

2019 – 2020



Accessibility Standards in Email Marketing



Email accessibility: It's not the sexiest email topic to talk about, but it's certainly one of the most important.

We live in a hyper-connected world, rife with communication tools and the internet always at our fingertips. But for many people with disabilities and impairments, [staying connected isn't always easy](#), and some activities, like reading emails or browsing the web, can require extra time or added technology. Recently, we conducted a poll on our website asking visitors whether accessibility is a part of their email strategy. Interestingly, more than **70% of respondents said they are actively looking at making their emails more accessible**.

Email on Acid is helping to make that a reality for email developers and marketers to create and send emails that every subscriber can read and understand, regardless of whether they have a visual impairment or disability. Here, you'll learn why [accessible email](#) is so important and how to implement it into your own email strategy.

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[According to the World Health Organization \(WHO\)](#), 1.3 billion people worldwide live with some form of visual impairment, with roughly 217 million living with moderate to severe vision impairment. Similarly, according to the 2017 U.S. Census Bureau, there were more than 40 million Americans (out of 325 million) with [some degree of disability](#), 7.5 million of whom were visually impaired. Given that the majority of this group belongs to the “netizens of the world,” it’s more important than ever to provide fair and equal access to the web and electronic communications.

1.3 billion people worldwide live with some form of visual impairment.

Countless people also face temporary disabilities, such as a broken hand or surgery recovery. They may be using assistive technology to navigate email as well. In 2015, it was estimated that the [annual number of marketing emails](#) sent and received per year would reach 246 billion by 2019. People with disabilities represent \$1 trillion in disposable income worldwide, according to Sharon Hurley Hall at [Optin Monster](#).

In the U.S. specifically, [the ADA](#) cites the U.S. Department of Labor’s findings that “**the large and growing market of people with disabilities has \$175 billion in discretionary spending.**” How many of these people are interacting with your emails?

— WHY? —

Access your whole audience.

And improve the experience for everyone (including you)!

DID YOU KNOW?



**1.14
BILLION**

People have a disability worldwide.

That is ~3.5x the population of the U.S.

COMMON DISABILITIES

Cognitive

Visual

Fine motor

Temporary



If you're like us and expanding accessible email is part of your mission, then you probably already know the best practices for [email accessibility](#). These practices break barriers and make it possible to reach people who would've otherwise been alienated from the digital conversation.

But for some email marketers, accessibility is required in their campaigns. Certain industries, such as financial institutions and governments, must adhere to [laws and regulations](#) for web accessibility meant to ensure an inclusive approach in the digital age.

Using Accessibility Standards in Every Industry

Email marketers who may not work in these industries should still be familiar with and implementing accessibility best practices. Creating an accessible email may be the difference in helping you reach a wider, more engaged audience.

Web Content Accessibility Guidelines (WCAG)

Before we go any further, let's make one thing clear. There is no one, paramount law that requires companies and organizations to make their services accessible. That said, we recommend looking at what the [World Wide Web Consortium \(W3C\)](#) has to say about accessibility.

Dating back to 1994, the W3C is an international standards organization on a mission to "lead the World Wide Web to its full potential by developing protocols and guidelines that ensure the long-term growth of the Web." In 1995, they came up with the [Web Content Accessibility Guidelines \(WCAG\)](#) (currently in version 2.1) which is nowadays the go-to document for accessibility standards around the world.

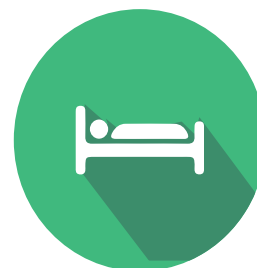
Apart from the WCAG, different industries set their own rules on accessibility, so it may be a good idea to know whether your company or organization needs to adhere to these guidelines when designing your email campaigns.

Disclaimer: For the purpose of this whitepaper, we focus on the regulations that apply in the U.S.

