

BASIC VADEMECUM FOR THE COMMUNICATION MANAGEMENT OF DEAF PEOPLE IN NORMAL AND EMERGENCY SITUATIONS

Luca Rotondi, Bsc Msc

President
Emergenza Sordi APS

International Master Courses in
Protection Against CBRNe events

UNIVERSITY OF ROME TOR VERGATA

Luca Rotondi, BSc MSc

Highschool's Degree in Industrial Chief – Field: clinical chemistry and health care

University's Degree in Biology – Field: physiopathology

University 2nd Level Master's Degree in “Chemical Analysis and Quality Control”

University 2nd Level Master's Degree in "Clinical Research"

University 2nd Level Master's Degree in "Forensic Genetics"

University 2nd Level Master's Degree in "Protection against CBRNe events"

Certificate of the Postgraduate University's Degree in "Industrial Hygiene"

University 2nd Level Master's Degree in " International Security Safety, Global Strategies and Medical Maxi-Emergency Management“ - COUNCIL DIRECTIVE 2008/114/EC

National Instructor Basic Life Support with Defibrillation adult and adult (BLSD full)

National Instructor AntiFire at low / medium / high risk



Dott. Luca Rotondi
Roma



Dott.ssa Marta Zuddas
Cagliari

Sig. Davide Mauri
Milano

Our wealth is made up of our
diversity: the other is precious to
us in so far as it is different to us.

Albert Jacquard
1925-2013



LESSON in THREE part:

- I PART: COMMUNICATION IN A NORMAL SITUATIONS
- II PART: COMMUNICATION IN A EMERGENCY AND DISASTER SITUATIONS
- III PART: PRACTICE AND CREATE VIDEO WITH SUBTITLE IN A VIRTUAL CBRN EVENTS

NORMAL SITUATIONS

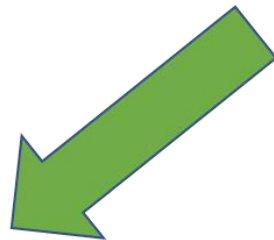
Do you have experience in the relationships with the deaf people?



if **yes**, raise your hand



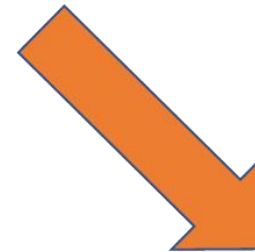
DEAF PERSON



ORAL



BILINGUAL
(ORAL + SIGN)



SIGN



1 DEAF EVERY 10.000 BABY BORN
IN ITALY, BORN 200/220 DEAF BABY/YEAR



ITALIAN LAW

Legge 26 maggio 1970, n. 381

Pubblicata nella G.U. 23 giugno 1970, n. 15

Art. 1, comma 2

“Agli effetti della presente legge si considera **sordomuto** il minorato sensoriale dell'udito affetto da sordità congenita o acquisita durante l'età evolutiva che gli abbia compromesso il normale apprendimento del linguaggio parlato, purché la sordità non sia di natura esclusivamente psichica o dipendente da causa di guerra, di lavoro o di servizio”

Article 1, paragraph 2

“For the purposes of this law it is considered a **deafmute person** the sensory impairment of hearing affected by congenital or acquired deafness during the developmental age that has compromised the normal learning of spoken language, provided that the deafness is not exclusively psychic or dependent on the cause of war, work or service ”

ITALIAN LAW

Legge 20 febbraio 2006, n. 95

Pubblicata nella G.U. 23 16 marzo 2006, n. 63

Art. 1, comma 1

In tutte le disposizioni legislative vigenti, il termine “sordomuto” è sostituito con l'espressione «**sordo**»

Article 1, paragraph 1

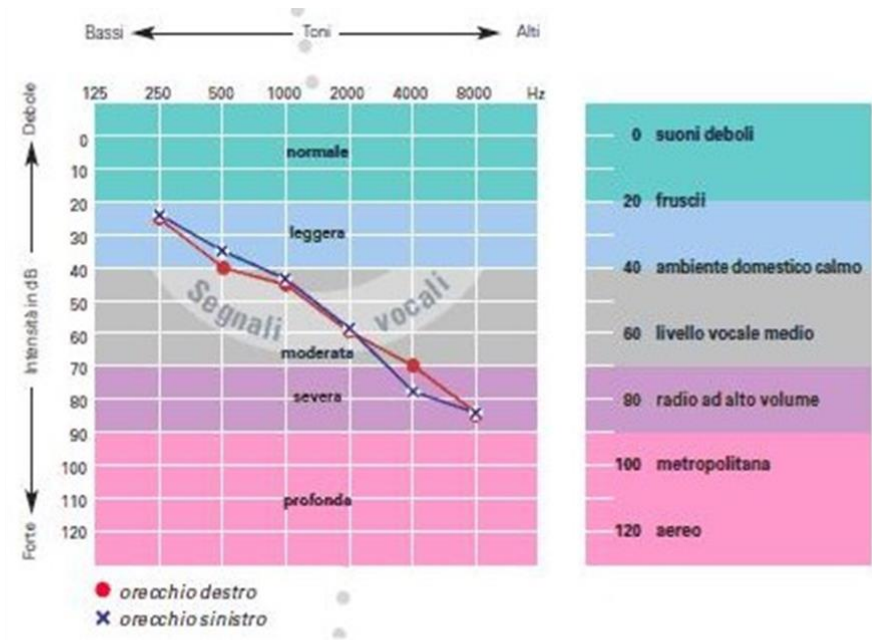
In all legislative provisions in force, the term "deafmute" is replaced by the term "**deaf**"

LEVELS OF DEAFNESS

Severe: Threshold between 70/90 dB: the person having such a deficit perceives only some sounds of the words if pronounced at high intensity.

Deep: Threshold equal to or greater than 90 dB and are divided into 3 levels; at the third one only the most serious and intense sounds are perceived, having a notable vibratory component, such as the roar of the engine, the slamming of the door and a few others. The word is not heard at all, so that no verbal language learning is possible without a prosthetic aid associated with lip reading

Total (Cofòsi): the loss is over 120 dB. In this case, no noise is perceived.



RECOGNIZING THE DEAF PERSON

The recognition of a deaf person is not simple because it is an "invisible" disability and apparently does not present any particular problems and / or signs.

