

Spanish-Language Resources for National Lightning Safety Awareness Week

VIOLETA YAS - CHIEF METEOROLOGIST - WWSI TELEMUNDO 62/WCAU NBC10

PABLO SÁNCHEZ-NÚÑEZ - METEOROLOGIST - KXTX TELEMUNDO 39

JOSEPH E. TRUJILLO-FALCÓN- CIMMS/NSSL/SPC AND CHAIR OF AMS CHALA

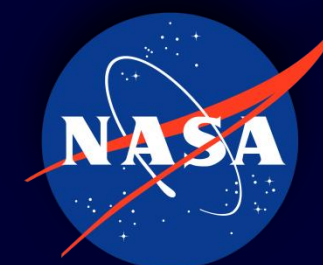
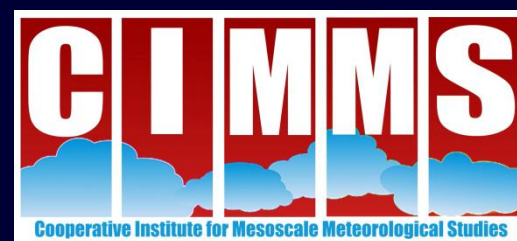
CHRISTOPHER J. SCHULTZ - NASA MARSHALL SPACE FLIGHT CENTER/NATIONAL LIGHTNING SAFETY COUNCIL

