

Data Visualization Webinar Series

Richard Russell
Health Communications Specialist
Division of Reproductive Health, CDC

Nicole Davis
Epidemiologist
Division of Reproductive Health, CDC

August 16, 2018

3:00PM



1. Reaching your audience
2. Developing your content
- 3. Designing your concept**
4. Presenting your creation



Homework list

Webinar 1: Determine team objectives, scope, audience, and story (*Due Aug 9th*)

Webinar 2: Create one example of each type of chart/graph and build a mock-up PPT presentation (Due Sept 20th)

Webinar 3: Add design elements and final messaging to created graphs; prepare final infographic for sharing (Due Nov 1st)

**Webinar 3:
Data visualization and
Infographic Design**



1

Color basics

psychological, cultural, and gender perceptions, color palettes, ADA compliance and color blindness

2

Font/type basics

safest options, legible vs. fancy, safe sizes and text color

3

Illustrations, photographs, and icons

cultural competency and diversity, context and association, copyright issues and internet images

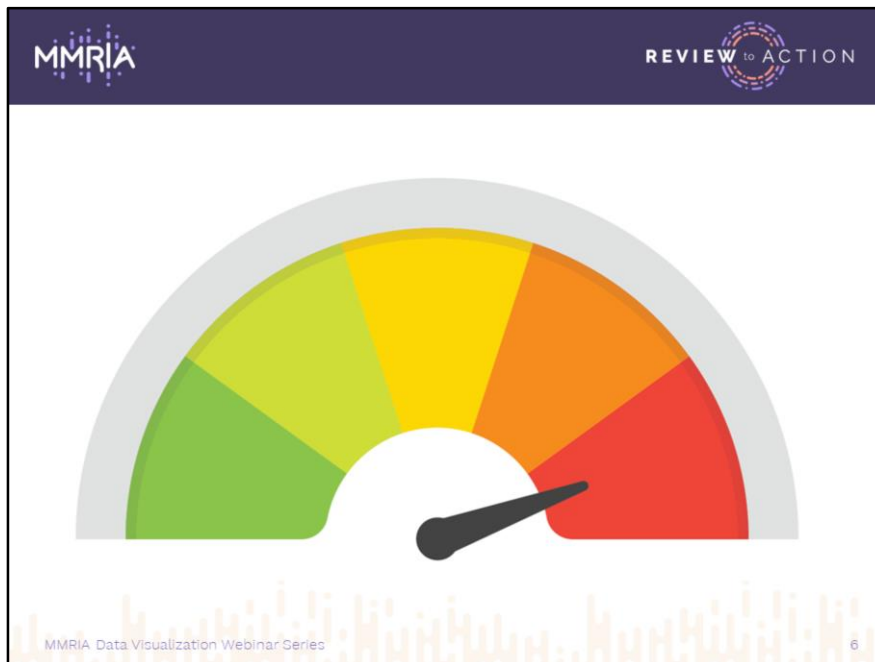
4

Infographics for the masses

mini-visualizations, sharing on different platforms

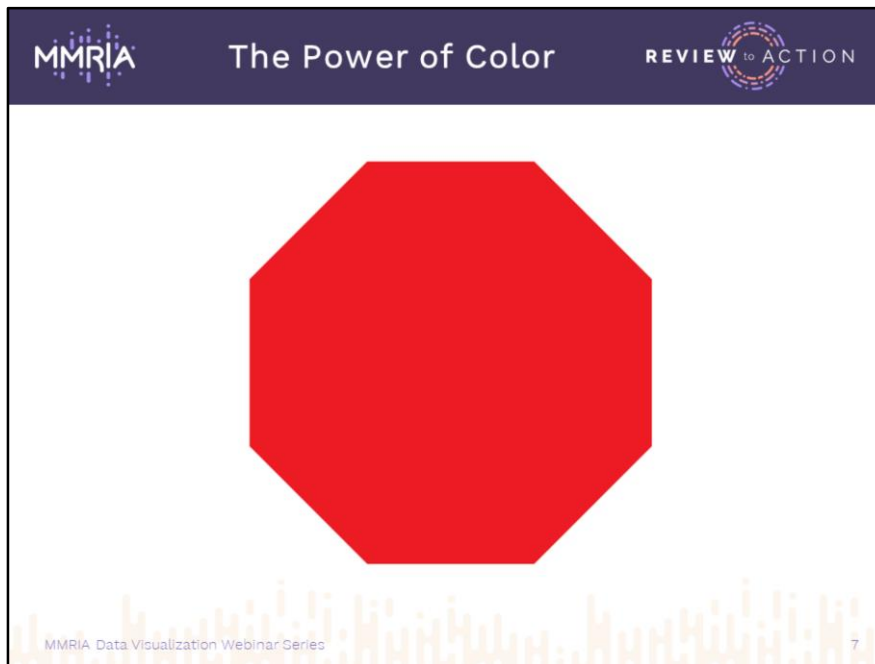
Our 3 big objectives for today are:

- Color: associations, significance, influences, and perceptions
- Fonts: title vs. text, readability
- Illustrating infographics
- Building visualizations for sharing



We are constantly bombarded by visual stimulation. Driving, walking, TV, our phones, the internet, everywhere we look, there are so many images thrown at us, and many people have trouble filtering through them. How many of them are throw-away and which ones are important? With so much data floating around, it's easy to miss or dismiss a lot of it.