Healthcare

When it comes to the healthcare industry, Section 1557 of the [Patient Protection and Affordable Care Act \(ACA\)](#) states that “the law prohibits discrimination on the basis of race, color, national origin, sex, age, or disability in certain health programs or activities.”

Another point of reference for healthcare providers is [Section 508 of the Rehabilitation Act](#) which enforces “equal access to electronic information and data comparable to those who do not have disabilities (...).”



Government Organizations

Accessibility guidelines for government bodies are set forth in The Americans with Disabilities Act (ADA) and Sections 504/[508 of the Rehabilitation Act](#). While [Section 504](#) sets the ground for preventing disability discrimination by government bodies and institutions, Section 508 regulates fair access to electronic information and information technology.

So, what does this mean for email marketers? The government refers to WCAG 2.0 for its internal accessibility policies, so you can safely use the document for guidance. You can also consult [this website](#) for specific recommendations.

Hotel Industry

Similar to other sectors we've mentioned, accommodation service providers have to render services compliant with the Americans with Disabilities Act. That said, email marketers in the hospitality field can refer to WCAG for guidance, as it's the go-to document for the hotel industry.

Finance

With the increasing number of customers using online financial services and mobile banking, institutions and organizations operating in the financial sector must make their services compliant with accessibility guidelines.

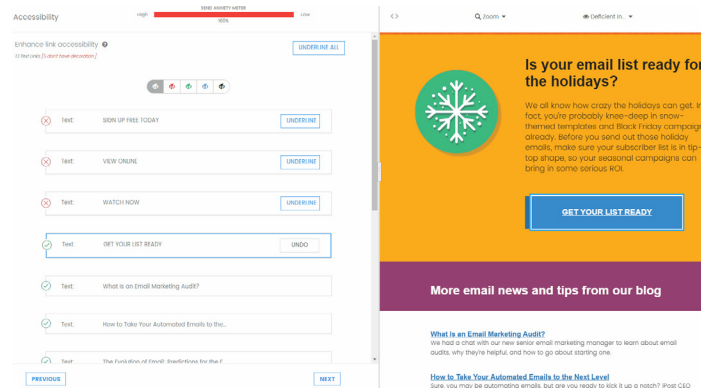
In addition to the guidelines set by the WCAG, companies in the financial sector are obliged to adhere to rules set out by [The Americans with Disabilities Act \(ADA\)](#). The document (Title III) “prohibits discrimination on the basis of disability in the activities of places of public accommodations(...).”

Since the Department of Justice recognizes WCAG as ADA-compliant, email marketers in the financial industry can safely refer to WCAG for guidance.

Use Good Color Contrast

The contrast ratio is the variation between the background color and the foreground color. In an email, the foreground color is often the color of text you're working with, but it can also apply to graphics, diagrams or logos.

[Contrast ratio](#) is especially important for subscribers who may suffer from certain visual impairments. For example, white text on a yellow background may be difficult to read.



Email on Acid's **Campaign Precheck** Accessibility feature includes a color contrast checker.



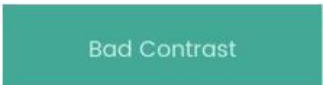


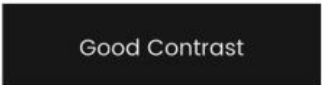
WCAG color contrast guidelines

[WCAG 2.0](#) set standards for web accessibility, including contrast ratio minimums. WCAG has a calculator that assigns a number between 1 and 21 that indicates how much contrast your background and foreground colors have. A 1:1 ratio is very little contrast (white text on a white background) while a 21:1 ratio is high contrast (black text on white background).

If your team needs to meet level AAA guidelines, you must use a contrast ratio of at least 7:1 for normal text and 4.5:1 for large text.

Any email design should have a **minimum** contrast ratio of 4.5:1 for standard sized text to meet [WCAG's level AA standards](#). For text larger than 23px or bold text larger than 18px, the contrast ratio should be 3:1.

Even if you know baseline accessibility best practices, take the time to get familiar with these regulations to help ensure your emails play by the rules.

