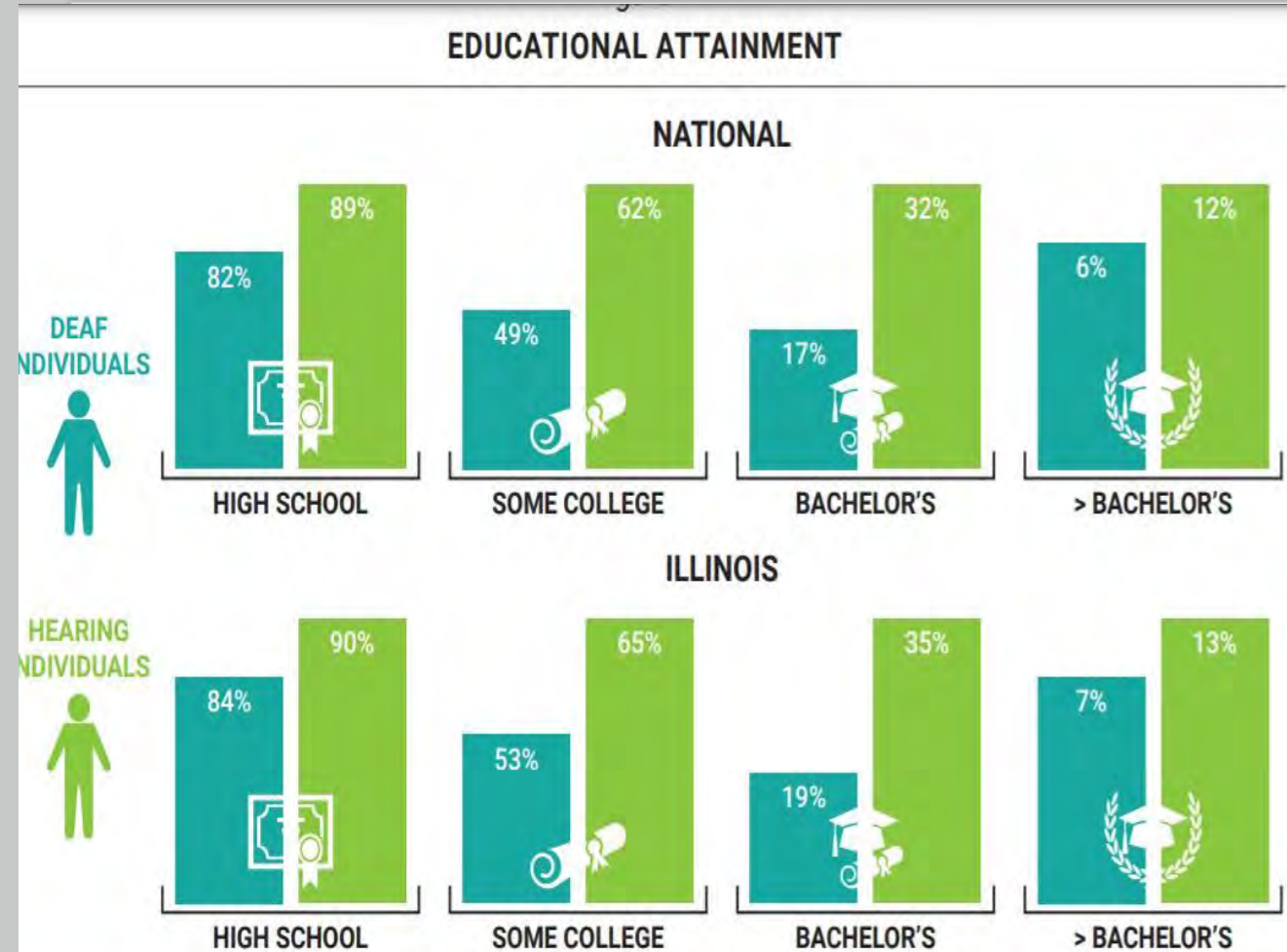
The next 3 slides use data taken from the National Deaf Center

<https://www.nationaldeafcenter.org/resource/state-reports-postsecondary-achievement-deaf-people>