KELLEY M. MURPHY - UNIV. OF ALABAMA IN HUNTSVILLE

ANDREA ROMERO - CHIEF METEOROLOGIST - WNJU TELEMUNDO 47

MADISON TORRES - METEOROLOGIST - WJAN AMÉRICATEVÉ

CHRISTOPHER BIANCHI - METEOROLOGIST - SPECTRUM NEWS LOS ANGELES

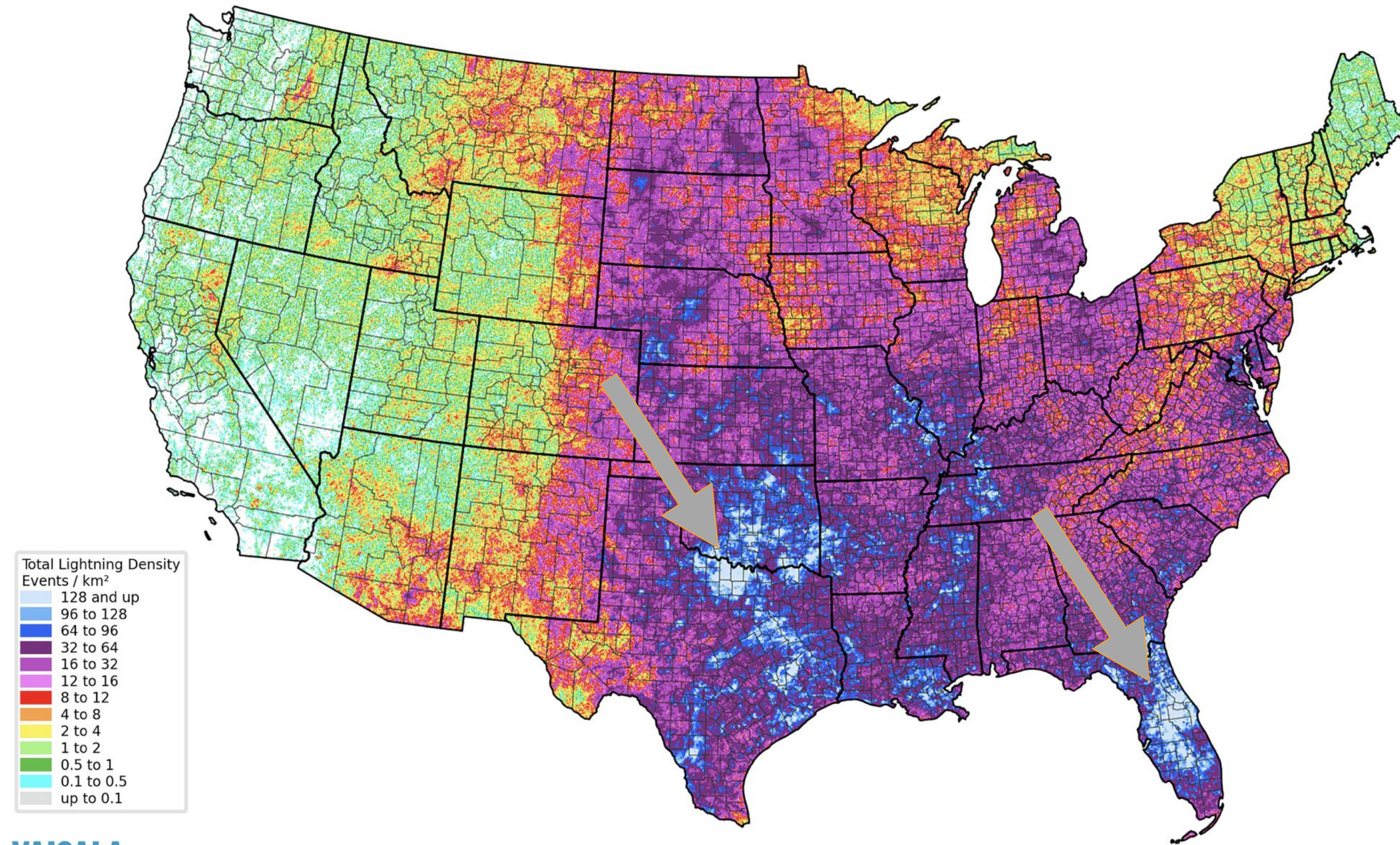


¿When Thunder Roars, Go Indoors?

Why lightning?



U.S. total lightning density in 2020
170,549,822 events detected



VAISALA

ANNUAL LIGHTNING REPORT 2020

© Vaisala 2021

Lightning Density + Population Distribution

Where Do Latinos Live and Work?

- Florida: 26.4% Latino (~5.6 million ppl)*
- Texas: 39.7% Latino (~11.5 million ppl)*
- High lightning concentration in Florida & Texas

***(U.S. CENSUS BUREAU 2019)**

Lightning Density + Population Distribution

Where do Latinos Live and Work?

- Latinos are more exposed due to the jobs they tend to have
- Top three occupations with the most Hispanic/Latino workforce are outdoors
- Farming, Fishing, Forestry (43.4% Latino)
- Grounds Maintenance (36.7% Latino)
- Construction & Extraction (32.3% Latino)

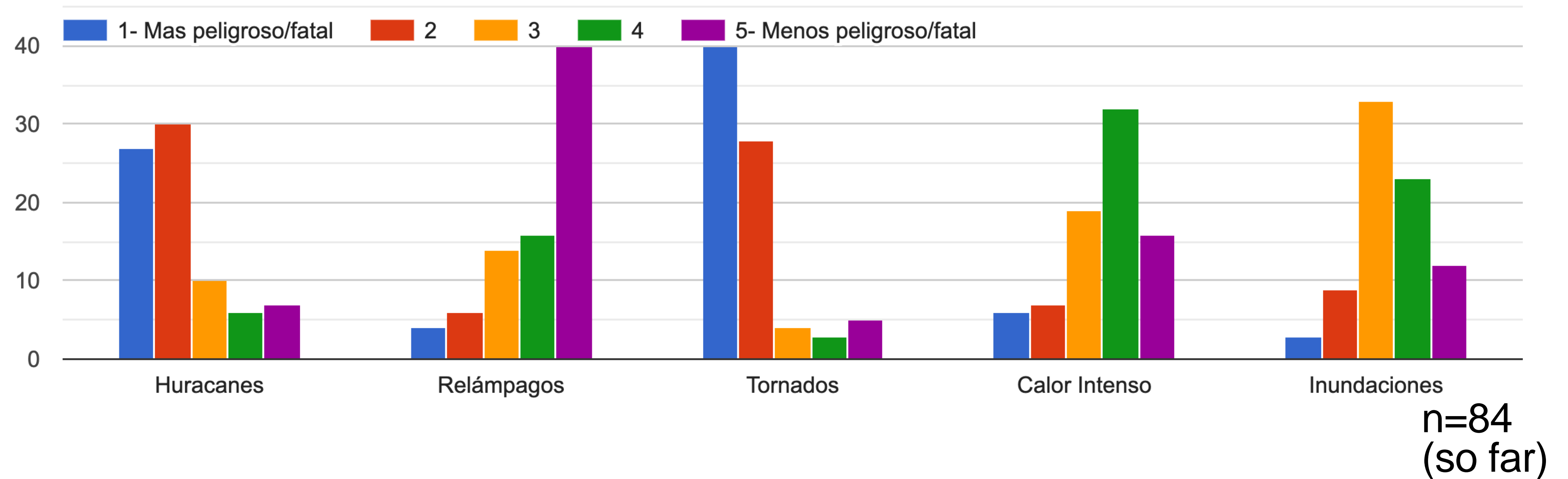
Percentage of occupational employment that is of Hispanic or Latino ethnicity, 2014 annual averages