 Bad Contrast Contrast Ratio: 1.19 : 1	 Good Contrast Contrast Ratio: 4.71 : 1
 Bad Contrast Contrast Ratio: 2.39 : 1	 Good Contrast Contrast Ratio: 9.46 : 1
 Bad Contrast Contrast Ratio: 4.22 : 1	 Good Contrast Contrast Ratio: 15.04 : 1



Email on Acid's **Campaign Precheck** has a contrast ratio tool built into the workflow that will check your email design for color contrast issues. The tool will flag anything below the standard and adjust the coloring, so it is easier to read.

Make Links Accessible

Links are another email element to consider for colorblind subscribers. Depending on the type of color deficiency a user has, he or she may not be able to easily see a link or CTA button.

Be sure to indicate a link with bold font, an underline, or a symbol (>), so you don't lose out on a click.

Keep Fonts at a Minimum of 14px

A good rule of thumb is to have your fonts at a **minimum of 14px in size**. Anything less than 14px can be tough for people to read. This is only a general rule and may change depending on the type of font you are using. For example, if you're using a light font, consider bumping the size up to a minimum of 16px.

Check out [our blog!](#)

Original design

Check out our blog!

If you can't see the color blue

 Bad for accessibility

Check out [our blog!](#)

Original design

Check out [our blog!](#)

If you can't see the color blue

 Good for accessibility

Maintain a Logical Reading Structure

When possible, keep a logical reading order to your email. In general, screen readers will read left to right before dropping to the next line.

Keeping a logical reading order can also help users with dyslexia to maintain reading flow.

Avoid Center-Aligned Paragraphs

Although it can be aesthetically pleasing to have your text in the center, it can be much harder for people with dyslexia to read center-aligned text. Yes, even on mobile! Try and keep large bodies of text left-aligned.



"To return to the ship," Hook replied slowly through his teeth, "and cook a large rich cake of a jolly thickness with green sugar on it. There can be but one room below, for there is but one chimney. The silly moles had not the sense to see that they did not need a door apiece. That shows they have no mother. We will leave the cake on the shore of the Mermaids' Lagoon."

Left Align



"To return to the ship," Hook replied slowly through his teeth, "and cook a large rich cake of a jolly thickness with green sugar on it. There can be but one room below, for there is but one chimney. The silly moles had not the sense to see that they did not need a door apiece. That shows they have no mother. We will leave the cake on the shore of the Mermaids' Lagoon."

Center Align

There are many adaptive technologies available to help visually impaired and disabled people use computers, tablets and smartphones. These include screen readers and screen magnifiers, or the more advanced sip 'n puff devices and eye-tracking technology. Because these tools exist, many visually impaired and disabled people can better access the internet and email.

Aside from these adaptive tools, email developers and marketers can further assist these users by making emails more accessible with a few code and design adjustments.



With Email on Acid's **Campaign Precheck**, you can easily scan your email for these important accessibility elements and adjust your code instantly.

If you want to get started with accessible emails, here are some tips and guidelines you can follow:

Use Semantic Code

Using semantic code is a basic fix that developers can apply to code, although most people overlook it. It's important to use header (<h1>) and paragraph (<p>) tags, so screen readers can differentiate between headings and paragraphs, making the content easier to digest. This creates a more pleasant reading experience and allows the user to better navigate your emails.

Set the Language Attribute

Setting the email language tells screen readers and other non-human systems, such as search engines, to pronounce or display your email copy in a specific way. Otherwise, the screen reader will read the email with the device's default language setting, which could make the message hard to understand.

You can set the language by using the two letters that correlate to the language the email is written in, such as "en" for English. For an English email, the code would look like `lang="en"`. If the email was written in Spanish, you would use "es." [Here's a handy list of HTML language codes.](#)



If you're using **Campaign Precheck's** accessibility tool, simply choose the language from the dropdown menu and we'll get the code sorted for you.