# Employment rates in Illinois (2017)

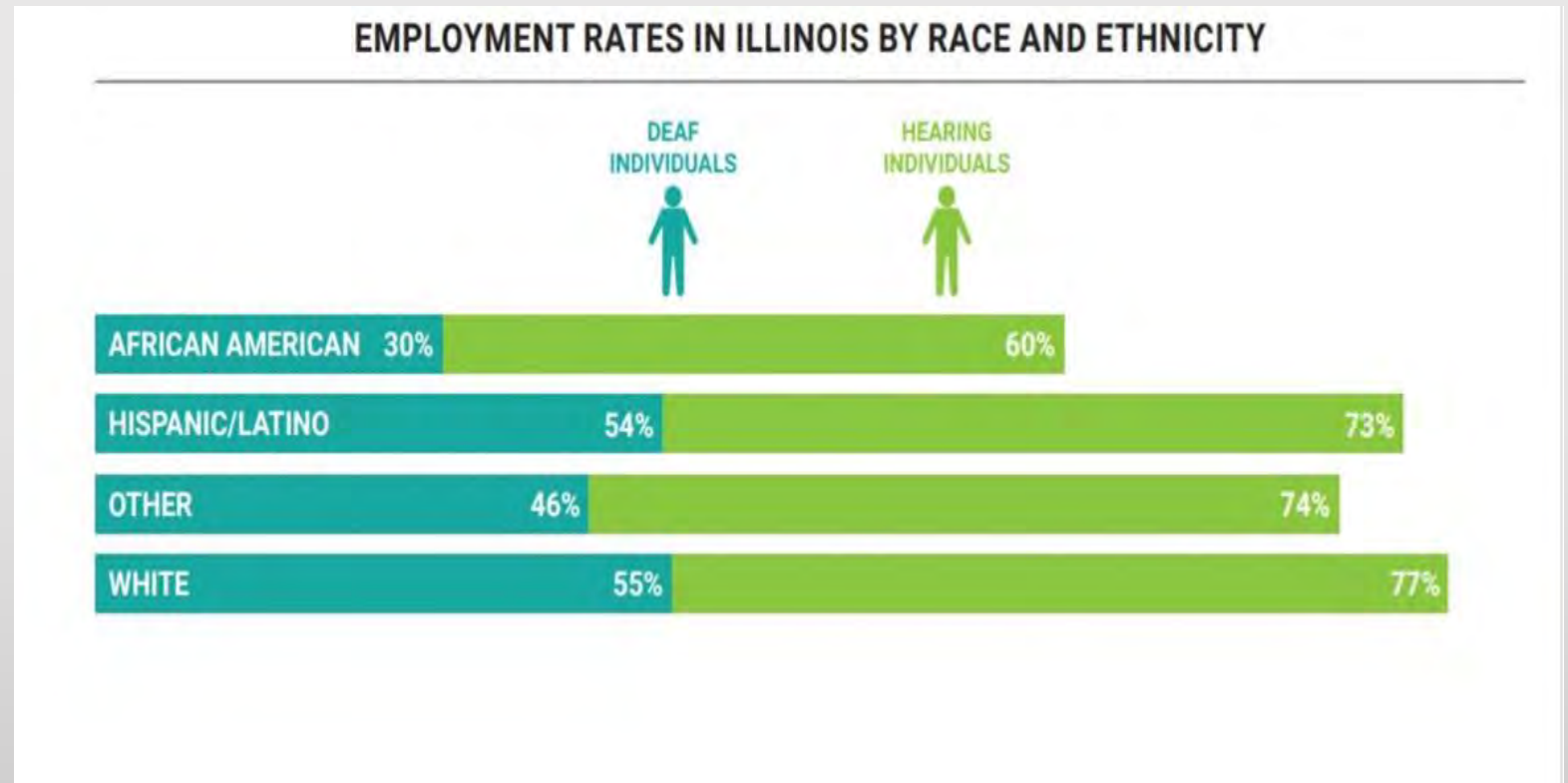


# Educational attainment (Illinois v. National)



In this report, we use the term *deaf* in an all-encompassing manner to include individuals who identify as Deaf, hard of hearing, hearing impaired, late deafened, and deafdisabled.

# Educational attainment by race and ethnicity in Illinois



## Poll question #2

What employment setting is best for persons with a hearing loss?

