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ISAAC BARCELONA 2010 Communicating Worlds

Emergency Communication 4 ALL
Communicating During Times of Emergency

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ISAAC Conference

Barcelona, Spain

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www.aac-rerc.com

NiDRR

Natural and Man-Made Disasters

• Many natural and man-made disaste...
• Fires, floods, earthquakes, hurrican...
  typhoons, tsunamis
• Terrorist bombs, explosives
• Health threats- anthrax

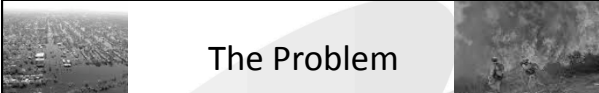AAC-RERC
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The Problem

• People with disabilities in the US often overlooked
  – Planning
  – Implementation of emergency strategies

• Despite
  – Vulnerability
  – Population size
  – ADA and Sec 504 of the Rehab Act

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Importance of Communication

• Effective and efficient communication needed
  – Prior to, during, and after emergencies
• Problem for people with CCN
• Millions of individuals with CCN worldwide cannot rely on their spoken during times of emergencies
• AAC approaches - picture and symbol communication boards and electronic devices are available to help people express themselves, BUT do they have the needed vocabulary

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Vocabulary and Symbols:

Adequate for Communication in Times of Emergency?

- **Question:** Are vocabulary and specially designed symbols available on these communication boards and speech-generating devices (SGD) adequate for effective communication during times of emergency

- **Goals:** (1) to identify the vocabulary needed by persons with significant disabilities who have CCN when communicating during times of emergencies; (2) to determine the degree to which this vocabulary was already available in two commonly-used symbol systems;(3) to develop and make available evidence-based, free, downloadable picture-based and text-based emergency communication aids that can be used before, during, and after emergencies

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METHOD

- 2 online focus groups were established
  - 1 for individuals who use AAC who have had experience dealing with emergency situations (n = 9)
  - 1 for emergency management personnel (n = 8)
- Each focus group independently generated needed vocabulary for communicating during times of emergency (2 weeks)
- 2 lists combined into 1 unduplicated list and then simultaneously sent to the 2 focus groups for final review
- Discrepancy analysis conducted - comprehensive list
- Online focus groups prioritized 50 words

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RESULTS

- 209 unique words considered to be necessary for communicating during times of emergency were generated
  - 76% by the icon sequences contained in Unity 128
  - 79% of the PCS symbols

- Words missing

  Attendant, Chemical (s), Damage, Disaster, Evacuate, Flood, Generator, Hazard, Incident, Infection, Injury/Injured, Liquid, Memory, Mudslide, Panic, Patient/Patience, Persistent, Shelter/sheltering, Shoot/shooting/shot, Stress, Suspect

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RESULTS

- Full list of emergency vocabulary can be found and downloaded at

http://www.disabilities.temple.edu/aacvocabulary/EMERGENCY.shtml

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RESULTS
(continued)

- Needed vocabulary available for developers and manufacturers of speech generating devices and fabricated communication boards

- Evidence-based, downloadable communication aids available:
  ### *Emergency Communication 4 ALL*

- http://disabilities.temple.edu/aacvocabulary/e4all.shtml

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Emergency Communication 4 ALL.............................Letter/Word Communication Aid

FREE SPACE *(for your custom message)*

MY NAME IS...

Ask me questions if you need to, but please wait patiently for my replies.

I can't speak but I can hear and understand you.

I will point to where I hurt. ➡

A	B	C	D	E
F	G	H	I	J
K	L	M	N	O
P	Q	R	S	T
U	V	W	X	Y
Z	?	.	!!	SPACE

My vital information is on the back of this page.

My technology needs to be charged.

Please contact my family.

WAIT. Please be patient.

Oops! — Help
Bathroom — Hungry
Afraid — Sick
I need/want — I can't

0	1	2	3
4	5	6	7
YES	8	9	NO

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Emergency Communication 4 ALL.............................Picture Communication Aid

FREE SPACE *(for your custom message)*

I can't speak but I can hear and understand you.

My technology needs to be charged.

My vital information is on the back on this page.

Please contact my family.

Ask me questions if you need to, but please wait patiently for my replies.

I will point to where I hurt. ➡

MY NAME IS — I, me, my — Bleed — Infect — Allergy — Disability — Help — Bathroom
WHO — You, yours — Broken — Need/Want — Blanket — Disaster — Home — Walker
WHERE — She, her, hers — Burn — Rescue — Clothes — Emergency — Hospital — Wheelchair
WHAT — He, his, him — Choke — Spell — Cold — Family — Sick — Wind
WHEN — They, them, their — Communicate — Talk — Damage — Fire — Pets — Worried
WHY — We, ours — Evacuate — Understand — Danger — Flood — Shelter — Worse/Word
HOW — YES — Hurt/Injure — Wait — Communication Device — Heat/Hot — Seizure — NO

0	1	2	3	4
5	6	7	8	9
A	B	C	D	E
F	G	H	I	J
K	L	M	N	O
P	Q	R	S	T
U	V	W	X	Y
Z	?	.	!!	SPACE

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PERSONAL INFORMATION

1. NAME _____
DOB _____
Address _____
Cell Phone _____
Home Phone _____
Email _____

2. EMERGENCY CONTACT
Name _____
Address _____
Cell Phone _____
Home Phone _____
Relation _____

3. 2ND EMERGENCY CONTACT
Name _____
Address _____
Cell Phone _____
Home Phone _____
Relation _____