Set the Title of the Email

Proper use of the `<title>` tag will set a title on the tab of the webpage when a subscriber views the email in a browser. This tag also provides additional context for people using assistive technology, such as screen readers.

Encode Characters

Don't forget to encode your characters in the HTML! If you need some help converting special characters, [we've got a handy, free tool](#) that will do it for you.

Don't Set Titles on Links

A lot of people still like to use `title=""` to add titles to links. Avoid doing this where possible. Instead, stick to including the key information either as part of the text or the link itself. Screen readers will break their reading pattern to read the title and it can make the content harder to understand.



Campaign Precheck will save you time and remove all the title attributes for you, so your subscribers using screen readers can better understand your email.

Set and Style Alt Text

One of the [essential parts of an accessible email](#) is well-executed image alt text (alternative text). Alt text is also beneficial in cases of image blocking, such as on Outlook. That said, good alt text should be a feature of every email, regardless of whether you're designing for accessibility.

Below are [five steps](#) for crafting the ideal image alt text, which can help create a better experience for every subscriber, visually impaired or otherwise.

1. Don't repeat image alt text

Try to use different alt text for each image, even if the images are similar.

Think about how a subscriber would hear your email if he/she is using a screen reader. Using different alt text for each image can better inform subscribers and help avoid confusion.

2. Be descriptive but watch the length

Your image alt text should help convey the message of your email – if someone can't see the image, will he/she still be able to understand what the email is about?

2. Be descriptive but watch the length (continued)

If you have an image announcing a sale, for example, be sure to put the sale information in the alt text (such as “30% off blouses and sweaters”). It’s crucial to include those details in the image alt text unless you clearly state the sale information elsewhere in the email.

Although you want to be descriptive with your alt text, keep the user experience in mind. If you need multiple sentences to describe an image’s message, it probably belongs in the body copy of the email.

Also, when an email client blocks an image, the alt text will be limited to the width and height of the image container. Outlook also precedes the alt text with a security warning if images are blocked, so it’s important to keep descriptions short and sweet.

3. Don’t interchange alt text and title text

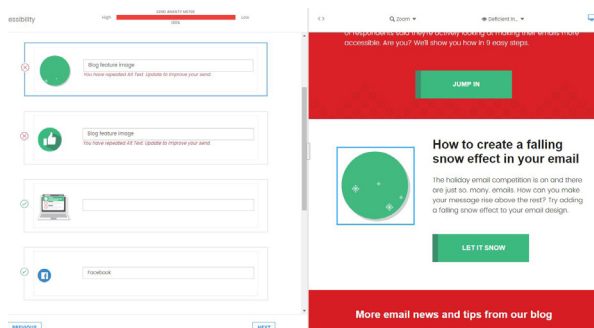
Some email developers or marketers may decide to add title text in addition to alt text. However, most screen readers will not prioritize alt text over title text and instead, read both. This doesn’t create a great experience for the user.

4. Use empty alt attributes when appropriate

Image alt text isn’t necessary for images that serve a design function. If you’re using an image purely for the aesthetics of the email (such as a spacer GIF or shadow), be sure to set an empty `alt=""` on the image. This tells the screen reader to skip over these images.

5. Style alt text when possible

[Stylizing your image alt text](#) can help improve the experience for users whose email clients block images. It allows you to adjust elements like alt text font color or size, or the background color to display when images are blocked.



Within **Campaign Precheck**, you can go through each of your images and set alt text where it’s needed. We’ll add the right code for you.

Set Presentation Roles

One of the most important steps in creating an accessible email is [setting the tables](#) to `role="presentation"`. This uses Accessible Rich Internet Applications (ARIA) to tell the screen reader how to interpret the table, so it can read it in a way that makes sense for the subscriber.

If the tables are not set to “presentation,” the screen reader will interpret the table as data, which means it will read out the HTML code to the user. It’s not a pleasant email experience.

However, if you set the tables to “presentation,” the screen reader will read only the content in the table.