Professional and clerical (white collar)

Service settings (pink collar)

Trade settings (blue collar)

Any of the above

And the answer to poll  
question 2 is.....

# Any of the above

(picture of people in various jobs)



# Services to persons who are Deaf and Hard of Hearing (SDHH)

What are some of the things we do?

- Provide technical assistance to VR field staff and administrators
- Disseminate information to field staff members who work with our customers who have a hearing loss
- Share recommendations as to what can be used to provide communication accessibility to customers, whether it is for postsecondary training or in the workplace.
- Seek and develop resources that can be utilized by our customers and counselors who work with this population



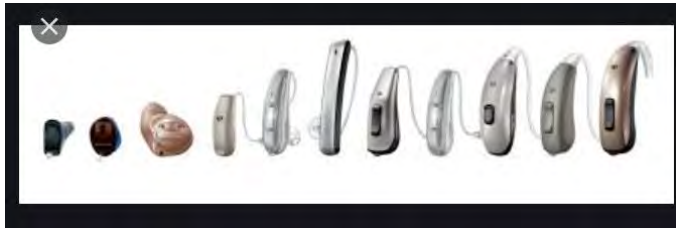
# Rehabilitation Counselors for the Deaf (RCD's)

- Aurora
- Avalon Park
- Bloomington
- Champaign-Danville
- Chicago Heights
- Downers Grove
- Elgin
- Emerald City
- Ford City
- Hiawatha
- Humboldt Park
- Jacksonville (2)
- Joliet-Kankakee
- LaSalle
- Murphysboro
- North Pulaski

## RCD's (continued)

- Olney
- Peoria-Pekin (vacancy)
- Quincy
- Riverbend (East Alton)
- Rock Island
- Rockford
- Rolling Meadows (2)
- Springfield
- Sterling
- Waukegan

# Hearing aids



- Many different styles and sizes are available.
- May be recommended for pairing with other devices
- DRS can provide funding for hearing aids (and accessories) with a vocational justification



## Assistive listening devices

- May be stand-alone or integrated with other devices
- May be individualized to meet customer's listening needs
- Can be a listening system or be used for the workplace (i.e., amplified stethoscope)
- DRS can pay for an audiologist to visit the workplace and make recommendations

## Communication accommodations

- Interpreters must be licensed to work in Illinois
- Interpreter must possess appropriate certification
- DRS may provide support for training, interviews, new employee orientation and up to 90 days post-employment





# Speech-to-Text Services

## How is this done?

---

- Automatic Speech Recognition (ASR) software
- Live transcriber
- Apps available on Android and Apple devices
  
- There is no one-size-fits-all solution. It depends on the users' hearing needs, what is being communicated, and where it is taking place. SDHH can provide guidance.

# Alerting devices (work and home)

We can provide recommendations and ideas to keep customers who are prospective employees safe at work. This can be anywhere from installing flashing lights on the forklift. (Workplaces are noisy – this benefits hearing employees, too)

We can purchase alarm clocks that are designed to either vibrate or flash when it is time to get up.

Tips on ways to communicate can be provided to the customer and the employee.

Who does the accommodation benefits most?

The employee requesting the accommodation

The employer

Co-workers

Everyone

Poll question  
#3



And the answer to poll  
question 3 is.....

# Everyone benefits when a co-worker is provided with a reasonable accommodation

(Picture of the word unable with a scissors cutting the “un” off)



# Population definition

## Vision Loss

- Totally Blind = a person who has complete loss of sight
- Legally Blind = a person who has a central visual acuity of 20/200 in their best-seeing eye with correction and a visual field no great than 20 degrees.
- Low vision = a person who has a visual acuity of 20/70 or poorer in the better-seeing eye which cannot be corrected

\*NOTE: for the purpose of this presentation, blind persons are used to refer to all types of vision loss

# What percent of Adult Americans report a vision loss?

- 3%
- 13%
- 33%



And the answer to poll  
question 4 is.....

# Number of Adult Americans with a vision loss

This is 13% of all adult Americans

32.2 million adult Americans reported vision loss

Findings from the 2018 National Health Interview Survey:

These people reported that they have trouble seeing even when wearing glasses or contacts, or that they are unable to see at all

# Types of vision loss

(the images show normal vision and what is seen with the vision loss )

## Macular Degeneration

a condition affecting the central part of the retina (the macula) and resulting in distortion or loss of central vision.