One way to corral perception and comprehension is to mesh your data with various visual elements fine-tuned in ways which build a theme and bring your story to life. Today we're going to focus on some simple steps to apply color, typography, and images which will help you deliver your information more clearly. Let's start with color.



Colors are historically, culturally, and psychologically associated with our emotions and instincts, our seasons, occasions, and ceremonies all have their particular palettes. None of these meanings are set in stone, but there is evidence that people “read” color and make connotations quickly when looking at design.

Color has meaning.



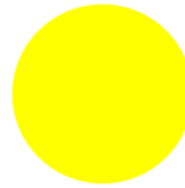
Stop,
danger,
love,
anger,
power



Femininity,
nurturing,
vulnerability,
optimism



Warmth,
happiness,
enthusiasm,
action



Success,
confidence,
energy,
summer, youth

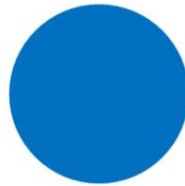
Every culture imbues colors with different meanings. In the West, warm colors - red, pink, orange, and yellow - are stimulating and evoke energy. These colors visually seem to move toward us and imply emphasis.

<https://graf1x.com/color-psychology-emotion-meaning-poster/>

Color has meaning.



Health, growth,
life, spring,
peace, ecology,
prosperity



Trust, calm,
loyalty,
responsibility,
confidence



Intuition,
quality,
luxury,
sensitivity

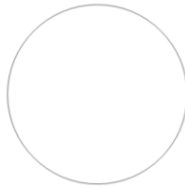
Cool colors - green, blue, and violet - are usually more calming. They seem to recede, making them great for backgrounds. These colors relay tranquility and trust and are most often associated with health and healthcare. Look at the logos of most hospitals and insurance providers.

<https://graf1x.com/color-psychology-emotion-meaning-poster/>

Color has meaning.



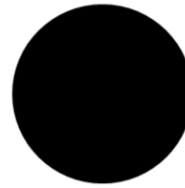
Earth,
nature,
honesty,
simplicity



Femininity,
nurturing,
vulnerability,
optimism,
peace



Detachment,
neutrality,
compromise

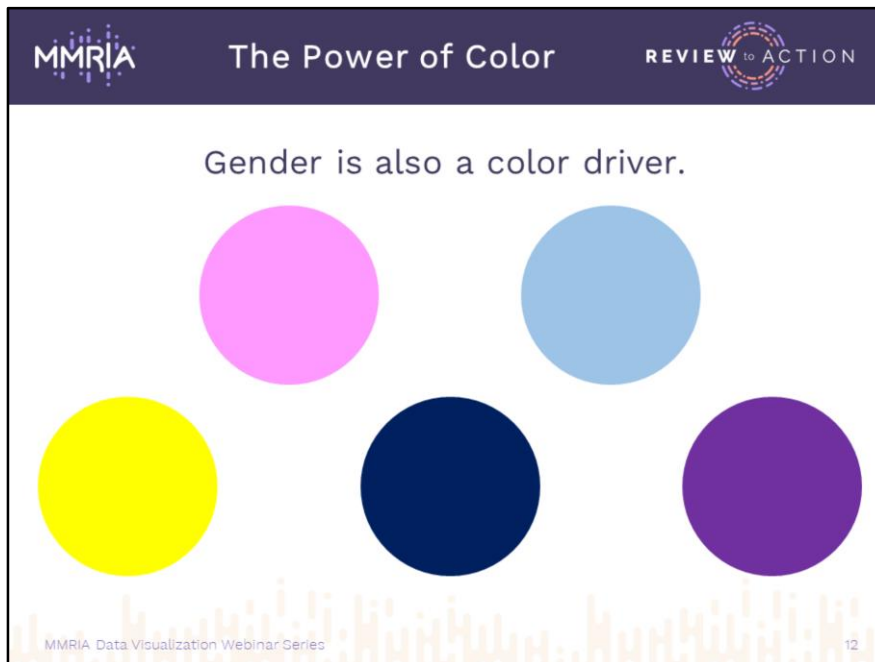


Control,
power,
mystery,
confidence

Neutral colors:

Brown is warmer than the others here, but is generally listed with the other neutrals. Along with gray, brown can make other colors brighter or tone them down when used as an accent.

<https://graf1x.com/color-psychology-emotion-meaning-poster/>



Many generations in western culture have been trained from birth to associate pink with girls and light blue with boys, though younger audiences are breaking away from this tradition.

And speaking of boys and girls, it may sound sexist these days, but gender does play other roles in the perception of color:

- Blue is the favorite color for men and women overall, and dark blue leaps ahead for both in color memory tests.
- Women remember yellow, men remember purple, but neither likes those colors.
- Generally, women respond more favorably to pastels and lighter tints; men go for brighter, bolder shades.

