Although no single messaging style works perfectly everywhere, these tips may help alert originators craft messages which will still be understandable after being processed by computer text-to-speech distribution channels.

Remember, these are tips, not rules. Always use your best judgement to make the message clear, concise and correct.

Alert Content

Please refer to relevant agencies and research for writing alert and warning content.

- Australian Government (Emergency Warnings: Choosing your words)
  - https://www.ag.gov.au/Publications/Pages/Emergency-warnings-choosing-your-words.aspx
- Centers for Disease Control and Prevention, Emergency Preparedness and Response
  - http://www.emergency.cdc.gov/
- Federal Emergency Management Agency, Emergency Management Institute
  - http://training.fema.gov/
- Minnesota Statewide Emergency Communications Board (Best Practice Guide)
  - https://dps.mn.gov/entity/secb/committees/Documents/Integrated%20Public%20Alert%20Warning%20System%20(IPAWS)%20Committee/mn-ipaws-public-alerting-authority-best-practices-guide-nov-2015.pdf
- National Weather Service, Warning Decision Training Division
  - http://www.wdtb.noaa.gov/
- National Center for Missing & Exploited Children (AMBER messages)
  - http://www.missingkids.com/Training
- US Army Corps of Engineers risk management center (A Guide to Public Alerts and Warnings for Dam and Levee Emergencies)
  - http://silverjackets.nfrmp.us/Portals/0/doc/WarningGuidebook_USACE.pdf?ver=2015-08-10-213008-520

News Style Guides

Understandable alert messages will SOUND like a broadcast story, LOOK like a print article, and PROCESS like a computer text.

Of course, alert warnings are not the same as news stories. Nevertheless, news style guides address common formatting issues for broadcast announcing, such as abbreviations, capitalization, numerals, punctuation, spelling, and usage. The Associated Press Stylebook[1] and AP Broadcast Guidelines are well-known and widely available throughout the media industry. Due to its widespread use, many computer text-to-speech engines are fine-tuned with AP Stylebook practices. These tips assume messages follow the AP Stylebook 2016 edition. Changes in recent AP Stylebook editions have made articles more Web and text-to-speech friendly, so you should always use the most recent editions.

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[1] The AP Stylebook is available for purchase from https://www.apstylebook.com and most book sellers.

Alert Script Preparation

Always prepare a written script using the most important information about the incident and actions the public should take. Public information officers may have pre-prepared templates for common incidents.

A. Write the script using the AP Broadcast Guidelines (p. 308, AP Stylebook 2016):
    1. Lead with the news.
    2. In leads, use forms of the present or future verb tenses.
    3. Keep leads short and to the point.
    4. Favor the active voice.
    5. Attribute at the beginning of sentences.
    6. Identify newsmakers before naming them.
    7. Omit needless words.
    8. Prefer the simple to the complex.
    9. Don't strain for synonyms.
    10. Use direct quotes only when a paraphrase doesn't work better. In most cases it does.
    11. Simplify numbers.
    12. Use a variety of sentence lengths, but keep most of them short.
B. Edit the script following the AP Stylebook guide for capitalization, abbreviation, spelling, numerals, punctuation and usage:
    1. Keep the broadcast structure.
    2. Use simple, syntactically correct sentences.
    3. Use upper and lower case, standard capitalization, standard punctuation and spacing. ALL CAPS LOOKS LIKE SHOUTING. Lack of punctuation sounds like a monotone run on sentence.
    4. Spell words correctly according to the message's language. Proper names should be spelled correctly, not phonetically, even if a different language.
    5. Do NOT include announcer notes, pronouncers (pruh-NOUNS-erz), or *** EMPHASIS ***. All text may appear on television scrolls, read by Text-to-Speech, and on web sites.
    6. Do NOT begin with a dateline, end with hash marks (###) or use other tagging.
C. Adjust the script text using tips from this document to fine-tune the script text for dissemination through audio, video and web channels, and processing by text-to-speech (TTS) processors.
D. Following these tips and AP Styebook generally produce understandable TTS messages. But you should always preview the message with a computer text-to-speech processor.
    1. Preview the script using Microsoft Windows Narrator or Apple OSX VoiceOver. These are unsophisticated TTS processors, and will reveal common issues with computer TTS. The goal: Is it understandable? Not: Is it perfect?
    2. Do not use a specific TTS processor's tricks or extensions. Because every TTS processor will have different problems, making it perfect for one TTS will create problems for a different TTS or text scroll. Simple sentences and punctuation are best.
E. Use the final script to record an audio file as an attachment to the CAP-EAS alert. The content of the CAP-EAS text should match the attached CAP-EAS audio file (or very similar).

Tips for better broadcast and text-to-speech scripts. When in doubt, spell it out.

