



Teresa Thompson, MA CCC-SLP Clinical Education Manager, Lingraphica teresa.thompson@lingraphica.com



Krista Davidson, MS, CCC-SLP Clinical Professor, University of Iowa Co-Chair of the Disaster Relief Committee for USSAAC krista-davidson@uiowa.edu



Department of Communication Sciences and Disorders



## **Disclosures**

#### Financial:

Krista Davidson is an employee of The University of Iowa. She is also the inventor of RescueVoice and receives a percentage of its sales.

Teresa Thompson is an employee of Lingraphica and thereby receives financial compensation from the Lingraphica Company.

#### Non-Financial:

Krista Davidson is Co-Chair of the Disaster Relief Committee for USSAAC.

#### **G** Lingraphica<sup>®</sup>

3

## **Course Resources**



https://lingraphica.com/course-resources-emergency-preparedness/

## **Learning Objectives**

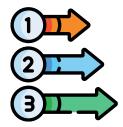
- Recognize the role SLPs play in educating and preparing clients for emergencies and disasters
- State at least two strategies to help prepare AAC users for emergencies
- · Identify three key elements used in the training of first responders about AAC
- Describe two resources available to aid in communication during times of crisis

#### **G** Lingraphica<sup>®</sup>

5

# Agenda

- Defining the Why
- Preparing our Clients
- Preparing our Community
- Resources
- Conclusion



# **Defining the Why**

#### **Eingraphica**°

7

## Access to AAC in Emergencies is Essential



- Individuals who can benefit from communication tools MUST have access to them in emergency situations
- Disaster plans are not designed for people with AAC needs



**G** Lingraphica<sup>®</sup>

(Boesch et al, 2022; DePew et al, 2022; Quinn et al, 2010)

## **Increased Risk**

- AAC users are more susceptible to adverse events during emergencies
- Compared to those without a disability, individuals with disabilities are:
  - 2-4 times more likely to die or be critically injured during disaster situations
  - 4-10 times more likely to become a victim of a crime



#### **Key Standard Lingraphica**®

(Quinn et al, 2010; Sisson, 2023)

# **Insight from AAC Users**

- AAC users who requested assistance during Hurricane Harvey surveyed to gain perspectives
- Results indicated people who use AAC and their families were unprepared prior to the disaster and did not have the necessary resources during and after the disaster.
  - Loss of AAC tools severely impacted their daily lives and the lives of their families



(Boesch et al, 2022)

#### **Kingraphica**°

9

## **Survey of AAC Users after Hurricane Harvey**

#### **Preparation:**

8%	prepared before Hurricane Harvey
69%	report having or working on a plan after Hurricane Harvey
31%	still did not have a plan
0%	of respondents had practiced their plan

#### Impact:

Issues impacting AAC user's ability to communicate after disaster

85%	Lost or damaged communication system
38%	Lack of vocabulary on their communication system relevant to the situation

#### **Kingraphica**°

(Boesch et al, 2022)

11

## **Recommendations from AAC Users**



## **Eingraphica**°

(Boesch et al, 2022)

## **Things to Consider: Our Clients**

During an emergency people who use AAC may:

- Be separated from their device
- Not have access to a power source to keep device charged
- · Have a device that was damaged in the emergency
- · Be separated from family/communication partners
- Need to communicate with first responders



#### **Kingraphica**°

13

## Things to Consider: Our Community

#### **First Responders**

- Need to know how to communicate with those who use AAC
- May have limited background knowledge of different disabilities and their corresponding communication demands
- Have not had information on this topic widely shared with them



(DePew et al, 2022; Quinn et al, 2010)

It is crucial for people who use AAC and their families, as well as professionals and other key stakeholders, to address directly disaster preparedness to help mitigate against some of the challenges people who use AAC are likely to encounter.

- Boesch et al, 2022

#### **G** Lingraphica<sup>®</sup>

15

## **Preparing our Clients**

## **Disaster Preparedness: Group Poll**

Do you have a disaster preparedness plan in place?