Occupation	Percent
Farming, fishing, and forestry	43.4%
Building and grounds cleaning and maintenance	36.7
Construction and extraction	32.3
Food preparation and serving related	24.9
Transportation and material moving	22.1
Production	21.9
Installation, maintenance, and repair	16.8
Personal care and service	16.6
Healthcare support	16.2
Total, all occupations	16.1
Office and administrative support	15.1
Sales and related	14.7
Protective service	14.4
Community and social service	11.6
Arts, design, entertainment, sports, and media	9.8
Education, training, and library	9.5
Management	9.1
Business and financial operations	8.4
Architecture and engineering	8.2
Legal	7.9
Healthcare practitioners and technical	7.7
Life, physical, and social science	7.5
Computer and mathematical	6.6

DFW/Philly Survey

3.) ¿Cuales de los próximos fenómenos meteorológicos te parece el más peligroso/fatal? Ponlos en orden de 1 a 5; (1) siendo el más peligroso/fatal y (5) siendo el menos peligroso/fatal

LIGHTNING: 40/84 PARTICIPANTS CONSIDER IT THE LEAST DANGEROUS



National Lightning Safety Council

- The National Lightning Safety Council (NLSC) was established to promote lightning safety education and awareness.
- The Council recognizes **National Lightning Safety Awareness Week (June 20th - 26th 2021)** and **International Lightning Safety Day (June 28th)** as a unique opportunity to provide the public with safety information about lightning.
- The NLSC coined the often used phrase for lightning safety:
“When Thunder Roars, Go Indoors”



2020 Lightning Fatality Data

	State	Age	Gender	Activity	Victim
1	South Carolina	32	M	Getting out of car	Sirmorio Davis
2	Florida	41	M	Work - lawn care	Jose Rivera**
3	Texas	51	M	Work - construction	Carlos Erick Davies Reyes**
4	Florida	35	M	Work - roofing	Raul Rome Teoba
5	Colorado	65	F	Walking	Pam Mount
6	Texas	61	F	Weed whacking	Jaime Maxine Wilkie
7	Texas	16	M	Moving hammock	Bryan Martinez**
8	Georgia	9	F	Walking	Nicol Mateo Pedro**
9	Pennsylvania	43	M	Putting up deer blind	Jason Gamba
10	Pennsylvania	34	M	Putting up deer blind	Craig Keleman
11	Indiana	34	M	Roofing	Jose Louis Lopez Mora**
12	Missouri	28	M	Was playing soccer	Noe Ordóñez Nunez**
13	California	47	M	Jetskiing	Eugene Arao
14	Montana	65	F	Walking	Verna Baisch
15	North Carolina	77	M	Cutting up tree limbs	Ralph Thomas Wallace
16	North Carolina	42	M	Cutting up tree limbs	Moo Saw Kefauver
17	Florida	58	M	Grilling	Jesus Perez**

(NATIONAL LIGHTNING SAFETY COUNCIL 2020)