(Von Worley, 2010)



The Power of Color

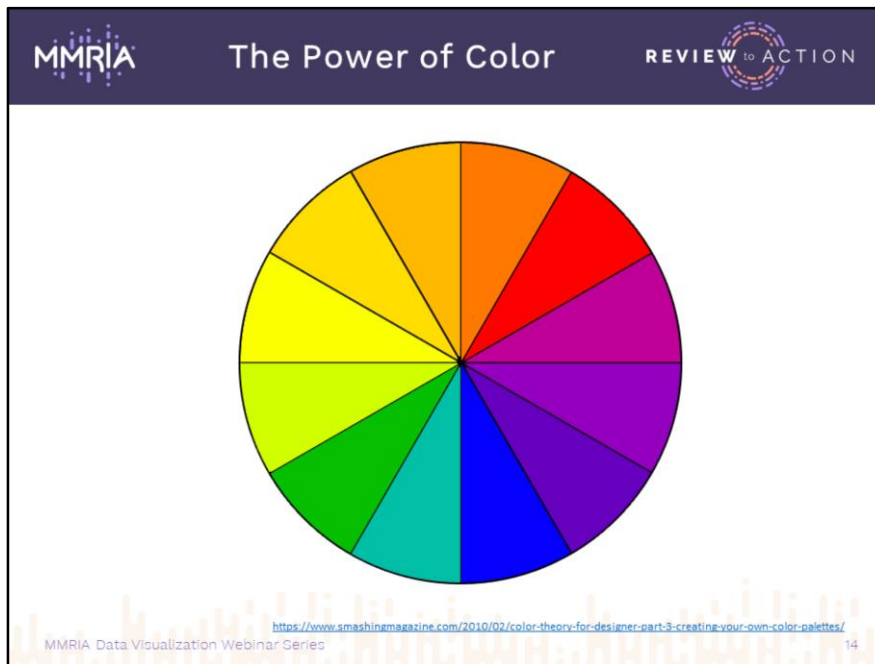


	Pantone	CMYK	RGB	Web
1	 PMS 295	C100 M57 Y0 K40	R0 G69 B124	#00447b
2	 PMS 390	C22 M0 Y100 K8	R193 G205 B35	#c1cd23
3	 PMS Pro Cyan	C100 M0 Y0 K0	R0 G174 B239	#00adef
Primary				
Secondary				
4	 PMS 437	C43 M35 Y35 K1	R153 G153 B153	#999999
5	 PMS 165	C0 M69 Y98 K0	R251 G113 B32	#fb7120
6	 Black	C0 M0 Y0 K100	R0 G0 B0	#000000
7	 White	C0 M0 Y0 K0	R255 G255 B255	#ffffff

MMRIA Data Visualization Webinar Series 13

Last session we mentioned that the safest place to start with color selection for your designs is with your organization’s branding guidelines, if they exist.

Here’s an example of a branded palette taken from the Cincinnati Health Department. Their primary palette of blues and greens would serve as the main colors to use for data visualizations created by or for them. The gray and orange in the secondary palette could be minor players acting as accent colors. These palettes usually provide all the necessary formulas to let you match colors in your design software, as seen in the four columns of code. Pantone and CMYK are used mostly for printing, while RGB and Web are best for onscreen presentations, video, and web design. If the formulas aren’t there, pick as best you can. In PPT, there’s a feature called “eyedropper” that lets you click on a color to match it as closely as possible



If your organization doesn't have prescribed color palettes, building a palette that's pleasing to the eye isn't really that difficult. We're going to walk you through the top 3.

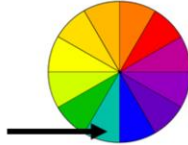
<https://www.smashingmagazine.com/2010/02/color-theory-for-designer-part-3-creating-your-own-color-palettes/>

Monochromatic



Our first example is a monochromatic palette, which relies on only a single color plus its various shades (darker) and tints (lighter). Most designers like to drop in black and white to add some variation and provide better colors for text.

Monochromatic



Text and accents

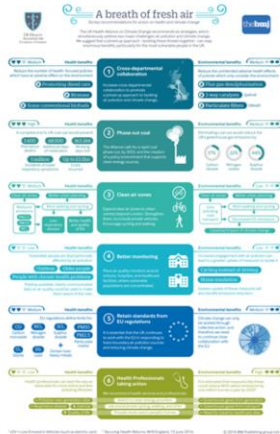
Backgrounds and accents

Text

Here we see how those colors were assigned for different areas of content.

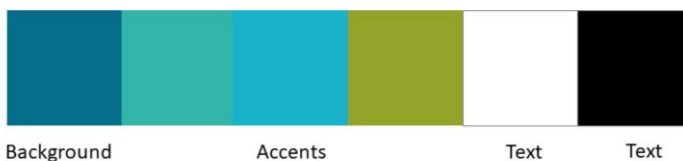
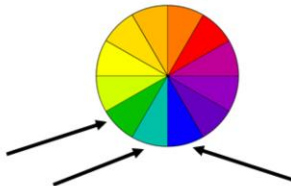
<https://www.smashingmagazine.com/2010/02/color-theory-for-designer-part-3-creating-your-own-color-palettes/>

Analogous



Similar looking in a lot of ways to monochromatic, analogous palettes are colors found next to each other on the wheel. Here they've selected shades of green and blue.

Analogous



Background

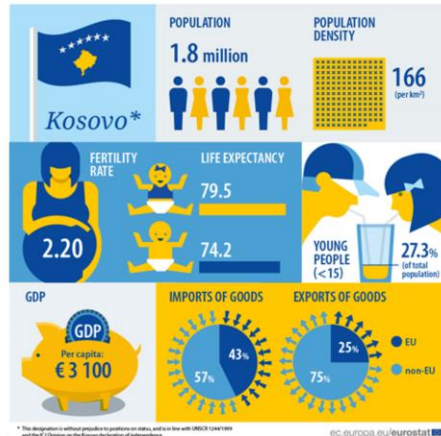
Accents

Text

Text

While that example didn't use black or white, it's a good practice to keep in mind, because of the way many colors interact with each other. You can see how the line between the blue above Accents and the blue green next to it blur together. Imagine trying to read text using only those two colors. We'll talk more about this when we look at text contrast issues a few slides down the road.