Are you currently addressing disaster preparedness in treatment?

#### 🛃 Lingraphica®

Have you attended any presentations on AAC and emergency preparedness before?

Do you feel disaster preparedness falls within our scope of practice?

#### 17

# **SLP Scope**

- It is within an SLP's scope of practice to advocate for AAC users and educate others
- It's important for SLPs to work with people who use AAC and their families to actively engage in disaster preparedness
- Emergency preparedness activities should be person-centered and account for individualized communication needs

   Proceed from the viewpoint of the person who uses AAC

**Eingraphica**®

(Quinn et al, 2010; Boesch et al, 2022, Barton-Hulsey, 2024)

## **Preparing Our Clients**

- Light tech alternatives
- AAC Go Bag
- Practice communicating in an emergency and with first responders
- Role play
- Add disaster preparedness goals to your treatment plan

## **Cingraphica**°



(Boesch et al, 2022)

19

# **USSAAC Disaster Relief Committee**

United States Society for Augmentative and Alternative Communication (USSAAC) Disaster Relief Committee (DRC)

- Established after Hurricane Katrina
- Goal of helping people who use AAC impacted by the disaster and their families
- Has responded to disasters including Hurricanes Harvey, Maria, and Irma, and the Marshall Wildfires
- Partners with USSAAC members, other professionals, disabilityrelated organizations, and government

#### **Eingraphica**°

(Boesch et al, 2022)

# **Disaster Preparedness Tool from USSAAC**

"Disaster Preparedness for People Who Use AAC"

- Created to help AAC users and their families prepare for disasters
- Free toolkit that contains suggestions, sample plans, and tasks that users should complete to be ready for a wide range of disasters
- AAC user selects a "disaster partner" who also receives the texts and supports the person who uses AAC during a disaster
- Upon completion, AAC user and family have concrete actions they can take in event of a disaster

## 🖪 Lingraphica<sup>®</sup>

(Boesch et al, 2022)

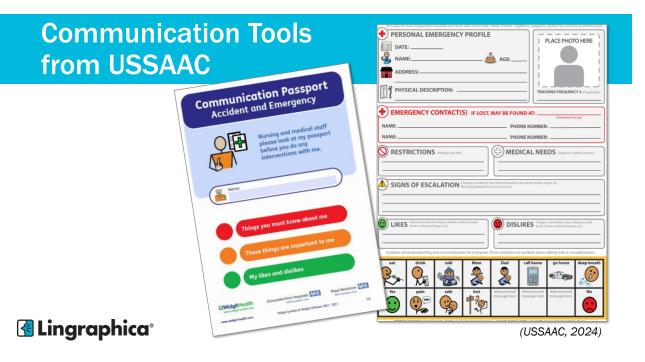
21

# **USSAAC Text-Based Plan**

A text or email will be sent every 3 days for 21 days with the following areas of focus:

- Sign up for emergency alerts
- Health and communication aspect of preparedness
  - Communication Passport
  - Communication Boards
- Go Bag
- Development and practice of Emergency Plan





23

# What's in the AAC Go Bag?

- · Contact and warranty information for device manufacturer
- Serial number of device
- Back-up communication tools
  - Laminated alphabet board, communication board, communication passport
  - · Laminated copies of SGD Displays
  - Consider vocabulary related to special health considerations, need to communicate with unfamiliar people
  - · List of medications
  - · Contact information for support team
  - · Pictures/names of family members and pets
- Back-up charger, portable power bank



## **Special Considerations for AAC Systems**

- Backups establish a schedule
- Tag AAC System with laminated or waterproof label in case it gets separated
- Laminate a picture of user using the AAC system, especially if it requires special positioning or mounting



**Kingraphica**°

(Zangari, 2017; Boesch et al, 2022)

25

## **Integrate Into Therapy**

- Practice social narratives with clients about emergencies and disasters
- Provide training to family on how to help client during disaster
- Create disaster-specific vocabulary to ensure effective communication before, during, and after disaster
  - Consider regional and global vocabulary needs as different regions are prone to different weather-related disasters