The volunteer should have basic knowledge that will enable him to identify the type of disability.

It is very important to keep calm and instill security in order to facilitate communication, consequently he must direct his attention towards working communication channels like sight and touch.



RECOGNIZING THE DEAF PERSON

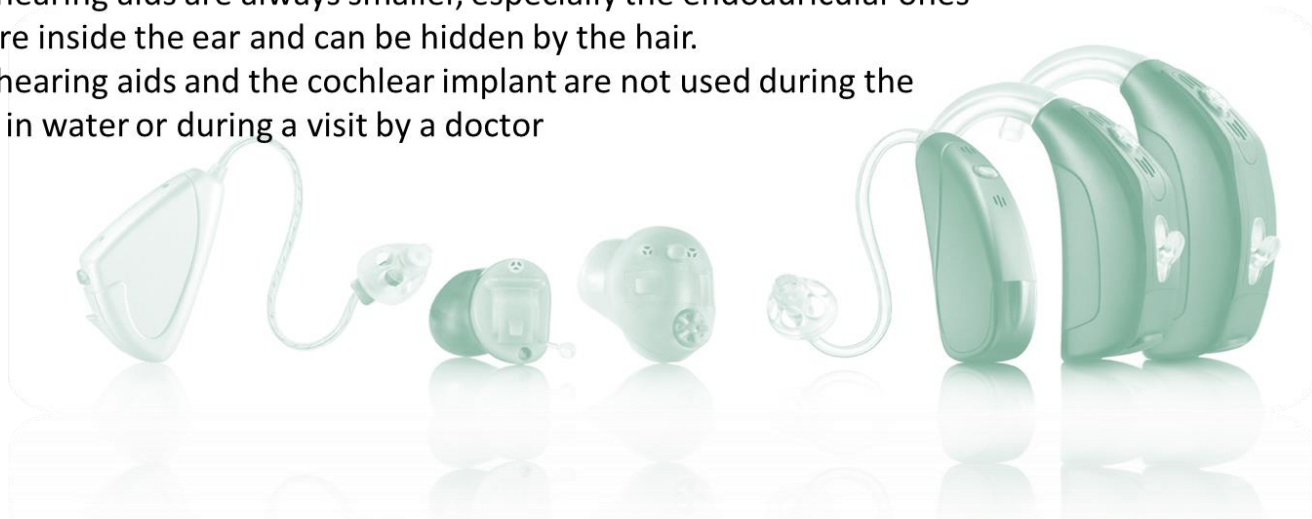


BASIC NOTIONS - related to physical and psychological characteristics

1- Recognition of the deaf person based on the physical appearance:

It is difficult to identify the deaf person unless he is wearing hearing aids and / or cochlear implant or using sign language. It is important to know that:

- The hearing aids are always smaller, especially the endoauricular ones that are inside the ear and can be hidden by the hair.
- The hearing aids and the cochlear implant are not used during the night, in water or during a visit by a doctor



BASIC NOTIONS - related to physical and psychological characteristics

2- Recognition of the deaf person based on the attitude

Communication plays a fundamental role, especially in an emergency situation. When a sound and / or vocal alarm signal occurs during the rescue, we can identify some attitudes based on the emotional and behavioral states that emerge in these critical moments:



BASIC NOTIONS - related to physical and psychological characteristics

In the event of a sound and / or voice alarm

It is not perceived and there are particular behaviors that show a strong discomfort putting the person at risk:

- shows unconsciousness and disorientation.
- becomes aware of what happened and enters a state of panic, impotence and inability to manage the situation



BASIC NOTIONS - related to physical and psychological characteristics

During the rescue

In this circumstance a barrier of communication can be raised between the operator who tries to establish a dialogue and the deaf person who at that moment is a state of total panic or unconsciousness. A series of misunderstandings and misunderstandings can occur: the deaf person can not formulate the request for help adequately and the rescuer is unable to understand it and consequently identify the right strategy for immediate and effective intervention.



BASIC NOTIONS - related to physical and psychological characteristics

Summing up

The deaf person, in a critical situation, when he is in front of a rescuer enters a state of agitation and anxiety because of the fear of not being able to express himself and not be understood.

The rescuer does not know how to interface with the deaf person due to inexperience

FHRASE AND SOUND

Use short, simple and complete sentences, highlighting the main word of the sentence (DO NOT use a childish language)

Use facial expression in relation to the theme of the speech.

Not all the sounds of the tongue are visible on the lips: make sure that the deaf person can understand, possibly underline them with a gesture. (Eg bomb, pump)

TYPES OF DEAF PEOPLE

Deaf with deaf or hearing parents

Deaf signing or non-signing

Deaf re-educated in verbal language with the oralist method

Deaf re-educated with the bimodal method (acoustic training, labial reading, Italian language marked)

Bilingual deaf (vocal language and sign language)

Deaf because of very noisy work activities *

Deaf to establish old age *

CHARACTERISTIC FACTORS OF THE DEAF PERSON

The level of deafness (mild, medium, severe, profound, total)
The age at which the diagnosis was made and was put the prosthesis

Singularity of a person (based on his character, life experiences, social life and so on)

The rehabilitative and scholastic path

CALL ATTENTION BEFORE YOU BEGIN TO SPEAK

The deaf person can not realize if you have started a speech, unless you are watching. Give a hand (do not move your arms too much!) Or call attention with a slight touch to the arm or shoulder, so you can talk to it once you get its attention