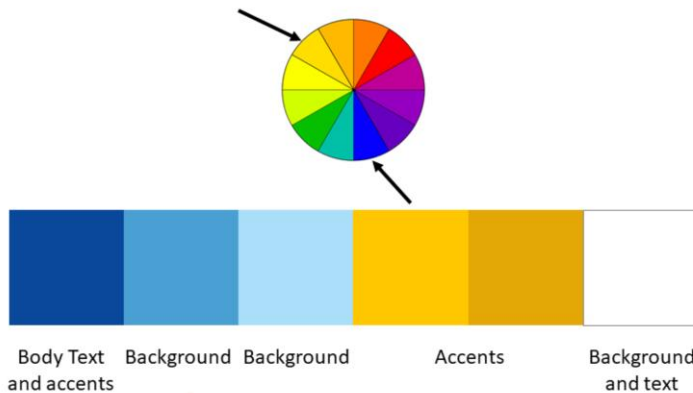
Complimentary



Complimentary palettes use colors from opposing segments on the wheel. While these produce energetic color schemes, that energy can sometimes be a little too powerful for some viewers to look at for long because it causes harsh vibrations in the eye.

[Source](#)

Complimentary



Don't select colors that are 100% opposite like red/green, blue/orange. Instead, choose a color and it's almost opposite, usually one step lighter or darker, to soften the reaction.

There are many other varieties of palettes to work with but these we've looked at today are the easiest.

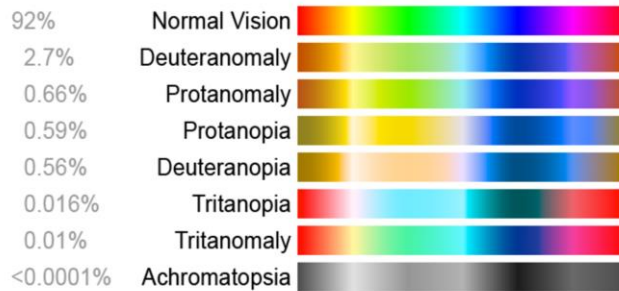
Most of us see color like this



Color plays a huge role in our ability to visually perceive the world around us, but that only applies to those who see color the way the majority of us do. For the 92% of the population with “normal” color vision, such everyday tasks, like driving or selecting ripe produce or matching socks, isn’t a problem. Quickly grasping information based on institutionalized color codes (traffic lights and signs) is also easy most of us.

https://en.wikipedia.org/wiki/Color_blindness

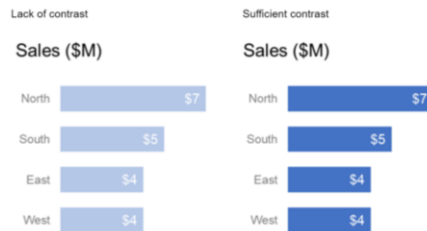
The rest see color one of these ways:



A small percent of our population has some type of color blindness and can't see color exactly the way it exists on the spectrum. This graphic recreates approximately how different types of color blindness change color perception. Red/green color vision deficiency is the most common, and men are more likely to be affected by (8%) than women (.05%). A very small number of people see no color at all.

https://en.wikipedia.org/wiki/Color_blindness

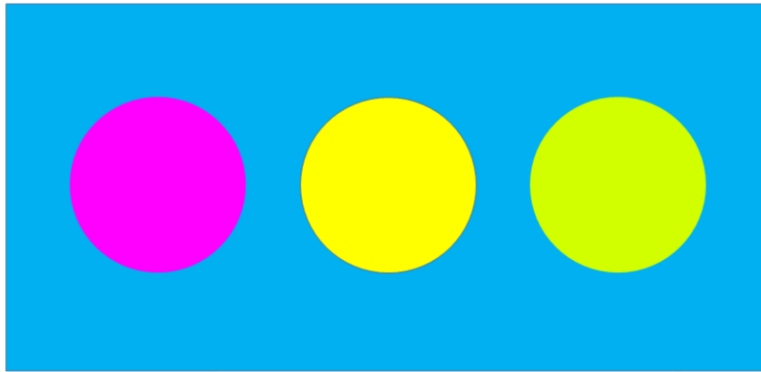
Consider color contrast, too.



Along with color blindness, many people have problems with color contrast. The interplay of text and background colors can prevent many from being able to read data. This is why it's important to pay attention when using white text on light backgrounds or dark text on dark colors.

<http://www.storytellingwithdata.com/blog/2018/4/23/accessibility-considerations-for-visuals>

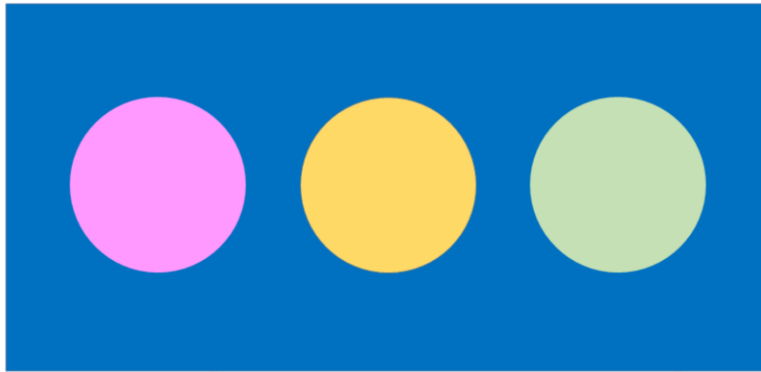
Consider color contrast, too.