#### **Eingraphica**°

(Boesch et al, 2022)

## **Example Goals**

• Long-Term Goal: Client will communicate effectively in an emergency or disaster with both familiar and unfamiliar communication partners

#### Sample Short-Term Goals:

Client will complete an emergency minimum assistance (i.e. two or fewer verbal prompts) with a familiar communication partner with 90% accuracy

#### **K** Lingraphica<sup>®</sup>

Without prompts, the client will share the emergency communication profile with communication profile with least 3 role-play scenarios a familiar communication partner in 3/3 opportunities

Client will use a communication board in at communication board in a with a familiar communication partner in 2/3 trials

Client will use a role-playing scenario with an unfamiliar communication partner in 4/5 opportunities

(Boesch et al, 2022)

## **Recommendations for SLPs**

- Sign up for the USSAAC toolkit and become familiar!
- Integrate into therapy sessions
- · Modify to meet cultural, linguistic, technological and other needs
- Reach out to first responders
  - Introduce client and family to locally available resources
  - Increase first responder awareness

#### **G** Lingraphica<sup>®</sup>

(Boesch et al, 2022)

27

# **Preparing Our Community**

## **Eingraphica**°

29

## We Are Part of the Solution!

- SLPs with expertise in AAC must lead the charge to educate first responders about communicating with people who use AAC
- What does this mean?
  - Awareness activities
  - Resources and materials
  - Presentations and outreach

## **Iowa's Training Presentation Outline**

- What is AAC?
- Who uses AAC?
- Images of communication systems and videos of people using speech generating devices (SGDs)
- · How to be a good communication partner
- · Hands-on experience with SGDs
- Communication boards
- · Role play scenarios
- · Group discussion and questions

#### **K** Lingraphica<sup>®</sup>



(Rang & Mankey, 2019)

#### 31

## **Role Play Examples**

- 12-year-old autistic child at a local park is suddenly unable to stand • Her caregiver didn't see what happened
  - $\circ\,\mbox{The child left their communication device at home}$
  - $\circ\,\mbox{She}$  jumped from a play structure and her ankle can't bear weight
- 78-year-old man with aphasia is on the bathroom floor
  - $_{\odot}$  His wife was downstairs at the time of the incident
  - $_{\odot}$  His personal communication board does not have the needed vocabulary
  - $\circ$  He fell in the shower; he has a history of cardiac issues

## **Iowa's Training In Action**



## **Eingraphica**<sup>®</sup>

33

# Challenges

- · Gaining initial interest from departments
- Scheduling conflicts
- Zoom trainings limit the trainers' interactions with trainees, particularly during role-plays
- · Variation in departments' ideal vocabulary
- Trainers were not aware of specific vocabulary needs of the department until after the training

## **Successes**

- · Increased student involvement and community outreach
- More presentations due to word-of-mouth and personal connections
- Development of RescueVoice app
- State and national poster presentations (ISHA, ASHA)
- · Positive feedback from participants

## **Eingraphica**°

35

Thank you so much for coming to the department and presenting to us...I heard nothing but praise from everyone in attendance and a bunch of us actually had a pretty long conversation after our meeting...about how to implement the information you gave us and how we can further improve our communication skills on each call we have. This is definitely something that wasn't on our radar before this training and the department as a whole sees this as a very important skill set to keep working on.

We put a set of the boards you gave us into each one of our trucks so we can be prepared to use them at a scene if needed. Please keep up the good work and I will spread the word to neighboring departments about it.

#### **Eingraphica**°

37

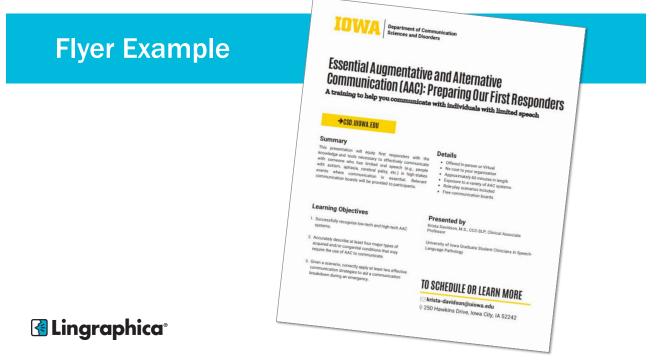
Thank you so much for presenting for us. People are still talking about the presentation, and I've seen the boards out and about being talked about! We are placing copies of the boards in each of our trucks to use on calls.