Campaign Precheck’s accessibility feature checks for presentation roles and will automatically adjust the HTML.

It’s worth noting that if you’re using a table for showing data you should leave this setting off those specific tables, as you still want them to be read as data tables.

Add a Content-Type

[Content-type](#) plays a major role in the way an email displays. This code informs the browser or email client which type of characters to expect in the message and how to interpret them. The most popular character sets are UTF-8 and ISO-8859-1.

To illustrate, let’s take the following code:

Here’s how it renders using each character set:

```
<p>UTF-8 Characters: ö ü ä</p>
<p>UTF-8 Chinese: 激光 這</p>
<p>HTML Entity Characters: &#28450; &#23383;</p>
```

Result with UTF-8 set:

UTF-8 Characters: ö ü ä
UTF-8 Chinese: 激光 這
HTML Entity Characters: 漢 字

Result with ISO-8859-1 set:

UTF-8 Characters: Å½ Å¼ Å½
UTF-8 Chinese: æ¿€ å...%œ é€™
HTML Entity Characters: 漢 字

As you can see, the Chinese symbols are not represented in the ISO-8859-1 character set. This is because ISO-8859-1 only includes Latin-based language characters. The result is jumbled text, which is the ISO-8859-1 interpretation of the symbols.

Setting the content-type also ensures nothing breaks the reading pattern, whether a subscriber is reading the email themselves or using a screen reader.



ARIA, or Accessible Rich Internet Applications, is a web spec created by the World Wide Web Consortium (W3C) with the goal of adding descriptive information to HTML elements that enhance the experience for people using screen readers.

It's worth noting that ARIA has zero effect on how your email looks or renders, it's simply a descriptive layer you can wrap onto the code.



How Does ARIA Work?

ARIA allows you to use HTML to tell screen readers what an HTML element is. The following are examples of ARIA roles:

`role="presentation"`

`role="article"`

`role="img"`

`role="listitem"`

[Check our more ARIA examples here.](#)

So, is ARIA the Answer to Accessible Email?

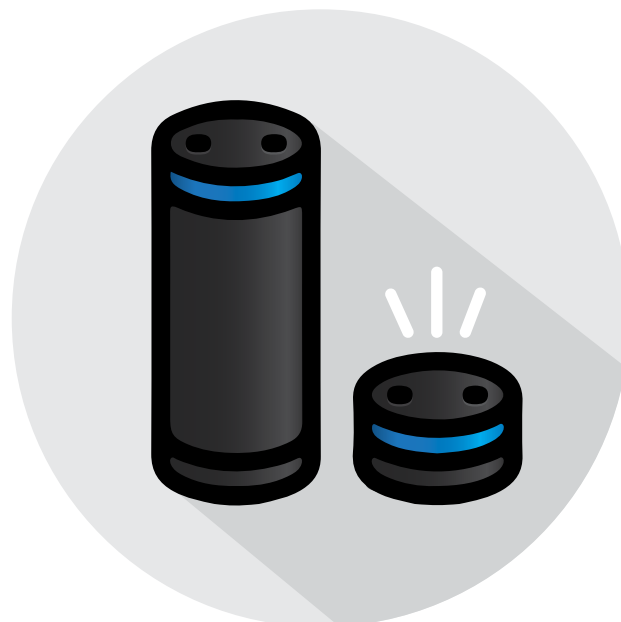
In short, not yet. Although it's making its way into web development, the email marketing world hasn't quite caught up.

So, our suggestion (for now) is to avoid using ARIA roles. If webmail clients are already adding incorrect roles, the ARIA would add to the confusion. That being said, it's important to still use `role="presentation"`. Although ARIA roles aren't ready for production, this exception benefits screen readers.

One of the features of AI, such as Alexa and Siri, is that they can now read email to users. Digital assistants are used all over the world by users who rely on voice as their only way of communicating with their devices.

This brought us one step closer to giving email marketers the ability to provide [auditory calls-to-action \(ACTAs\)](#) in their email campaigns.