The science of color theory is ancient, studied by artists and scientists. One area of this is color-on-color reactions. I built this sample of colors all in the same chroma, or brightness, to show something we all used to see pretty often. Remember the early days of web design with all those blinding magenta headlines on yellow backgrounds? There's a reason those aren't very common now.

<http://www.storytellingwithdata.com/blog/2018/4/23/accessibility-considerations-for-visuals>

Consider color contrast, too.



Correcting that previous slide using darker-to-lighter contrast helps differentiate tones and prevent eye fatigue.

<http://www.storytellingwithdata.com/blog/2018/4/23/accessibility-considerations-for-visuals>

MMRIA The Power of Color REVIEW to ACTION

The Americans with Disabilities Act (ADA)
Design Standards
www.ada.gov/2010ADASTandards_index.htm

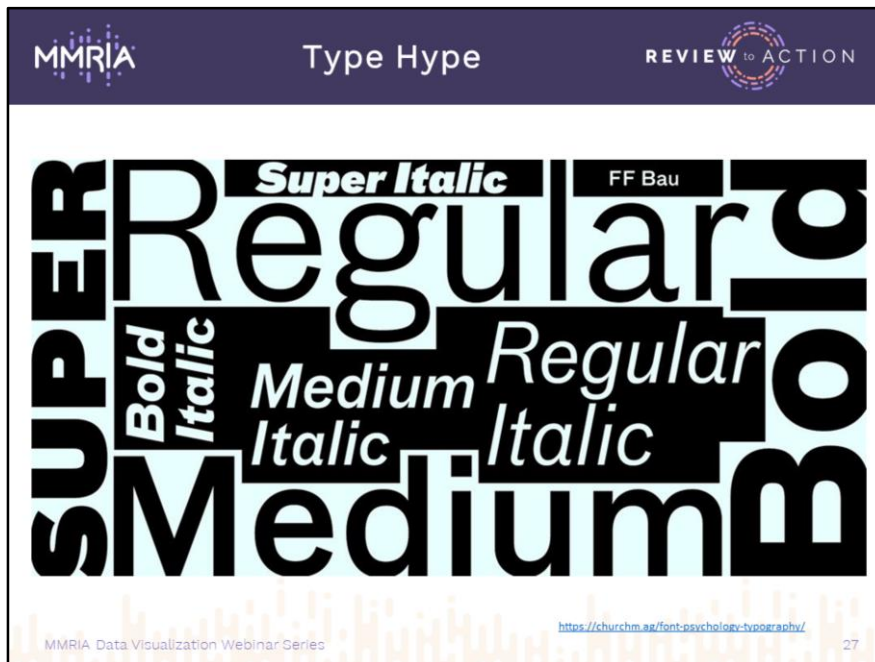
MMRIA Data Visualization Webinar Series https://en.wikipedia.org/wiki/Color_blindness 26

While it's a loooooong and tedious read, everything you need to know about the legal aspects of color and contrast in design can be found here at the ADA.gov website. It covers every aspect from facility design to the web. More than likely, your department's website is required to comply, and there's probably someone on staff or on your web development team with some expertise in the field.

At the end of this deck we have some links to sites that will help you assess your color choices and to help ensure you stay within compliance regulations. These also come in handy when building color palettes, as we discussed a few slides back, to make sure your contrast and text combinations are bold enough on light, dark, or different color backgrounds.

These standards are generally monitored only for electronic and online documents, but most of the color and contrast practices mandated in the guidelines hold true for print design as well.

www.ada.gov/2010ADASTandards_index.htm



Another very distinguishing feature in design is typography (or fonts). If you've ever looked at typography websites, it looks like there are almost as many fonts as there are colors. Typography is one of the easiest ways to establish a mood in design, which also makes it an easy way to change the tone of a presentation or design in ways you may not have intended.

There's a fine line between legible and I-have-no-idea-what-that-says. So we're going to go over some basic dos and don'ts about using typefaces.

In the graphic on this slide, we're looking at 8 styles of a single font.

Sans Serif fonts are easier to read onscreen:

Serif Font (Times New Roman) **Sans Serif Font (Arial)**

Stick with “System Fonts” for better sharing:

Serif

- Courier
- Georgia
- Palatino
- Times New Roman

Sans Serif

- Arial
- **Impact**
- Lucida Sans
- Tahoma
- Trebuchet
- Verdana

This is a repeat from our last session but important enough to reiterate:

Serif fonts are great for long reads like articles and books, especially when used at a small point size; sans serif is best for onscreen presentations.

If you're building infographics in PowerPoint or any other Microsoft programs and planning to share raw documents (as opposed to making them PDFs or JPGs), stick with system fonts. If you're designing for print or making infographics for posting on social media, you have a ton of options.

MMRIA Type Hype **REVIEW to ACTION**

HOW LONG DO YOU USUALLY GO WITHOUT EATING? WHAT IF YOU HAD TO GET THROUGH **A 16 OR 24 HOUR CHILD BIRTH?**

Restricting food and drink for laboring women is common. One large survey¹ of U.S. women who gave birth showed: **40% drank fluids** **20% ate**

So why are there restrictions?
 Fear of medical complications from stomach contents is still common among health care professionals.
 A 2013 research analysis of 5,000+ women found:

- NO EVIDENCE** to support restrictions on what you eat or drink in a typical labor.
- Restrictions may mean a longer and more painful labor for you.