DISTANCE

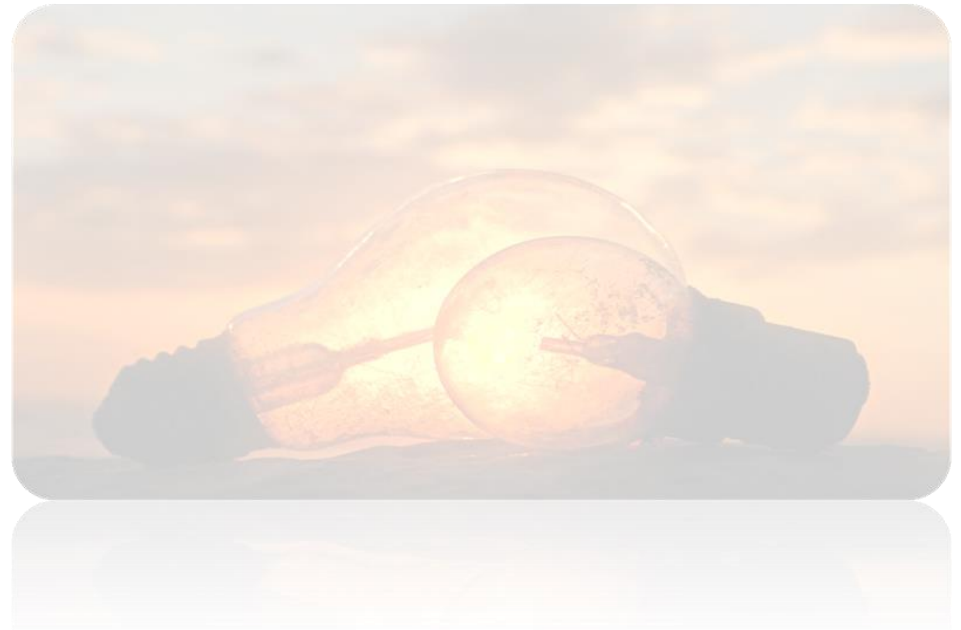
To allow the deaf a good lip reading the optimal distance in the conversation should **never exceed one and a half meters.**



LUMINOUS SOURCE

The light source must illuminate the face of the speaker and not that of the deaf person: we must always speak with the face turned to the light.

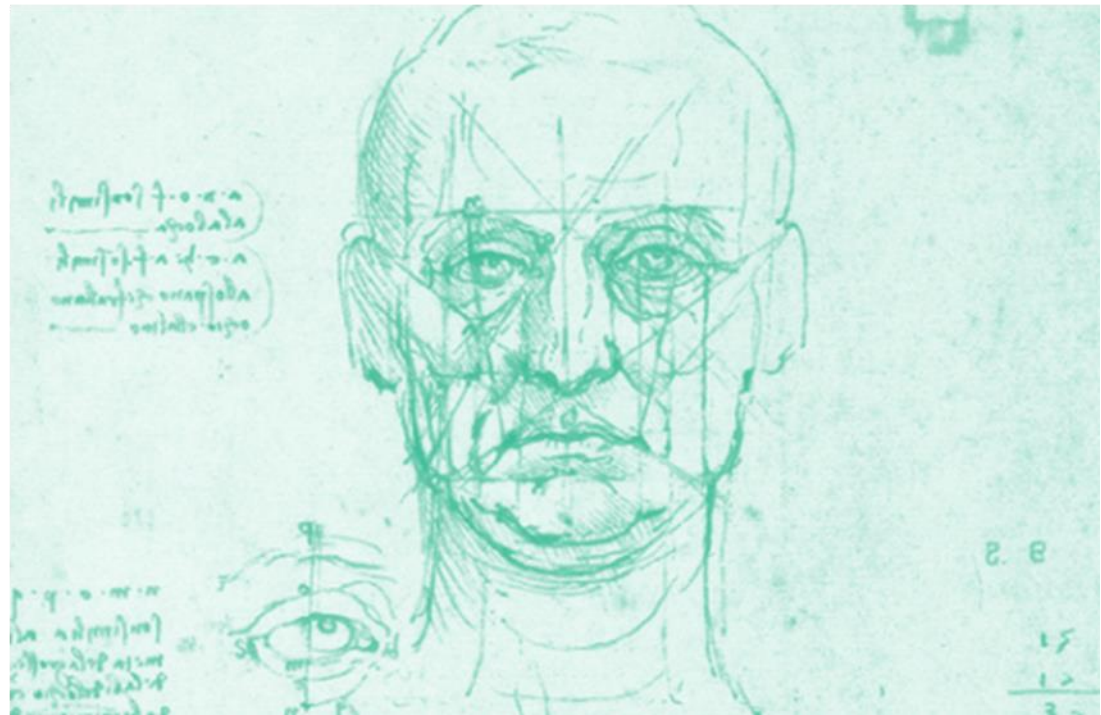
The big obstacle for the deaf is the darkness that completely closes the visual communication so they enter into total disorientation due to the lack of information.



HEAD AND FACE POSITION

The speaker must keep his head steady (it's like trying to read a book in a stormy sea)

The face of the speaker must be at eye level of the deaf person.



NOT SCREAM

The deaf person can not hear you even if you increase the tone of voice. On the contrary, it creates a situation of unease because raising the tone of voice, one has a distortion of the muscles of the face and the lip reading becomes more difficult

The speed of the speech must be moderate: neither too fast nor too slow

Consequently it is very important to scan the words well without distorting the pronunciation or using dialectal expressions.



DO NOT TURN, DO NOT COVER THE MOUTH



If you do not know sign language it is essential that the deaf person sees your mouth to understand your speech. It is very important that you are not in the backlight: if you have objects or clothes that cover your face, you should remove them and above all try to stay calm.

This is very important in particular in emergency situations, as it would result in a delay in operations and could therefore cause damage to the surrounding people.



Communicator Mask



REPEAT, IF NECESSARY

If you can not make yourself understood on the first try, avoid saying "do nothing", "let it go" and to desist: it is frustrating to find yourself in front of someone who interrupts communication: it's like saying: "I do not have the patience to keep talking with you" .

Try to repeat the phrase more slowly, replacing some terms with synonyms.



FACILITATE THE COMMUNICATION



If you think it can be useful, follow the sentences with some gestures, indicating the subject of conversation. In dialogues in which more people are involved, the deaf has much more difficulty in understanding the speeches, because he has to continually "jump" visually from one mouth to the other, perhaps losing pieces of sentences. In this case, stop and explain what you are talking about.