Topic	EAS and CAP Description/Instructions	Headlines and WEA text
Abbreviations and acronyms	Follow AP Stylebook guidelines for broadcast. Avoid abbreviations. Use acronyms only when they help a listener understand the message, e.g. instead of repeating a long agency name after the first use. It's usually better to use a simple word instead of an acronym, i.e. "police" instead of NYPD. Do not abbreviate titles, e.g. Attorney General, Doctor, Governor, President, Reverend, Rear Admiral. Minimize long official titles, and make more conversational. Well-known acronyms use all caps, with hyphens or periods, e.g. F-B-I, U.S., to assist pronunciation by announcers and text-to-speech. Well-known means well-known by the public, not the originator. When in doubt, use the full name the first time. Acronyms pronounced as one word are written without hyphens or periods, e.g., FEMA, NASA. POTUS is not considered a well-known acronym. Use the President of the United States, or the President. (GPO Style Manual)	When necessary for space, abbreviate least important words. Well-known acronyms use all caps, without periods, such as FBI and NASA. Except two-letter acronyms use periods, such as I.D. and U.S. to distinguish from USPS state codes. Illinois Governor orders evacuation of East Saint Louis Gov. order: evacuate E. St. Louis, IL. Bring I.D. card to Boise, ID. A.C and D.C. power failure in Washington, DC. The President warns The company president says

Ages	Use broadcast structure for age. Use numeric figures. Use hyphens for adjectives or as a substitute for a noun. Do not abbreviate "month," "months," "year" or "years."	Use print structure for age. Use numeric figures. When necessary for space, abbreviate least important words.
	The 33-year-old suspect wearing The 6-month-old infant was abducted The infant is 6 months old. The suspect is in her 30s (no apostrophe) The suspect is 25 to 35 years old	The suspect, 33, wearing Infant, 6 mo., abducted Infant, 6 months old, is Suspect in 30s (no apostrophe) Suspect 25-35 yr. old
Dates	Most emergency messages are short-term, and do not require calendar dates. Use Monday, Tuesday, etc. up to 7 days before or after the current date. Use yesterday, today, and tomorrow before or after the current day. When exact calendar dates are needed, spell-out months (preferred) or follow AP Stylebook abbreviations (only Jan., Feb., Aug., Sept., Oct., Nov. and Dec.) September has a four-letter abbreviation in the AP Stylebook. Other abbreviations are not as universally recognized by TTS as dates, e.g. Jan may be a person's first name or a month. January (never abbreviate month alone) February 2011 (never abbreviate month-year) September 1 (or Sept. 1) July 4 (does not have an abbreviation) December 22, 2016 (or Dec. 22, 2016) Do not use date formats like MM/DD/YYYY because it may confuse international visitors and text-to-speech configurations may switch the day, month, year components.	Most emergency messages are short-term, and do not require calendar dates. Use Monday, Tuesday, etc. up to 7 days before or after the current date. Use yesterday, today, and tomorrow before or after the current day. When exact calendar dates are needed, spell-out months (preferred) or follow AP Stylebook three-letter abbreviations (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec). January (avoid abbreviating month alone) February 2011 (or Feb 2011) September 1 (or Sep 1) July 4 (or Jul 4) December 22, 2016 (or Dec 22, 2016)

Dimensions	Follow AP Stylebook guidelines for broadcast. Use numeric figures and spell-out inches, feet, pounds, miles, etc. Use hyphens for adjectives or as a substitute for a noun. The 5-foot-6 suspect The suspect weighs about 160 pounds 10-mile evacuation zone	Use numeric figures and spell-out inches, feet, pounds, miles, etc. When necessary for space, abbreviate least important words. Use an apostrophe to indicate feet and quote marks to indicate inches when space is critical. 5'6" suspect Suspect 160 lbs. 10 mi. evacuation
Directions	Avoid abbreviations. Spell-out directions. North, northeast, northern, northbound, heading north, etc.	When necessary for space, abbreviate least important words. North (N), northeast (NE), northern (N), northbound (NB), heading north (NB), etc.
License plate	Use State name, tag with spaces. Include punctuation, such as a comma, at the beginning and end of the tag. Virginia, A B C 1 2 3 4.	No spaces, USPS state code in parenthesis. ABC1234 (VA)
Proper Names	Proper names will be mispronounced. Proper names should be spelled correctly, not phonetically, with punctuation and capitalization. For messages in English, Spanish, and other Latin languages, use Romanized/Latin characters for proper names from non-Latin languages (Arabic, Chinese, Cyrillic, Japanese, Korean, etc.) Unless a person's name is critical for the message, such as the child's name in an AMBER alert, his or her official job title alone is usually sufficient for an emergency message, e.g. the Mayor of New York City or the President of the United States. Job titles are less likely to be mispronounced. For names of bridges, cities, landmarks, localities, organizations, etc. be careful with dual use abbreviations, such as "St." meaning Saint or Street, or "N" meaning "North" or "N Street." Avoid abbreviations unless part of the official name.	Proper names should be spelled correctly, not phonetically, with punctuation and capitalization. For messages in English, Spanish, and other Latin languages, use Romanized/Latin characters for proper names from non-Latin languages (Arabic, Chinese, Cyrillic, Japanese, Korean, etc.) Drop parts of a proper name when necessary for space. In general use only last names unless necessary to distinguish between two people using the same last name such as an AMBER Alert. For names of bridges, cities, landmarks, localities, organizations, etc. use the most well-known short name, even if not the official name, unless it creates confusion, e.g. Red Cross instead of the American Red Cross Eastern Missouri.