True or False?
YOUR STOMACH IS NEVER ACTUALLY EMPTY
 EVEN IF YOU DON'T EAT OR DRINK²

<https://www.foryourbirth.com/blog/2016/5/6/will-your-hospital-have-food-and-drink-restrictions>

MMRIA Data Visualization Webinar Series 29

This is a nice mix of serif and sans serif typefaces. The arrows in the upper left corner get a little too light for white text and the teal text on light pink is not great, but overall their use of a complimentary palette is really good



Even in simple black and white, fonts can suggest very specific feelings. They can denote whimsy, solidity, innovation, or they can steer a design toward a specific age group.

Just like with colors, there are also gender preferences in typography:

- Cursive, rounded, lighter typefaces appeal more to women.
- Men prefer straighter, blockier, more solid fonts.
- Gender-neutral fonts include modern, minimalist typefaces like Arial.
- Font preferences can be fluid depending on a viewer's background or industry.

The typefaces shown here are all known as Display fonts. Their main use is for headlines and specialty design. They shouldn't be used for the main body of your content because the mood they imbue can override your best intentions.

<http://blog.visme.co/feminine-design-masculine-design/>

Maternal Mortality
Maternal Mortality
Maternal Mortality
~~Maternal Mortality~~
MATERNAL MORTALITY

Maternal Mortality

So, specific to the focus of MMRCs, it's easy to see how using some of the fonts from the previous slide can affect the "feel" of the words set in that typeface.

It becomes obvious very quickly that nothing above the blue line fits the bill. These fonts are all too formal, happy, or goofy. And going the opposite doesn't work well either, so don't look for morose fonts. Finding a neutral font is best, rather than one that looks too stylized.

ONE FOR TITLES

Subtitles: Same Font, Different Size

One for Body

- *Italic or bold for everything else*

- Main title/header = largest font
- Try using the same font for subtitles, but smaller
- For body text, always use a simple, readable font–
 - Keep the point size over 16 if possible
 - Select fonts with options for bold and italic
- Label charts with the same size font as your body text
 - Use bold for chart labels, italic for captions
- Avoid specialty fonts like cartoon or script styles

If in doubt, go back to our old Rule of 3: 3 fonts or less. Like we saw on the first slide about fonts, many font “families” have variations of weight and shape, so it would be easy enough to use three looks from one typeface.

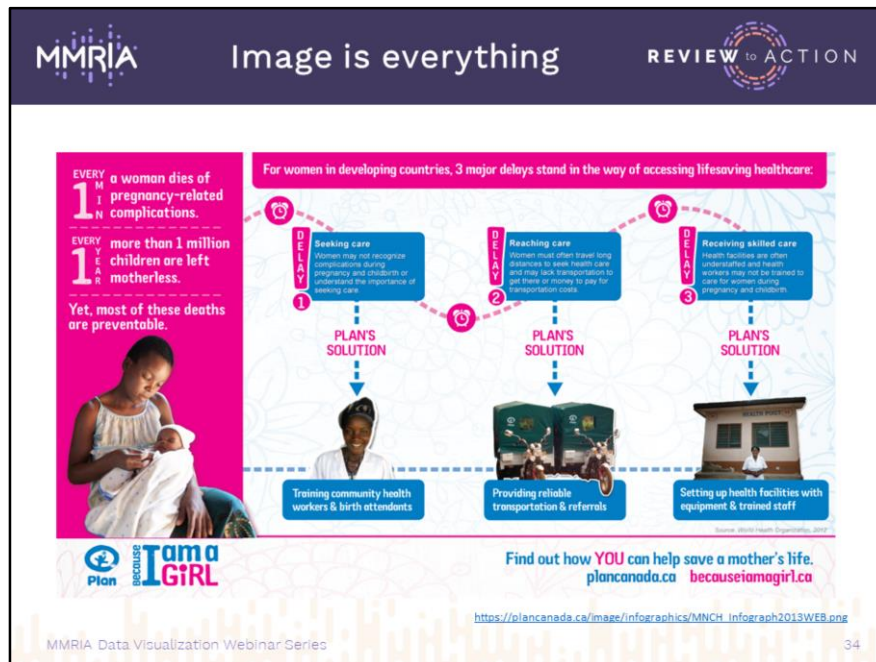
But you can have fun and mix it up. The primary rule of thumb with fonts is to keep it legible and be sensitive to your audience;

- If in doubt, ask a colleague to review what you’ve done, without telling them what it says. If they squint or take too long to figure it out, try another font.
- ALL CAPS works for headers, but doesn’t work for every font, and shouldn’t be used for body copy.



The abundance of information and imagery available via the internet is staggering. This is just a portion of a Google image search for the term “Maternal Health Icon”. As we’ve mentioned, pictures are a bridge to help us understand the world around us. Our brains respond to images with lightning speed: a symbol takes 150ms to process; we attach meaning to it in only 100ms. And that response crosses language barriers that words alone can’t. They grab and hold our attention much better than a solo block of text: in social media world, posts with images receive 10 times more engagement than text-only posts. When we share the slides for this session, I’m including a link to an infographic about infographics which goes into details about brain processing times and image absorption. (<https://neomam.com/interactive/13reasons/>)

It’s not a question of image versus text. Words are here to stay. They have great value: a picture is worth a thousand of them. But since images are so powerful and speak to us so rapidly, it makes it doubly important to use them well. Essentially, you want to make a good impression on the first try. As usual, there are rules.