With the rising popularity of competing stand-alone devices, such as the Google Home or Amazon Echo, Siri usage has dropped in recent years. Nevertheless, [Siri is still the most popular digital assistant](#).



How Voice Assistants Read Email

By default, Alexa will read the HTML version of the email. If no HTML version is available, she will read the text-only version. It's important to note that Alexa will remove all HTML comments but will read any hidden HTML (such as display: none). So, if you have any hidden content, or your HTML shows or hides blocks of content for desktop or mobile versions, Alexa will read all of it.

Alexa first tells the listener how many new emails they've received within the past 24 hours and how many of those have an important label.

Next, Alexa will prioritize emails labeled as important and then read the remaining emails, regardless of order received. If there are no "important" emails, she will read through them newest to oldest.

Below is [how Alexa reads](#) through an inbox:



For John, from the last 24 hours you have **X** unread emails, **X** marked important. The first **[important]** email is from **[sender]**, **[subject]**. Do you want to **[read, reply, delete, archive or next]**?

Siri is fairly static with what she reads and always follows the formula:



[Sender] sent you an email about **[subject]**. It says **[preheader]**. Would you like to reply?

The one variable is the preheader. Siri will read the first 499 characters of your email. For most people, this will include their [email preheader](#) followed by the first few lines of the email body. Given that preheaders fall into the first 499 characters of your email, Siri will read them out loud regardless of whether they are hidden. This requires crafting intentional preheader text, with Siri's reading in mind.

Because current email best practices suggest using shorter, snappier preheaders, we end up adversely affecting [how Siri reads our emails](#).

Luckily, optimizing for Siri is not complex. All you need to do is extend the preheader to have complete control over what Siri will read. Since we are using the preheader technology that is already present in a majority of emails, optimizing preheader content for Siri will not negatively impact the email. This won't hurt your deliverability or make your emails look bad on any client.

Auditory CTAs

Both Siri and Alexa finish an email with some derivative of, "Would you like to reply?"

This can be used several different ways for an auditory CTA, encouraging email engagement before a user has even "clicked" into your email.

In one of our Siri experiments, we added an auditory CTA to the email preheader. The CTA encouraged users to reply to the email with "I love email" to be entered into a prize drawing.

When we began testing this, we found that because of the speed Siri reads at, "I love email" came out as "Iluvemail," and it was very hard to understand. By adding commas to each word and making it "I, Love, Email" we were able to slow down the sentence and make it discernible.

Emoji Support

Given the popularity of emojis, we tested how Alexa would interpret emojis in either the subject line or body of an email. When Alexa encounters an emoji, she will read the name of the emoji. Alexa supports emojis up to [Unicode Version 10](#). If Alexa encounters an unsupported emoji, she will skip over it, as if it doesn't exist in the copy.

That said, it's important that any emoji use is contextually relevant and complements the message.



Proper Punctuation

Alexa will ignore most punctuation marks (like !,%,#,* , etc.) but periods and commas are crucial to a good auditory experience. Take the following HTML for example:

```
<h1>
<span>Alexa Roundup</span></h1>
<br>
Greetings! Welcome to Email on
Acid's Alexa Roundup!<br>
```

When Alexa strips the HTML from above, it will read the email as:

Alexa Roundup Greetings! Welcome to Email on Acid's Alexa Roundup!

Because there is no punctuation between “Roundup” and “Greetings!” Alexa will interpret that as one sentence, which will be difficult to understand when listening to the email. We were able to get around this issue by adding a hidden `` with a period:

```
<h1>
<span>Alexa Roundup</span><span style="display: none; max-height: 0px; overflow: hidden;">.</span></h1>
<br>
Greetings! Welcome to Email on Acid's Alexa
Roundup!<br><br>
```

We used the same CSS for the additional `` as we would for [preheader text](#). This means the user won't see the punctuation, but Alexa will acknowledge it when reading the email.

It's important to note that proper punctuation is crucial, given how screen readers and voice assistants interpret the email text.