2020 Lightning Fatality Data - Takeaways

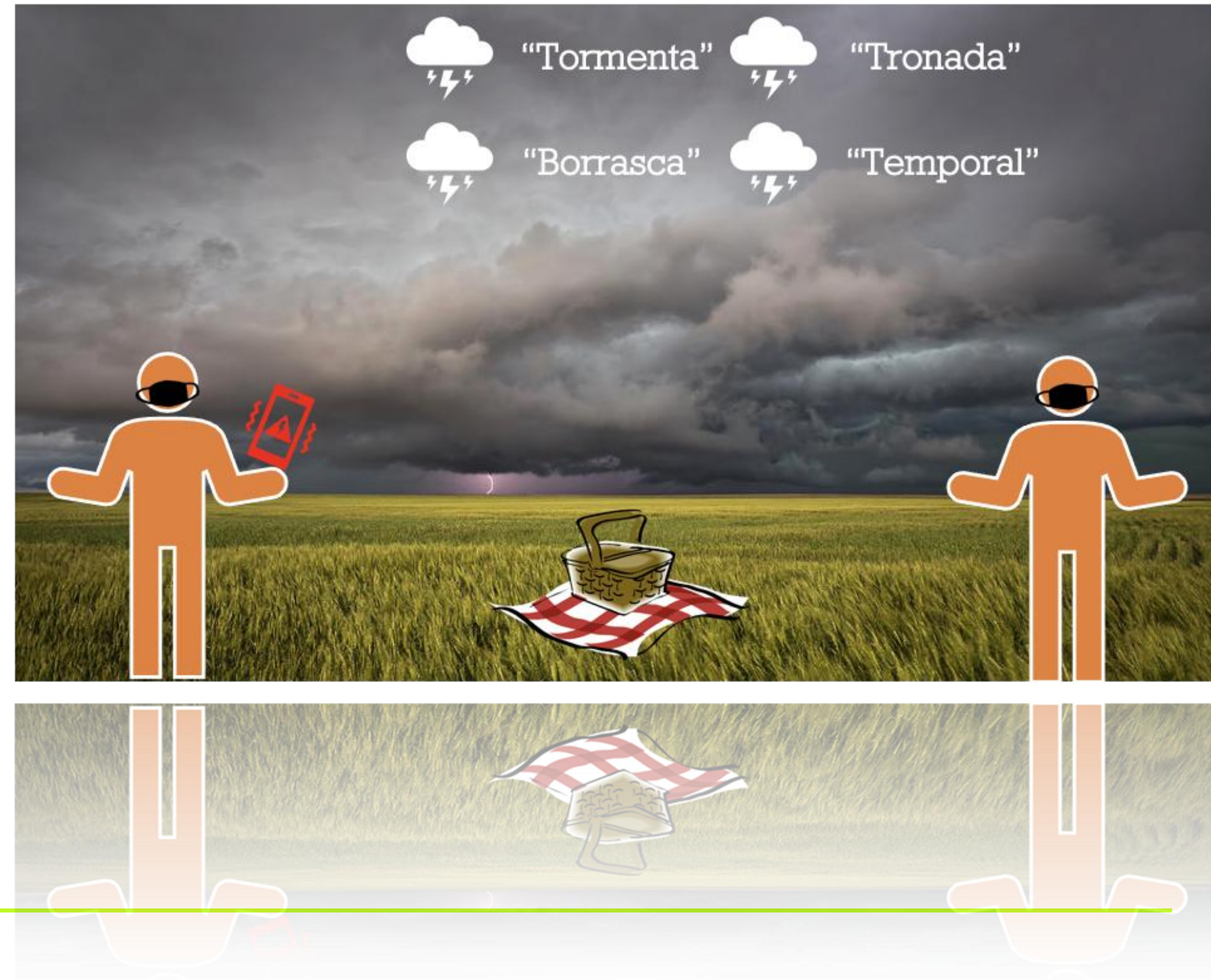
- 35% of deaths occurred in Texas or Florida (6 of 17)
- 41% are names of Hispanic descent (7 of 17; possibly 9 of 17)
- 41% of activities involved lawn care/construction (7 of 17)

(NATIONAL LIGHTNING SAFETY COUNCIL 2020)

Effective Risk Communication in Spanish

Challenges in the United States:

1. Risk Literacy among Hispanics/Latinos
2. Spanish Dialects in the U.S.
3. Translating Technical and Risk Terminology



Clear
Concise
Correct
...and Rhyme!

FOR NATIONAL LIGHTNING SAFETY AWARENESS
WEEK 2021

SI
ESCUCHA
UN TRUENO,
VAYA
ADENTRO

- 1.) Inmediatamente **PARE** las actividades al aire libre
- 2.) Busque refugio en un **edificio** o **vehículo**