WRITE



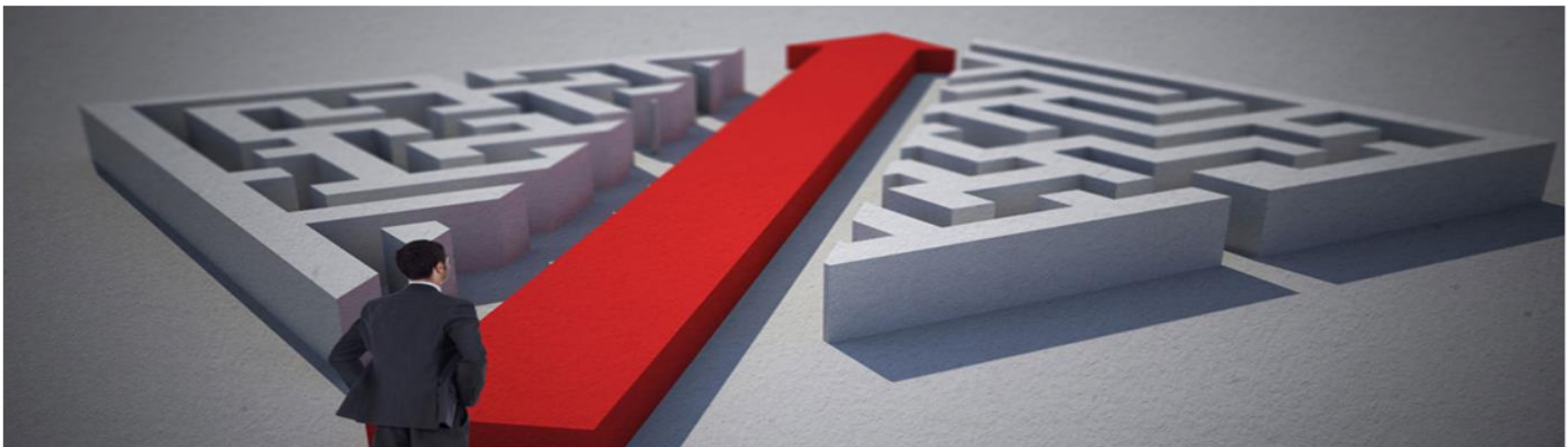
Foreign words, place names or proper names can be difficult to understand. In this case, write the word on a piece of paper, or on the mobile phone display: in this way you will make yourself clearer and help the other to understand what you are saying. Or use dactylology (the manual alphabet) if you know it.



AVOID SHORTCUTS

If you encounter a deaf person accompanied by a hearing member, do not ask the accompanying person for information regarding the deaf person.

Being deaf does not mean having cognitive problems or being stupid, it would be very rude to ignore it with the excuse that "this is done before".



ACOUSTIC PROSTHESIS

Even if the deaf person wears the hearing aids, he / she can not always perceive the speech perfectly, therefore it is necessary to behave according to the communication rules just mentioned



LIGHT VISUAL AID

The displays, with sliding and / or fixed writing, made up of super-bright LED lights are becoming more common.

In emergency situations, it should be flashed to attract attention and provide information on the situation.

VERY EFFECTIVE TOOL



DEAF PEOPLE AND THE COMMUNICATION

The world of the deaf is not silent: they have so much to say and above all so much to listen, exactly as much as a hearing person.

In this case, "listening" does not mean hearing through the use of the auditory canal, but observing and understanding the other through lip reading, non-verbal behaviors and for those who know sign language, also through visual-gestural communication.

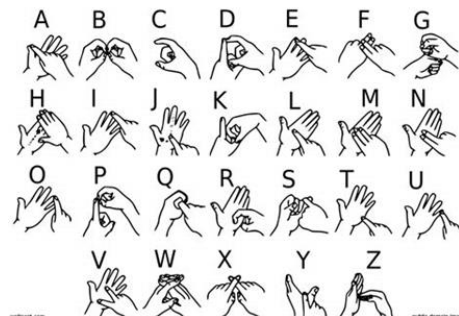


SIGN LANGUAGE ARE DIFFERENT IN ALL WORLD

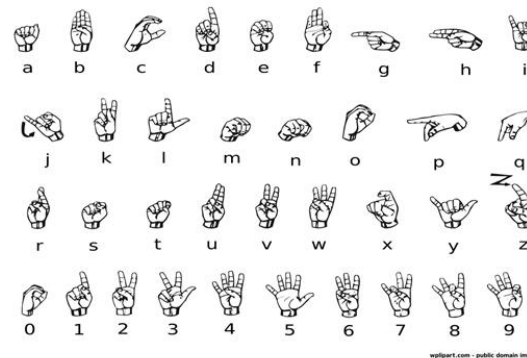
IL NUOVO ALFABETO MANUALE ITALIANO



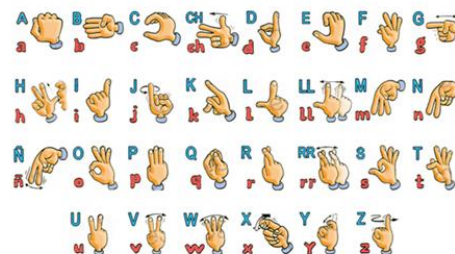
British Sign Language Alphabet



American Sign Language Alphabet



ALFABETO DACTILOLÓGICO ESPAÑOL



All the countries of the European community have recognized sign language



last country still must officially recognize is **ITALY**



Break time!

Please return in 10 minutes.

APP FREE «SPREAD THE SIGN»

The first video-dictionary of languages that contains sign languages to the world (including the LIS, Italian sign language) with over 250,000 signs.

The project funded by the European Commission through the Office for the International Swedish Educational and Training Program. .

For those interested, Spread the Sign, is available free on the website www.spreadthesign.com and is also available as an App on the Apple Store and Google Play.



Il più grande dizionario di lingue dei segni al mondo. Con oltre 250.000 segni!