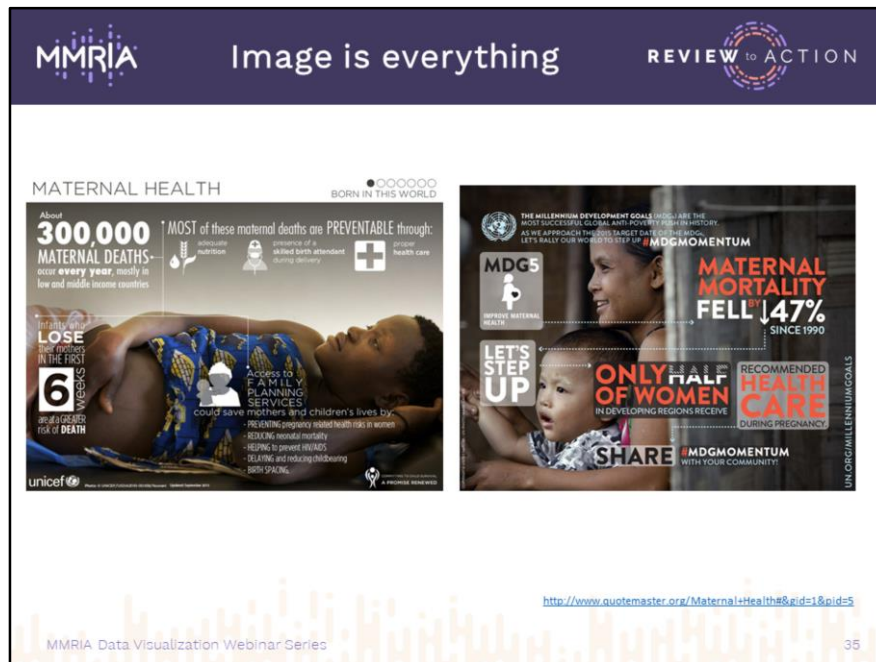


Photographs work beautifully to humanize data and personalize stories, and they can help audiences connect to situations they may not have taken an interest in otherwise.

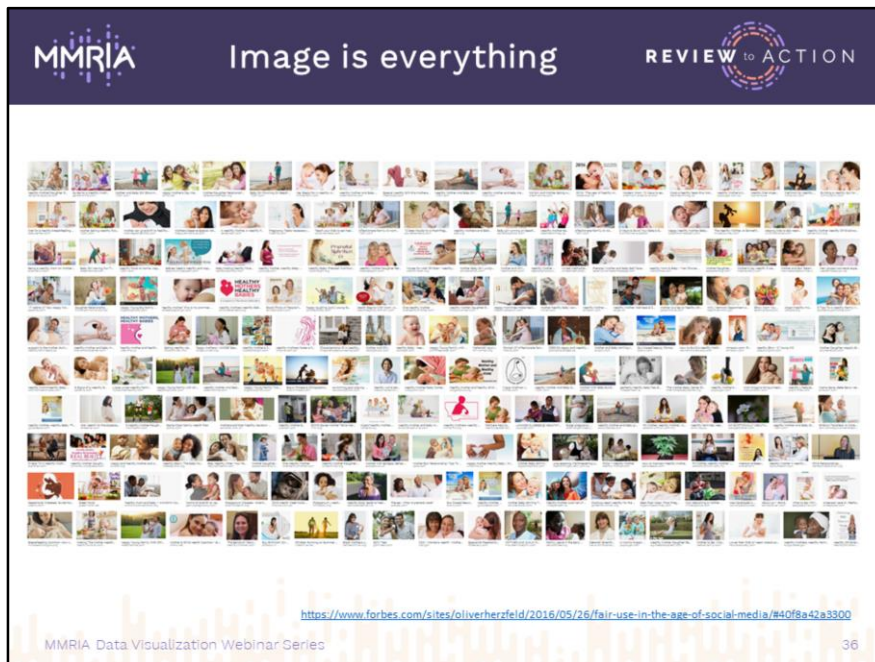
Synchronizing your data, words, and pictures is essential. If you illustrate your data with incongruent images, your audience can get distracted quickly and lose interest. Data categories like ethnicity, age, etc. need to be paired to imagery thoughtfully and respectfully. So if you're showing data about trends in a specific group and want to use photos, it makes sense that your photos should consist mainly of people within that group. This sounds logical, right? But it's surprising how often we see visualizations and even ads where someone didn't stop to make that connection. Keep an eye open for these mismatched combinations in the future. Think about how you react when you notice them: some seem almost comical, but others feel careless. It may seem superfluous, but this sensitivity is an easy way to help build trust with viewers.

While photos can really draw viewers in, the same can be said in reverse as well: if you are illustrating visualizations of data about the general public, remember how many different people make up such a large population. Some viewers may lose interest if they don't see themselves represented. If you include photos, this makes it important to work with images which are as inclusive as possible for gender, sexuality, race,

environment (like urban/rural) etc etc. You won't be able to find images of EVERYONE all the time, so don't panic.