4. DOCTOR
Name _____
Address _____
Phone _____

5. HEALTH INSURANCE
☐Private ☐Medicare ☐Medicaid ☐Other
Policy Number _____
Date Issued _____

6. PRESCRIPTION MEDICATIONS
Name & Dosage _____
Name & Dosage _____
Name & Dosage _____
Name & Dosage _____
Name & Dosage _____

7. OVER THE COUNTER DRUGS
1) _____
2) _____

8. PHARMACY NAME _____
Contact Person _____
Phone _____

9. ALLERGIES [complete list] _____

10. RELEVANT MEDICAL HISTORY [brief] _____

11. SUPPORT AGENCY [if applicable] _____

12. MEDICAL EQUIPMENT/TECHNOLOGY SUPPLIER _____

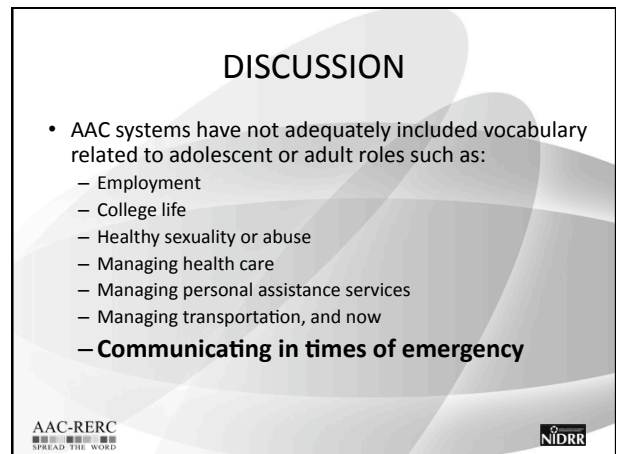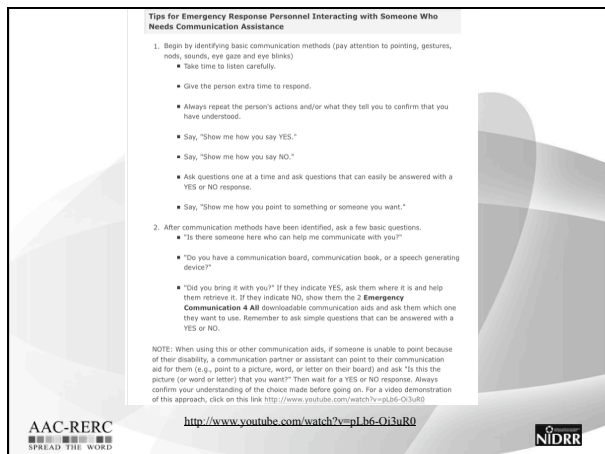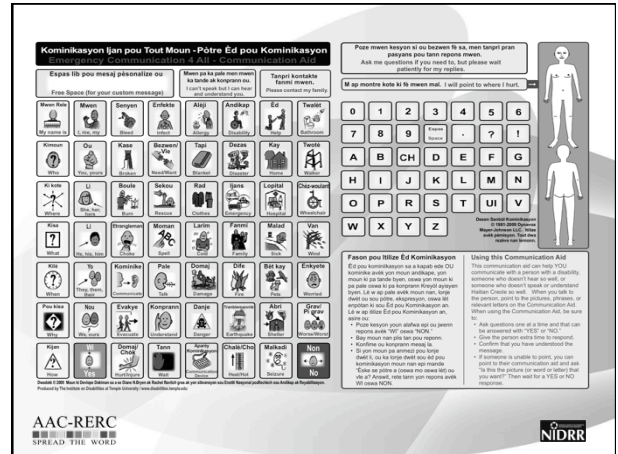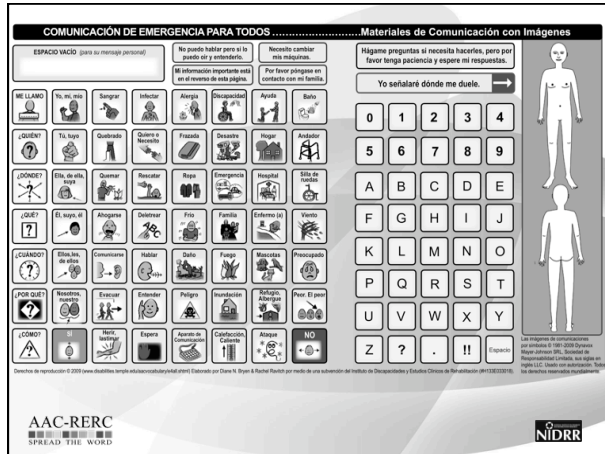13. EQUIPMENT/SUPPORT NEEDED FOR INDEPENDENCE
Personal Assistance Services
Name _____
Phone _____
Allotted Hours _____
Mobility/Transferring _____
Communication _____
Hygiene/Toileting /Vision _____
Telephone Use _____
Finances/Writing _____
Cooking _____
Eating and Diet _____
Transportation _____
Service Animals _____

Institute on Disabilities
TEMPLE UNIVERSITY
College of Education

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DISCUSSION

- AAC systems have not adequately included vocabulary related to adolescent or adult roles such as:
  - Employment
  - College life
  - Healthy sexuality or abuse
  - Managing health care
  - Managing personal assistance services
  - Managing transportation, and now
  - **Communicating in times of emergency**

CONCLUSIONS

- Collaboration between individuals who use AAC approaches and emergency personnel ---> needed vocabulary

- Collaborations needed among researchers, developers, and manufacturers of SGD and other [wireless] information/communication technologies

- Enhanced communication technologies have the potential for preventing emergency situations from becoming life-threatening disasters.

- The wireless technologies already exist, collaboration is needed!

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