Per maggiori informazioni consulta il sito web

www.spreadthesign.com

ITALIAN SIGN LANGUAGE

A



ITALIAN SIGN LANGUAGE

B



ITALIAN SIGN LANGUAGE



C



ITALIAN SIGN LANGUAGE



D



ITALIAN SIGN LANGUAGE

E



ITALIAN SIGN LANGUAGE

F



ITALIAN SIGN LANGUAGE

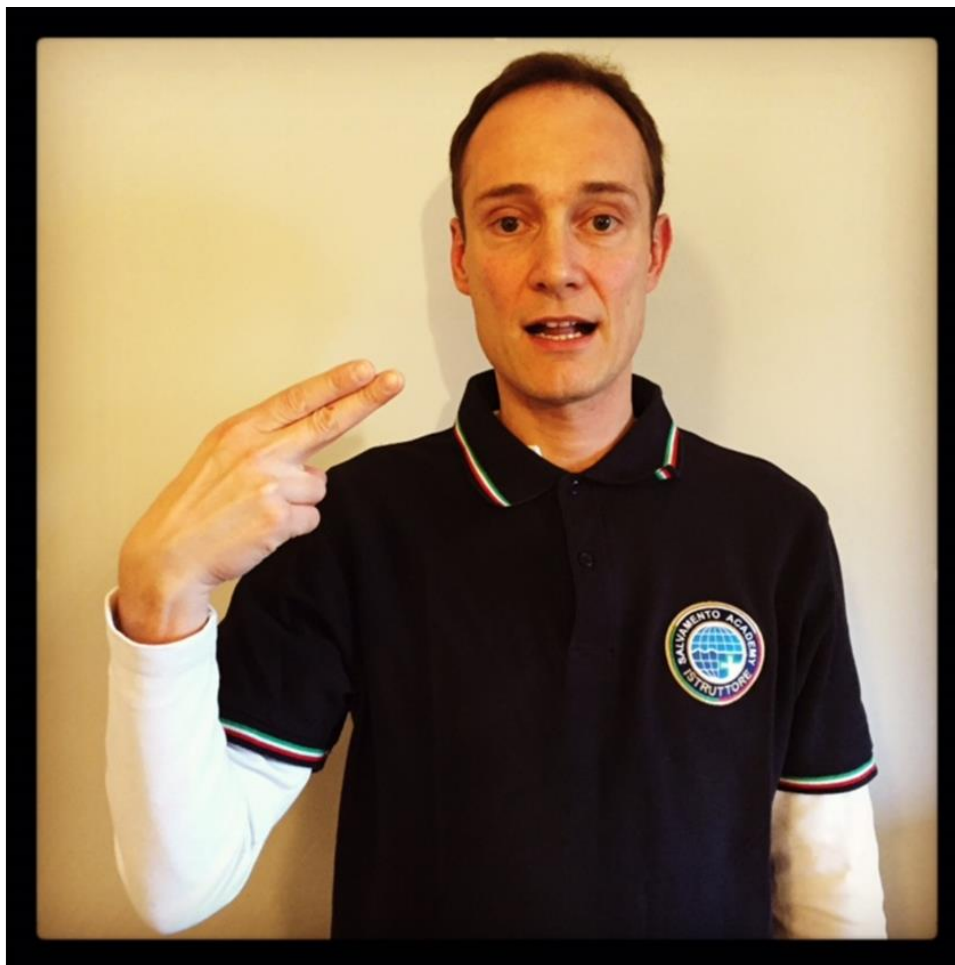


G



ITALIAN SIGN LANGUAGE

H



ITALIAN SIGN LANGUAGE



ITALIAN SIGN LANGUAGE

J



ITALIAN SIGN LANGUAGE

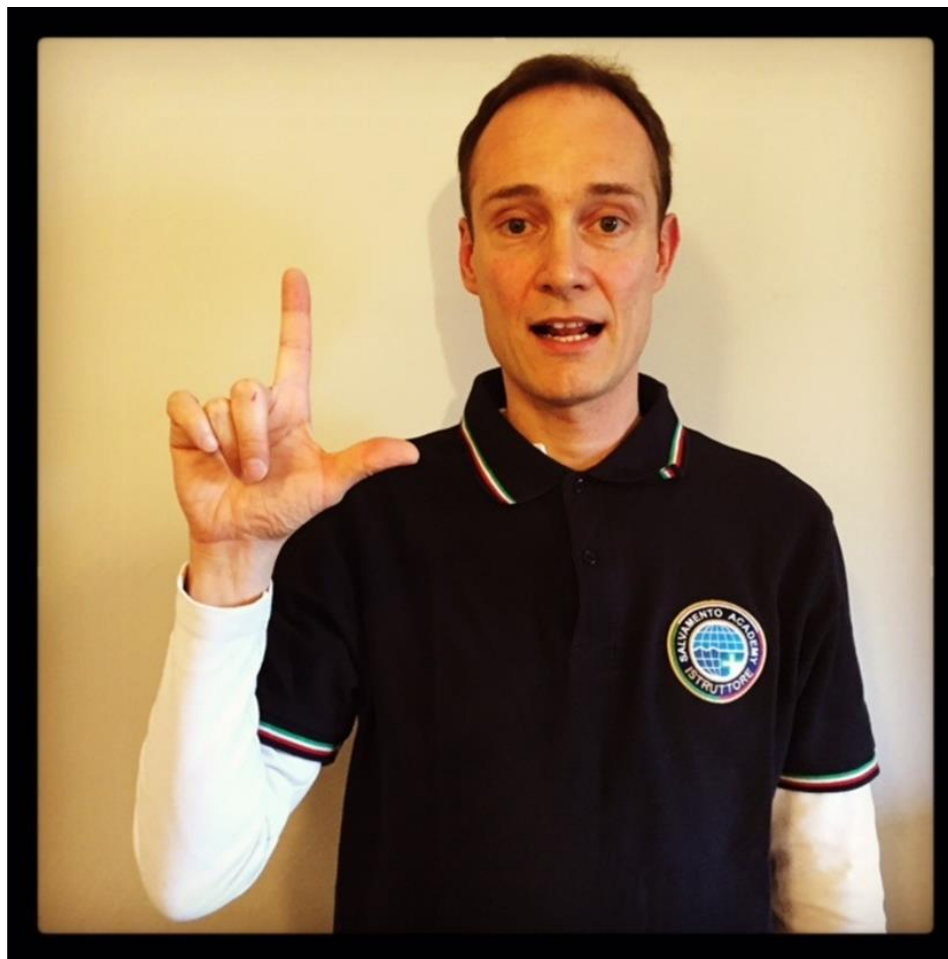
K



ITALIAN SIGN LANGUAGE



L



ITALIAN SIGN LANGUAGE



M



ITALIAN SIGN LANGUAGE



N



ITALIAN SIGN LANGUAGE

O



ITALIAN SIGN LANGUAGE



P



ITALIAN SIGN LANGUAGE

Q



ITALIAN SIGN LANGUAGE

R



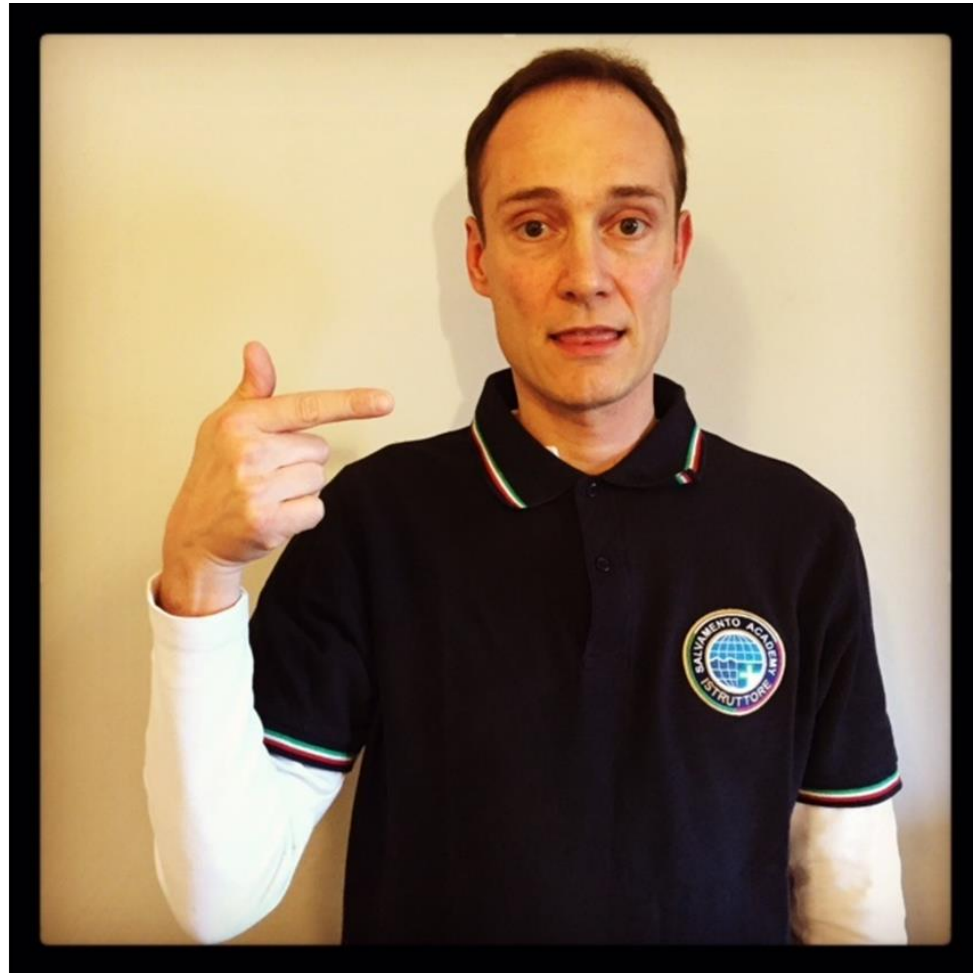
ITALIAN SIGN LANGUAGE

S



ITALIAN SIGN LANGUAGE

T



ITALIAN SIGN LANGUAGE



U



ITALIAN SIGN LANGUAGE

V



ITALIAN SIGN LANGUAGE

W



ITALIAN SIGN LANGUAGE



X



ITALIAN SIGN LANGUAGE

Y



ITALIAN SIGN LANGUAGE



Z



AMERICAN SIGN LANGUAGE





EMERGENCY AND DISASTER SITUATIONS

(Amatrice Earthquake's Real Experience)

Article 11 of the ONU Convention about the rights of Persons with Disabilities



concerning situation of risk and humanitarian emergencies
conditions

"States parties shall take, in accordance with their obligations under international law, including international humanitarian law and international human rights law, all necessary measures to ensure the protection and safety of persons with disabilities in situations of risk, including situations of armed conflict, humanitarian emergencies and the occurrence of natural disasters."