## **One Way to Get Started**

- Create your presentation and learning objectives
- Create an informative flyer for distribution
- Start with any personal connections to EMS, Fire, and/or Police departments in your area
- Contact departments via their websites, email, phone etc.
- After presenting, ask for referrals to other area agencies
- Be willing to adapt!

#### **Eingraphica**°

39



## **Training First Responders: Group Poll**

Does a local training sound like something you could do in your area?

What challenges would you anticipate with a community presentation?

#### **G** Lingraphica<sup>®</sup>

41



## **RescueVoice**



Fostering an inclusive and responsive approach, the RescueVoice app equips those on the frontlines of care with the tools necessary to effectively communicate with individuals with limited speech in high-stakes events where information is critical.

## **Eingraphica**<sup>®</sup>

43

## **RescueVoice**

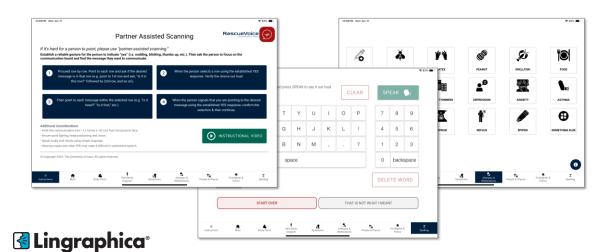
- · Purpose-built speech-generating app
- Engineered specifically for first responders and medical personnel to use with individuals who have limited speech or who are unable to speak because of a medical event.
- Contains both tap-to-talk icons and text-to-speech capabilities. Instructions are provided on each page for a more user-friendly interface.
- Pre-stored vocabulary based on feedback from first responders related to symptoms, pain, body parts, allergies, medications, people, time, and places is included.
- <u>https://rescuevoice.uiowa.edu</u>

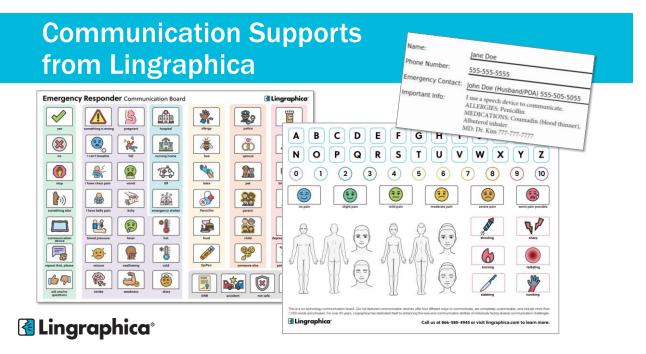
## **RescueVoice**



45

# RescueVoice





47

## **Additional Resources**

- <u>https://www.patientprovidercommunication.org/</u>
- <u>https://ussaac.org/emergency/</u>
- <u>https://aacdisasterrelief.recovers.org</u>
- <u>https://disasterstrategies.org/</u>
- <u>https://nwacs.info/aac-and-emergency-preparedness</u>
- <u>https://www.ready.gov/disability</u>
- <u>https://widgit-health.com/downloads/index.htm</u>
- <u>https://carterkits.org</u>
- <u>https://www.sdsheriff.gov/community/blue-envelope</u>

## **Other Community Efforts**

#### Blue Envelope Program

- Communication awareness tool between law enforcement and community members diagnosed with a disability that may require additional accommodations or awareness during a law enforcement interaction
- Participating locations offer free blue envelopes, stickers, lanyards, seatbelt covers, and more
- · Individual can readily display or present Blue Envelope
  - Contains ID, contact information, pertinent vehicle documents