Abbreviations

AI doesn't always interpret abbreviations correctly as it reads text in lowercase. For example, we tested:

Only available in the US.

Alexa interpreted the “US” as “us” rather than “U.S.” Try to use periods in acronyms so voice assistants read it properly. If that isn't visually appealing, you can use the punctuation tip above to hide the periods.

Siri, on the other hand, reads fast and pronounces acronyms very, very fast. Instead of clearly speaking each individual letter of the EOA, Email on Acid, acronym, Siri instead pronounces it like one word, making it sound more like “Eeohay.”

Avoid Image-Only Content

Knowing that Alexa will strip all the HTML from the email and read what’s remaining could mean bad news for image-only emails. If your call-to-action is in an image, the user won’t hear it when Alexa reads the email. If you must use an image-heavy design, be sure to provide enough context in the preheader text.



Tracking AI Email Reads

Unfortunately, when Alexa reads an email, she does not trigger an email open within your [email analytics](#). This is because it does not open an email in a browser that would trigger the image pixel to load.

Alexa and Email Accessibility

When it comes to Alexa reading email, there is no accessibility support. You have to rely strictly on copy.

As previously mentioned, Alexa strips the HTML from an email and reads the remaining text. This means she also removes all [ARIA HTML](#) attributes (roles, states and properties), image alt text and semantic elements.

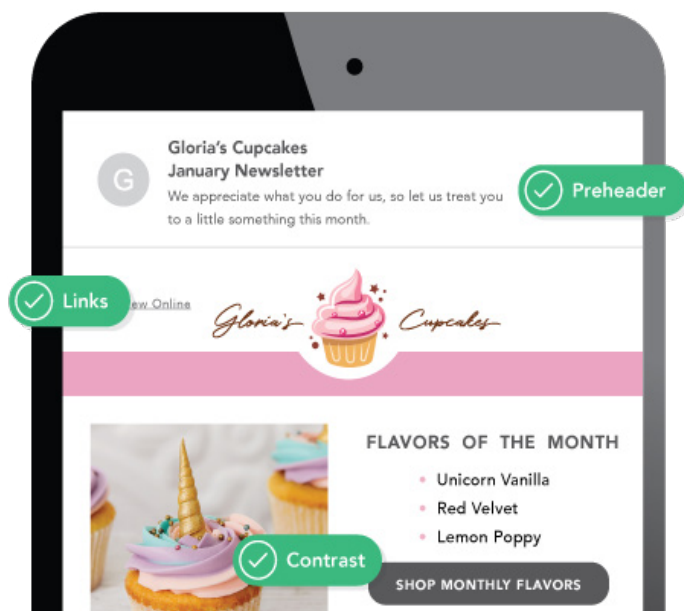


Hey, Alexa?

Campaign Precheck: Accessible Emails Made Easy

Whether you're a developer, designer, or email marketer, email accessibility comes down to you. Even though ARIA is not yet an option, you can take steps to ensure you give users the best possible email experience, regardless of visual, hearing, or other impairments.

Email on Acid's Campaign Precheck was the first email content checking tool on the market to provide Accessibility checks to email marketers and brands.



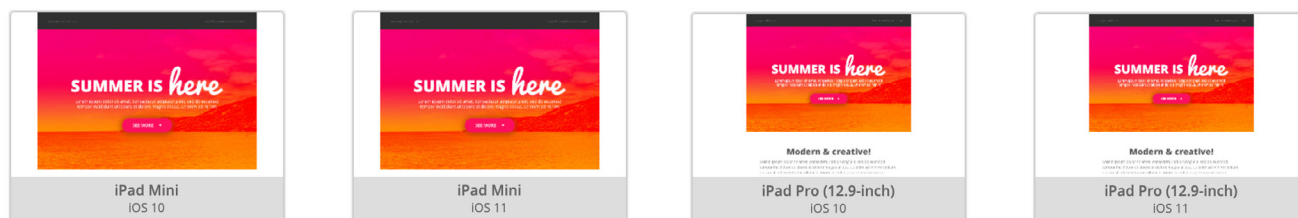
While similar tools have emerged, ours is still the only one that will make automatic ADA-compliant adjustments to the HTML at the press of a button.