## Retinitis Pigmentosa

a chronic hereditary eye disease characterized by black pigmentation and gradual degeneration of the retina



# More images of types of vision loss

(Glaucoma shows normal vision and vision what can be seen with the vision loss.  
Stargardt's shows vision with the disease )

## Glaucoma

a condition of increased pressure within the eyeball, causing gradual loss of sight.



Normal Vision



Glaucoma

## Stargardt's Disease

a genetic eye disorder that causes progressive vision loss.





# More images showing what is seen with different types of vision loss....

**Legally blind**



**Peripheral vision loss**



# Vocational Rehabilitation (VR)

- Vocational Rehabilitation is a federal-state program that helps people who have physical or mental disabilities obtain and maintain competitive integrated employment
- A person with a disability receives individualized services which assist them in reaching their employment goal.
- VR is committed to working with employers to promote hiring individuals with disabilities.

# Division of Rehabilitation Services

## The Three Bureaus of DRS

- Home Services Program provides a wide range of services to individuals with the most significant disabilities to enable them to remain in their homes and live as independently as possible
- Bureau of Field Services assists individuals with disabilities, other than vision loss, in preparing for, obtaining and maintaining quality competitive employment
- Bureau of Blind Services assists individuals with vision loss in preparing for, obtaining and maintaining quality competitive employment

- The BBS team provides a wide variety of vocational rehabilitation (VR) services to individuals who are blind. Blind people receive individualized services to assist them in obtaining and maintaining employment. The team is comprised of:
  - Rehabilitation Counselors for the Blind
  - Rehabilitation Instructors
  - Orientation and Mobility Specialists
  - Rehabilitation Coordinators

## Bureau of Blind Services (BBS)

# Blind people and Employment

## Annual Labor Force Participation Rate

	2020	2019	2018	2017	2016	2015	2014
<b>Ages 16-64</b>	40%	41%	43%	39%	34%	34%	35%
	(74%)	(74%)	(74%)	(74%)	(73%)	(73%)	(73%)
<b>Ages 16+</b>	23%	24%	25%	23%	19%	20%	21%
	(63%)	(64%)	(64%)	(64%)	(64%)	(63%)	(64%)

Numbers not in parentheses are estimates for people with visual impairment. Numbers in parentheses are estimates for people without visual impairments.

The Current Population Survey is a monthly survey of a representative sample of the civilian.

# Which jobs can a blind person do?

- Auto mechanic
- Teacher
- Chef
- Judge
- Engineer
- Factory worker
- Lawyer

- Doctor
- Customer service representative
- Architect
- Piano tuner
- Writer
- Coach and athlete
- Packager

And the answer to poll  
question 5 is.....