On 29 January 2015, the WFD, the World Federation of the Deaf, and WASLI, the world-wide association of sign language interpreters, drew up a document on Guidelines for communication during natural disasters and other mass emergencies for people deaf that use sign language.



WASLI and WFD Guidelines

**Communication during natural
disasters and other mass
emergencies for deaf people
who use signed language.**

Approved Date: 29 January 2015
WFD Board and WASLI Board
www.wfdeaf.org / www.wasli.org

CBRN MASK



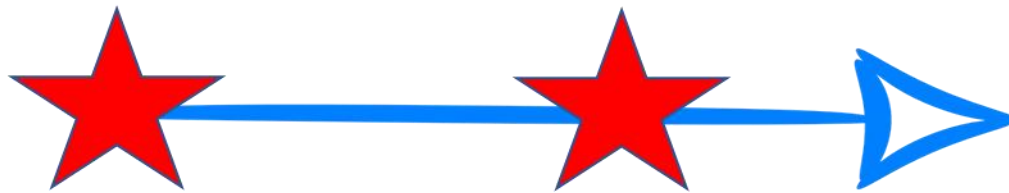
Two Big Amatrice's Earthquake

August 24th, 2016

01:36:32 UTC
(03:36:32 a.m. Italy)
Moment Magnitude
Scale 6.0

02:33:28 UTC
(04:33:28 a.m. Italy)
Moment Magnitude
Scale 5.4

Earthquake
disaster



Post-Earthquake Alert Communication for “information” and/or “search and rescue” for all population



Deaf Post-Earthquake Alert Communication for “information” and/or “search and rescue”





Pro:

Ability to send files up to a maximum of 1.5 GB

Possibility to create supergroups up to 1000 contacts

Versus:

Less used than other apps



it is possible to upload videos with a maximum duration of 2 minutes 20 sec



Pro:

Present on millions of devices in the world

Versus:

Ability to send files up to 100 MB

Group chats limited to 256 people

Security level currently not impeccable

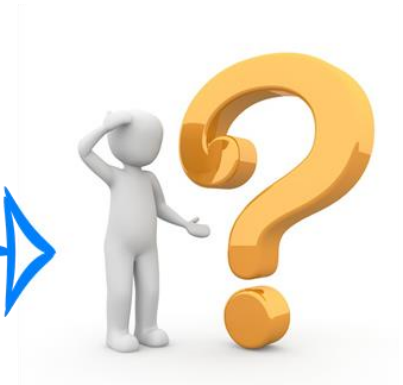
What is the possibility of communicating to the deaf people in case of disaster?