#### 49

## **Other Community Efforts**

#### Carter Kits<sup>™</sup> Sensory Bags

- Contain clinically proven items known to comfort autistic children and others who find themselves overwhelmed or otherwise impacted by traumatic events.
- Initially designed for First Responders; however, they have expanded to many other professions
- Offer training to individuals and organizations



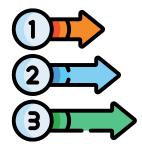
# Conclusion

## 🛃 Lingraphica®

51

# Conclusion

- Defining the why
- Preparing our clients
- Preparing our community
- Resources
- Conclusion



## Earn ASHA CEUs for Today's Course

- Return to learn.aphasia.com
- Go to your Learning Center
- Look in the "Current" tab and find this course
- Launch Post-Work (learning assessment and course eval)
- When finished, it will show in "Completed" tab
- Please complete within 48 hours

#### **Eingraphica**°

53

# **Next Steps**

- Consider ways you could address emergency preparedness information in your practice update or add new client goals.
- Reach out to someone you know who is a paramedic, firefighter, police officer or works in emergency medicine and have a conversation about the content we covered today.
- Look for opportunities to provide education about interacting with people with communication challenges.

## **Next Steps**

- Implement your learning and earn additional ASHA CEUs! Enroll in one, or both, of the following self-study courses:
  - Insight to Action Part 1: Applying AAC Emergency Preparedness in Your Practice
  - Insight to Action Part 2: Preparing First Responders

## **Eingraphica**<sup>®</sup>

55

# **Next Steps**



#### Schedule a device demo

www.lingraphica.com/clinical-aac-device-demo/

## **Cingraphica**®



Start a trial www.lingraphica.com/start-trial/

# Questions & Answers

#### Lingraphica

57



## References

Barton-Hulsey, A., Boesch, M. C., Chung, Y., Caswell, T., Sonntag, A. M., & Quach, W. (2024). Emergency and disaster preparedness for individuals who use augmentative and alternative Communication: A pilot study on supported planning using a toolkit. American Journal of Speech-language Pathology, 33(1), 16– 32. https://doi.org/10.1044/2023\_ajslp-23-00086

Boesch, M.C., Begley, E., Blackstone, S., & Caswell, T. (2022). Augmentative and Alternative Communication Disaster Preparedness: Roles, Responsibilities, and Opportunities for Speech-Language Pathologists and Other Professionals. Perspectives of the ASHA Special Interest Groups, 7(5), 1483-1489. https://pubs.asha.org/doi/epdf/10.1044/2022\_PERSP-21-00274

Carter Kits Sensory Bags. (2024). https://carterkits.org/

DePew, S.C., & Thistle, J. J. (2022). Supporting Communication Between Individuals With Disabilities and First Responders: A Preliminary Case-Based Interview Study. Perspectives of the ASHA Special Interest Groups, 7(1), 115-122. https://doi.org/10.1044/2021\_PERSP-21-00123

Quinn, E., & Stuart, S.L. (2010). Disaster Preparedness. Perspectives of the ASHA Special Interest Groups, 19(4), 120-123. https://doi.org/10.1044/aac19.4.120

Rang, M., & Mankey, S. (2019) AAC: A different method but the same message (and why it matters). First Responders Augmentative/Alternative Communication Training. https://www.fraac.com/materials/

San Diego County Sheriff's Department. (2024). About the Blue Envelope Program. https://www.sdsheriff.gov/community/blue-envelope

Sisson, P. (2023). What People With Disabilities Know About Surviving Climate Disasters. Bloomberg. https://www.bloomberg.com/news/features/2023-06-22/in-climatedisasters-people-with-disabilities-are-getting-left-behind

USSAAC. (2024). Readiness: Disaster Preparedness for People who Use AAC. https://ussaac.org/readiness/

Zangari. C. (2017). Emergency Preparedness for the AAC Family. PrAACtical AAC. https://praacticalaac.org/praactical/emergency-preparedness-for-the-aac-family/

#### 强 Lingraphica®