This is a huge time saver if you want your brand to abide by accessibility standards, but don't want to reduce output or slow your process by doing so. [Campaign Precheck](#) will walk through your email's HTML and design elements and check them against some of the most important accessibility guidelines, including:

- Color contrast
- Link design
- Alt text
- Title attributes
- Presentation roles

Fix any issues with just a few clicks, no coding knowledge required. No need to send designs back to your developer or start from scratch.

Don't Forget to Run an Email Test



When making any changes to your email, whether it's code-based or simply a content rearrangement, it's important to ensure you [re-test every email](#), every time. Even the slightest code change can affect how your email displays. With [Email on Acid](#), you can quickly see how your email looks across 80 different email clients and devices (and counting).

Achieving accessible email is not just an inclusive effort, it is a strategic one.

Subscribers living with any kind of permanent disability or temporary impairment are going to give their business to brands who tailor their emails for them too.

If the spending power of people with disabilities is \$1 trillion, are your emails optimized in a way that makes it easy to meaningfully connect with those subscribers?

Let's recap how accessibility translates into ROI for your bottom line:

- Accessible CTAs make it easy for users to locate the links and take action.
- Alt text enhances your message with descriptive copy, making it more motivating.
- Set presentation roles and removed title attributes create an enjoyable listening experience with a screen reader and encourage future opens.

Make Automations Accessible

A good place to start is with your welcome series. On average, a welcome email typically sees [4x the open rate and 5x the click-through rate](#) of other emails.

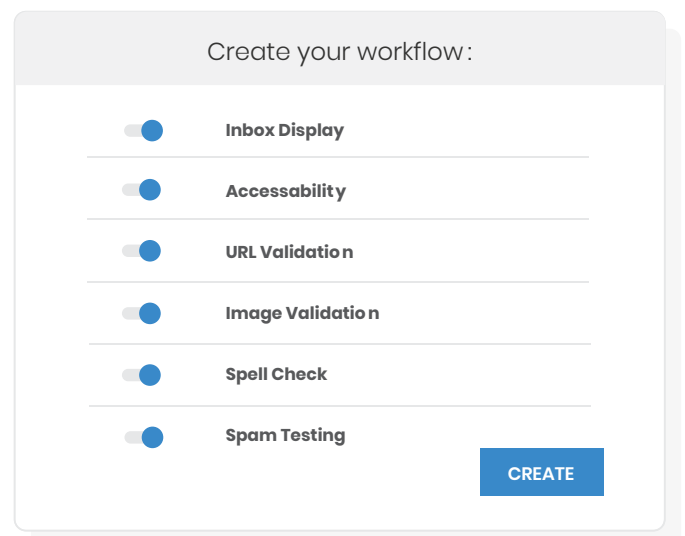
Your welcome email is your biggest opportunity to achieve a conversion, so make sure it's accessible to capture each one.

Accessibility is King

Good email etiquette means taking the steps necessary to allow as many people as possible to participate in your email—even if it means adding an extra step.

If someone can't read or see your email, it's not going to motivate an engagement or conversion.

Accessibility isn't going anywhere. The WCAG standards could expand their reach into other industries, so it's best to start making these shifts now.





Make Every Email Accessible, Every Time with Campaign Precheck.

Accessibility in email design is important, yet it's often overlooked by email marketers, developers, and brands. Inaccessible content is alienating for subscribers who need it and costs brands engagements and conversions.

Campaign Precheck has the only Accessibility Validation tool on the market that makes ADA-compliant adjustments to your HTML in just a few clicks. Whether you're in an industry that requires ADA-compliant communications or simply want to connect meaningfully with more subscribers and improve your ROI, try Campaign Precheck free for seven days and see how accessible emails can boost your results.