2009 L'Aquila Earthquake



2016 Amatrice Earthquake



very important to create a
DISABILITY DATA BASE
to use in case of natural or artificial disaster for rescue



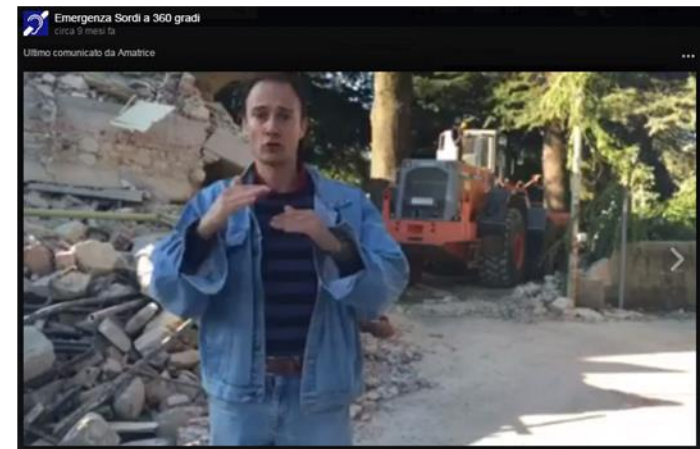
Immediately created a Facebook Page «***Emergenza Terremoto Sordi - Deaf Earthquake Safety Check***» after the 2nd Amatrice's Earthquake.

In that occasion a subtitled video with the LIS - Italian Sign Language (called "VideoLis") has been used to **create** a contact with the deaf community in order to **identify** and **rescue** persons in the Amatrice Earthquake Zone.

Now the "***Emergenza Sordi a 360° gradi***" is a **public page** of emergency information for deaf peoples.







Live Communication from Amatrice, August 24th and 25th

The “vademecum” to create a general emergency video for deaf people

call as **D.E.C.T**

Deaf Emergency Communication Techniques,
L. Rotondi – M. Zuddas – P. Rosati - , 2018

- **Short video:** max 2 minutes;
- Possibility to **use** the latest generation of **mobile phones for video shooting**;
- **Simple, clear and straightforward language**;
- **Sign language** according to the country's sign language by interpreter or a normal or deaf person who knows the sign language;
- **Subtitles** (no sliding). In online, exist more easy Apps to create subtitles;
- Is possible to put the **voice** in the video (for normal peoples).
- **Full text** above the video;
- **Contact Information.**

ORIGINAL RESEARCH

A Facebook Page Created Soon After the Amatrice Earthquake for Deaf Adults and Children, Families, and Caregivers Provides an Easy Communication Tool and Social Satisfaction in Maxi-Emergencies

Luca Rotondi, BSc, MSc;¹ Marta Zuddas, BSc, MSc;¹ Pasquale Marsella, MD;² Paola Rosati, MD, MSc³

-
1. Emergencies Involving Deaf People (Emergenza Sordi), Association for Social Promotion, Rome, Italy
 2. Audiology and Otosurgery Unit, Bambino Gesù Children's Hospital IRCCS, Rome, Italy
 3. Unit of Clinical Epidemiology, Bambino Gesù Children's Hospital IRCCS, Rome, Italy

Abstract

Although international and Italian conventions have issued numerous communication protocols to assist people with disabilities during earthquakes or other maxi-emergencies, no tailored strategies exist to create and disseminate information online to deaf people. On August 24, 2016, a devastating earthquake destroyed Amatrice in Central Italy. This natural disaster underlined the lack of information on disabled people possibly involved and the lack of tailored, online communication tools. Having various registries listing disabled residents in the earthquake area might have benefitted emergency procedures. To access information easily and expedite risk management, the authors developed an online information tool for deaf persons, their families, and caregivers. Within hours after the earthquake, they published a Facebook page (Facebook, Inc.; Menlo Park, California USA) including a video provided with subtitles, Italian sign language, and service numbers. Those who accessed the

APPS TO CREATE SUBTITLES



Perfect Video

editore video e presentazio



iMovie

(Only Macbook)



**VideoShow -
Editor video**

This specific communication techniques and specific broadcasting news for deaf people are used in the official social media of the **Municipality of Rome ("Roma Capitale")**. In the past, these techniques had proven to be effective and therefore "VideoLis" were published about the **behavior to adopt in case of earthquakes, tornados and other disasters**.



European Emergency Number 112




“COMUNICA CON TUTTI”

A special project, with the aim of supporting fragile people in communicating with health personnel, created by a non-profit association



in collaboration with Emergenza Sordi APS and Corps of the Order of Malta (CISOM) Monza and Brianza Group



Communicating will be easier through the use of icons created ad hoc by an illustrator, which will allow fragile people to explain their discomfort, symptoms and needs to healthcare personnel.



Two contexts of action have been taken into consideration within the project which, unfortunately, are of primary importance for all of us lately: the Emergency Department and the Hospital.

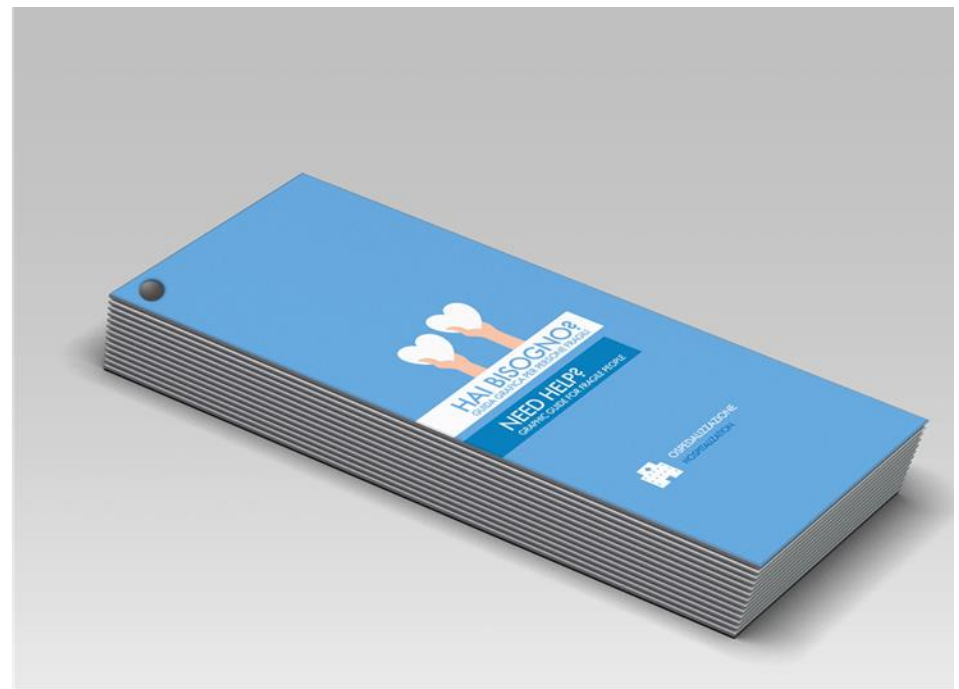


2 tools have also been designed through which to communicate with healthcare personnel:

WEBSITE



PRINTED VADEMECUM





SEI ALLERGICO A QUALCOSA?
ARE YOU ALLERGIC TO SOMETHING?