# All of the above

**Haben Girma - DeafBlind lawyer**

**\*image of woman wearing ponytail while using refreshable Braille**



**Tracy Starek - Blind teacher**

**\*image of woman standing in front of a blackboard**





# Common devices and equipment used by blind people



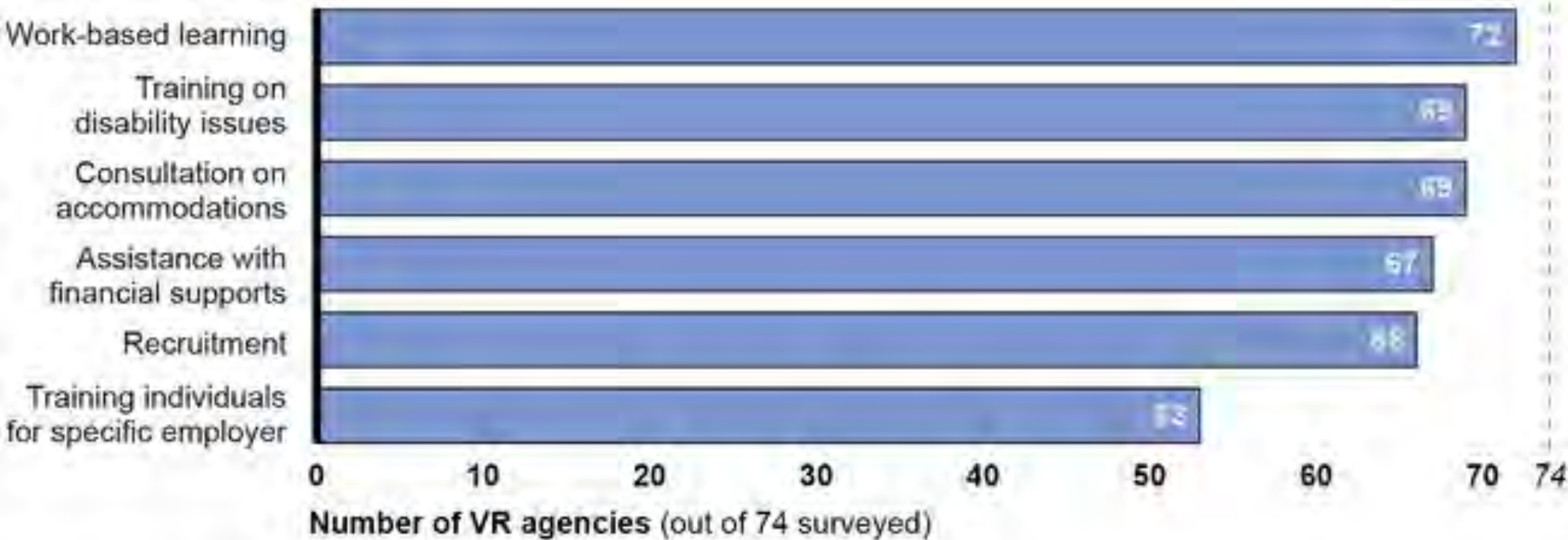
- Optical Character recognition (OCR)
- Handheld magnifiers
- Screen magnification
- CCTS's (closed circuit televisions)
- Screen Readers
- JAWS
- Voice Recognition Software
- Braille display

(images of various devices shown)

# Employers and BBS collaboration

- BBS provide disability awareness training to Employers; human resource representatives, supervisors, and co-workers. Training can be specific to the business industry or general. Typical components of training include:
  - Myths and realities of blindness
  - Vision loss in the workplace
  - Communication methods used by blind people
  - Devices and equipment used by blind people

# Types of Employer Services Provided by Most State VR Agencies



Source: GAO survey of vocational rehabilitation (VR) agencies. | GAO-18-577

# Fact or Fiction ?



The canes used by blind people are white with a red stripe as a result of a recommendation made by George Bonham from Peoria Illinois?

And the answer to poll  
question 6 is.....

# Fact

White canes are white because of [George A. Bonham](#). In 1930, Bonham, president of the Peoria Lions Club (Illinois), watched a man who was blind attempting to cross a street. The man's cane was black and motorists couldn't see it, so Bonham proposed painting the cane white with a red stripe to make it more noticeable. The idea quickly caught on around the country.

## Additional facts:

- Most people who are visually impaired don't use a white cane. In fact, only an estimated 2 percent to 8 percent do. The rest rely on their useable vision, a guide dog or a sighted guide.
- There are three different kinds of white canes. The standard mobility cane, used to navigate. The support cane, used by people with visual impairments who also have mobility challenges. And the ID cane, a small, foldable cane used by people with partial sight to let others know they have a visual impairment.

Please contact us to discuss future collaboration. We look forward to meeting with you.

Cartoon picture of man working on a laptop



Christina Pean, SCD

DHS-DRS

100 South Grand Avenue East; Springfield, IL 62794

[Christina.Pean@Illinois.gov](mailto:Christina.Pean@Illinois.gov)

[DHS.DRSSDHH@Illinois.gov](mailto:DHS.DRSSDHH@Illinois.gov)

217-717-9112 (P)

Ingrid Halvorsen, ABC

DHS-DRS

100 W. Randolph, #5-300; Chicago, IL 60601

[Ingrid.Halvorsen@Illinois.gov](mailto:Ingrid.Halvorsen@Illinois.gov)

[DHS.DRSBBS@Illinois.gov](mailto:DHS.DRSBBS@Illinois.gov)

217-299-8008 (V)

312-957-4881 (VP)