EL COMITÉ PARA EL AVANCE DE HISPANOS Y LATINX
EL CONSUL NACIONAL DE LA SEGURIDAD CONTRA
RELÁMPAGOS

Social Media Content Plan



JUNE
20TH - 26TH

SUNDAY

9 AM: LATINOS & LIGHTNING [GFX]

4 PM: INTRO VIDEO FROM BROADCASTERS

MONDAY

9 AM: SLOGAN [GFX]

4 PM: PABLO & HOUSTON NWS FACEBOOK LIVE

TUESDAY

9 AM: WHERE TO GO/WHAT TO DO [GFX]

4 PM: WHAT IS A SAFE VEHICLE? [GFX]

WEDNESDAY

9 AM: MYTHS [GFX]

4 PM: MADISON & MIAMI NWS FACEBOOK LIVE

THURSDAY

9 AM: LONGTERM HEALTH IMPACTS [GFX]

4 PM: WHAT TO DO IF SOMEONE IS STRUCK [GFX]

FRIDAY

9 AM: QUIZ SHEET FOR KIDS [PRINTABLE GFX]

4 PM: ANDREA & NY NWS FACEBOOK LIVE

SATURDAY

9 AM: ANSWER SHEET FOR KIDS' QUIZ

4 PM: INFOSHEET ROUNDUP

NOTES:

* ALL TIMES ARE EST

* HASHTAG TBD

* WEBSITE TBD



BILINGUAL METEOROLOGISTS AND AMS CHALA MEMBERS FROM HOUSTON, MIAMI, NEW YORK

EFECTOS A LARGO PLAZO SOBRE LA SALUD



**SÍNTOMAS NEUROLÓGICOS
PERSISTENTES**



**DEBILIDAD MUSCULAR Y EN LA
MÉDULA ESPINAL**



PÉRDIDA SENSORIAL



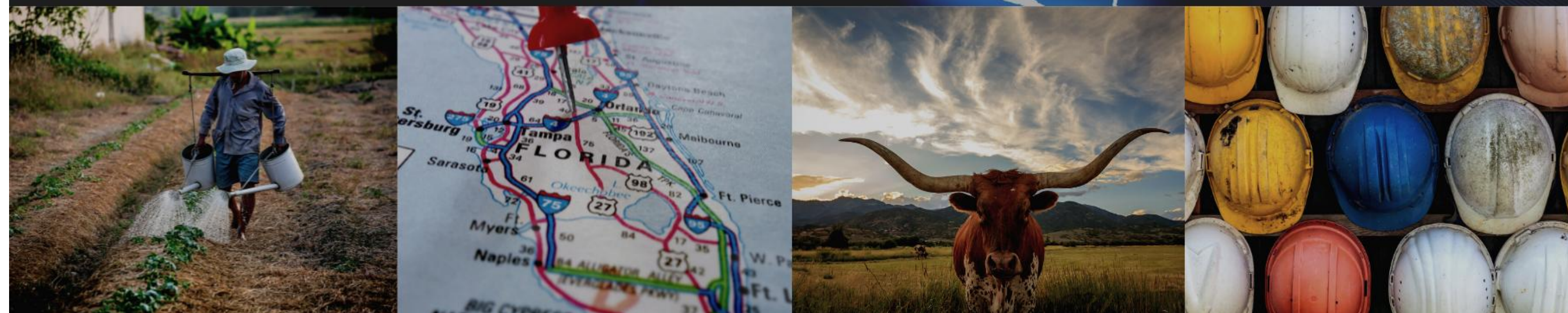
**DIFICULTAD PARA PENSAR Y
CONCENTRARSE**

MÁS INFORMACIÓN EN

[Website]

LATINOS Y LA AMENAZA DE RELÁMPAGOS

¿SABÍAS QUE LOS LATINOS SON
DES PROPORCIONADAMENTE
AMENAZADOS POR LOS
RELÁMPAGOS, DEBIDO A DONDE
TENDEMOS VIVIR Y TRABAJAR?



“ - - - - -
¡LOS RELÁMPAGOS SON
MÁS CÁLIDOS QUE LA
SUPERFICIE DEL SOL!
PUEDEN LLEGAR HASTA...

50,000°

.....
EL DIÁMETRO DE UN
RELÁMPAGO ES SOLO
COMO UNA MONEDA DE...

25¢



What we feel our initiative will provide

- Save lives and protect, through information
- Second, we are looking for the generation of a *unique* message on lightning security in Spanish.
- We want our initiative to be a *benchmark* among the U.S. Hispanic community in terms of lightning information and security.
- We seek to change the perception of the risk associated with lightning among the Hispanic population.

National Lightning Safety Awareness Week (June 20th-26th, 2021) and International Lightning Safety Day (June 28th, 2021)

¿When Thunder Roars, Go Indoors?



¡Si escucha un trueno, vaya adentro!

VISIT: [HTTP://LIGHTNINGSAFETYCOUNCIL.ORG](http://LIGHTNINGSAFETYCOUNCIL.ORG)