DEGENZA (CAMERA)
HOSPITAL STAY (ROOM)



DEGENZA (CAMERA)
HOSPITAL STAY (ROOM)



CIBO
FOOD



HAI BISOGNO?
GUIDA GRAFICA PER PERSONE FRAGILI

NEED HELP?
GRAPHIC GUIDE FOR FRAGILE PEOPLE



HAI BISOGNO?
GUIDA GRAFICA PER PERSONE FRAGILI

NEED HELP?
GRAPHIC GUIDE FOR FRAGILE PEOPLE

PRONTO SOCCORSO
FIRST AID

DOVE È SUCCESSO?
WHERE?

 CASA HOUSE	 LAVORO OFFICE	 SCUOLA SCHOOL
 STRADA STREET	 PARCO PUBBLICO PARK	
 IMPIANTO SPORTIVO SPORTS FACILITY	 CENTRO COMMERCIALE SHOPPING CENTER	
 LUOGO DI CULTO PLACE OF WORSHIP	 CENTRO SOCIALE / ACCOGLIENZA SOCIAL CENTER / WELCOME CENTER	

COME TI SENTI?
HOW ARE YOU?

PRONTO SOCCORSO
FIRST AID

Andare a Casa

INDIVIDUIAMO I PROBLEMI
LET'S IDENTIFY THE PROBLEMS

 FERITA INJURY	 DIARREA DIARRHEA	 STITICHEZZA CONSTIPATION
 TOSSE COUGH	 RAFFREDDORE COLD / FLU	 FEBBRE HIGH TEMPERATURE
 DIFFICOLTÀ A URINARE DIFFICULTY TO URINATE	 BLOCCO INTESTINALE INTESTINAL OBSTRUCTION	
 SVENIMENTO FAINTING	 DEBOLEZZA WEAKNESS	 SOFFOCAMENTO SUFFOCATION
 VERTIGINI DIZZINESS	 CEFALEA HEADACHE	 NAUSEA NAUSEA

PRONTO SOCCORSO
FIRST AID

Andare a Casa

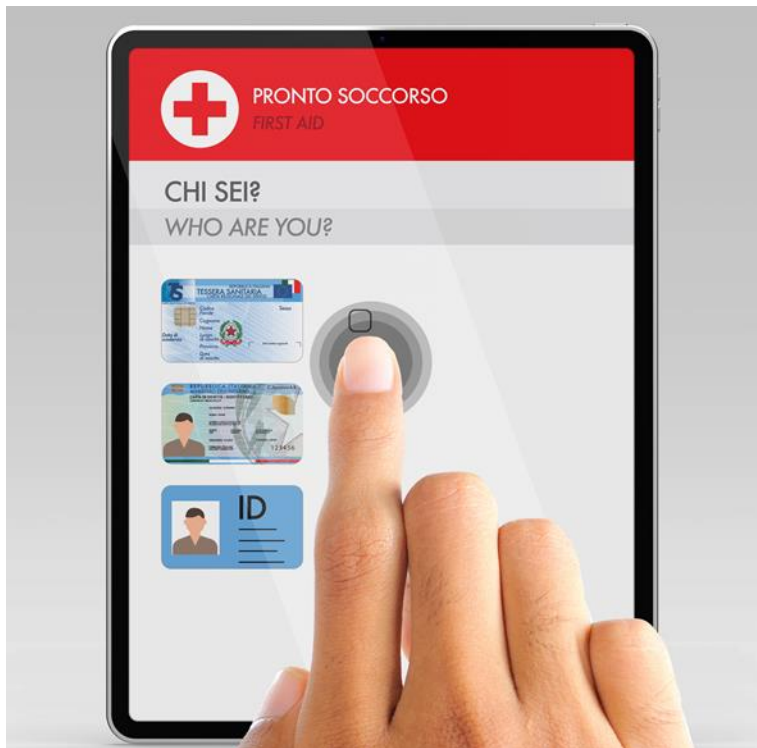
COSA È SUCCESSO?
WHAT HAPPENED?

 INCIDENTE CONVEICOLI ACCIDENT WITH VEHICLES	 AGGRESSIONE SESSUALE SEXUAL ASSAULT	 INTOSSICAZIONE ALIMENTARE FOOD INTOXICATION
 CADUTA FALL / STUMBLE	 INCIDENTE SPORTIVO SPORTS ACCIDENT	
 AGGRESSIONE MUGGING / ASSAULT	 MORSO / PUNTURA BITE / PUNCTURE	
 SPORZO FISICO PHYSICAL EFFORT	 AUTOLESIONISMO SELF-HARM	 ABUSO DI DROGHE DRUG ABUSE
 USTIONE BURN		 ANNEGAMENTO DROWNING

PRONTO SOCCORSO
FIRST AID

Andare a Casa

By connecting with your device (smartphone, tablet, laptop) to the web page
www.comunicacontutti.it
or through the printed Vademecum supplied to the emergency rooms and hospitals that
request it.



CONCLUSION:

- The video for deaf people is **important** because don't exists an official disabled persons territorial database used in case of emergency;
- It's necessary to **apply in the mentality** of disaster managers or military and civil emergency coordinator to preparing videos in the social media for deaf people in
 - PRE-EMERGENCY
 - EMERGENCY
 - POST-EMERGENCY
- **Low cost** to make videos.



www.facebook.com/EmergenzaSordi

Dott. Luca Rotondi
Presidente Emergenza Sordi APS
presidente@emergenzasordi.eu

info@emergenzasordi.eu