Punctuation and capitalization	Punctuation and capitalization affects text-to-speech engines. Use standard punctuation and capitalization. Unusual capitalization may cause words to be read letter-by-letter as acronyms, such as "It is important" versus "IT is important" may be read by text-to-speech engines as the acronym "I.T." Do not include extra punctuation to indicate emphasis, such as *** UPDATE ***, because text-to-speech may read it as "asterisk, asterisk, asterisk, update, asterisk, asterisk, asterisk."	Minimize punctuation, but use enough to separate parts of the message.
State names	Avoid abbreviations. Use short or full state names as appropriate. Illinois Dallas, Texas Commonwealth of Virginia New York state (when necessary to distinguish from New York City) The entire District of Columbia Washington, DC (exception) Washington state (when necessary to distinguish from Washington, DC) When necessary, use AP Stylebook state abbreviation or USPS state code with addresses. Cleveland, OH Los Angeles, Calif. People may confuse USPS state codes, i.e. AL – Alabama with AK – Alaska, MA – Massachusetts with ME – Maine with MN – Minnesota. It's better not to abbreviate in most instances.	When necessary for space, use AP Stylebook state abbreviation or USPS state code. Cleveland, OH Los Angeles, Calif.

| Street Addresses | Follow AP Stylebook and U.S. Postal Service guidelines for addresses.

Exact street addresses are typically not used in emergency messages. Without a street number, spell out all parts of the street name.

Mount Lee Drive
N Street Northeast (Alphabetic "N" street)
Pennsylvania Avenue Northwest
West 33rd Street

For exact street addresses, use the USPS ZIP Code lookup tool to correct and standardize the street address. Standardized addresses are important for people using GPS navigation tools. Then follow the AP Stylebook capitalization and punctuation guidelines for addresses. For predictable results, spell out abbreviations, including Ave., Blvd., and St. and compass points, other than the USPS state code.

4059 Mount Lee Drive, Hollywood, CA 90068
145 N Street Northeast, Washington, DC 20002
1600 Pennsylvania Avenue Northeast, Washington, DC 20500
450 West 33rd Street, New York, NY 10001 | Follow AP Stylebook and U.S. Postal Service guidelines for addresses.

Exact street addresses are typically not used in headlines or WEA texts. Spell out all parts of the street name.

Mount Lee Drive
N Street Northeast (Alphabetic "N" street)
Pennsylvania Avenue Northwest
West 33rd Street

When necessary for space, follow USPS abbreviation rules for addresses (USPS Publication 28, and USPS ZIP Code lookup tool). Capitalize and punctuate.

Mt. Lee Dr.
N St. NE
Pennsylvania Ave. NW
W. 33rd St. |

Telephone number	Prefer 10-digits with area code and hyphens. Use spaces, instead of hyphens, in short dialing codes and numbers. Include punctuation, such as a comma, at the beginning and end of the telephone number. Call, 202-555-1212, for assistance. Call, 9 1 1, for an emergency (with spaces, no hyphens) Dial, (star) H P (pound), to reach the Highway Patrol (with spaces, spell-out dialing codes)	Prefer 10-digits with area code and hyphens. Do not use spaces in short dialing codes and numbers. Call 202-555-1212 for assistance Call 911 for an emergency (no spaces, no hyphens) Dial *HP# to reach Highway Patrol (with dialing codes) **Note: The WEA text field must not contain telephone numbers or URLs.** It is possible to hack IPAWS telephone number checks, but violates the IPAWS user agreement.
Times	Follow AP Stylebook guidelines for broadcast, but use a.m. and p.m. instead of a-m or p-m. Noon, midnight, 11 a.m., 3:30 p.m., 9 to 11 a.m., 9 a.m. to 5 p.m. When exact time is not necessary, use yesterday, today, tomorrow, tonight, this morning, etc.	Use compact style such as noon, midnight, 11AM, 3:30PM, 9-11AM, 9AM to 5PM

| Web addresses (URL: Uniform Resource Locator) | Use simple, pronounceable, web addresses in the EAS description and instruction fields. A web link to a top-level portal page is usually sufficient. The public can navigate from the portal page to incident or more detail pages.

Use capitalization and spaces to make the address as readable and pronounceable as possible. Because the general web address will likely be used as the public portal page for many alerts, experiment with multiple TTS engines. It will not be perfect, but useable by the public.

Do not include the "http://" as part of the web address. Most listeners and text-to-speech engines recognize items beginning with "www." as a web address.

www.Chesterfield.MO.US
www.NYC.gov
www.Pueblo Emergency.info
www.S D County Emergency.com
www.Weather.gov

Separately, all CAP messages should have an incident specific web address (URL) in the CAP web field. If an incident specific link is not available, provide a generic link to the sender's web site in the CAP web field. | Do not use the Headline or WEA text fields for web addresses.

Separately, all CAP messages should have an incident specific web address (URL) in the CAP web field. If an incident specific link is not available, provide a generic link to the sender's web site in the CAP web field.

Note: The WEA text field must not contain telephone numbers or URLs. It is possible to hack IPAWS URL checks, but violates the IPAWS user agreement. |