Along with matching photos to subject matter, matching the mood in a photo can make or break a visualization. As we saw when dealing with fonts, Maternal Mortality isn't a topic to be cavalier about. That's not to say everything you do needs to be gloomy and depressing. The image on the right shows a smiling woman associated with data about improvements in mortality rates, a tricky choice but one that works very well. Both of these also show a wonderful use of design and photo combination; on the left, everything is laid out horizontally, aligned to subject of the picture, on the right, the image splits the page roughly in half vertically, and the design elements were spread across to fill this space and the gap between. Whatever type of illustration you choose, your content and image should not fight each other for space or placement. Overlapping is often necessary and can work beautifully as seen here, but don't let either one block the other or interfere with legibility. Watch for color overlaps as well; light text over bright backgrounds, or dark over dark, make reading difficult, as we've mentioned. At the end of the day, your data is the star; the visuals are there to help explain it rather than compete with it.



So where do all these photos come from and how do you get them? We saw one frame from a Google image search, which has become everyone’s go-to resource for pictures. Here’s a new one for the term “Healthy Mother Photo”. (And I confess: I’m guilty, even though I’m about to warn you not to do it...).

It’s so easy and convenient to search and grab and it’s commonplace in the digital age to borrow images from each other without even thinking about it. But try to limit the amount of borrowed photos and other types of illustrations you use. And beware of copyright infringement issues. The US Copyright Act is dense and convoluted, and unless you’re a specialized attorney, good luck making sense of it. In there, deep down, is this thing called Fair Use, which governs the educational and non-commercial short-term borrowing of images. It never states this plainly, but the gist of it all is it’s “sorta kinda mostly OK but you didn’t hear it from me and only as long as you’re not making money or claiming ownership and no one tells you to cease and desist”. In other words: you’re on your own.

To help you keep track of your favorite pictures, start developing a vault, a file where you store images you find, download, borrow, or others that spark ideas for future image searches. E-mailing yourself a picture with its source URL is a quick on-the-go way to start this. You can add an “Inspiration” folder to store them. Or start a Pinterest or Instagram page of your own for these.

I'm adding a link to a good Forbes article covering the basics of Fair Use.

<https://www.forbes.com/sites/oliverherzfeld/2016/05/26/fair-use-in-the-age-of-social-media/#40f8a42a3300>



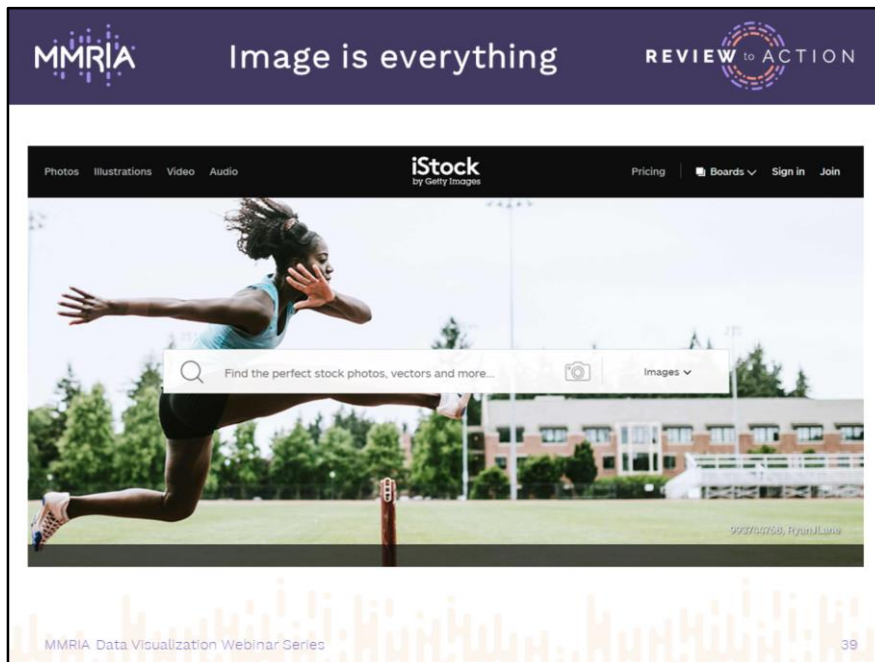
Another thing: if you DO borrow images, please don't do this. Nothing says "I didn't buy this!" like a watermark.



When it comes to producing something for the masses or anything that publicly promotes your data, either visualizations on social media or brochures, DO NOT google-grab photos or any other imagery. Documents intended for public consumption do not fall within the Fair Use parameters.

For print pieces, it's also necessary that you use a higher-resolution image than one you copy and paste from an online search.

So where do the good images come from?



Unless you have a skilled photographer on staff, and maybe even if you do, stock photo sites are the best place to hunt for pictures. Those with the best quality and biggest selection work by subscription or pay-as-you-use. Costs vary per company and plans are priced according to various combinations of quantity and quality. You purchase X number of downloads per day or month, with access to different levels of quality and selection, usually called “collections”. They are not all created equally, but most of the sites are easy to search by words or phrases, and many will help you by providing checkboxes for items to include or exclude.

I’ve been using iStock for many years. I’m not promoting them, but one of the primary reasons I’ve stayed with them is something they don’t have that most others do: model release restrictions. Many stock agencies won’t allow their photos to be used in situations that may show their models portrayed in questionable circumstances, like being associated with certain health conditions.

There are many free photo sites online as well, but their offerings are usually more limited. Several have really good photographers and cover a wide array of topics.

In the public domain (meaning they are copyright free), the US government has several websites with 1000s of downloadable images. CDC has the Public Health Image Library, or PHIL. The National Institutes of Health Medicine Library has a fantastic collection of historical medical images. Wikipedia hosts a vast collection of images in the public domain, and Flickr and a few

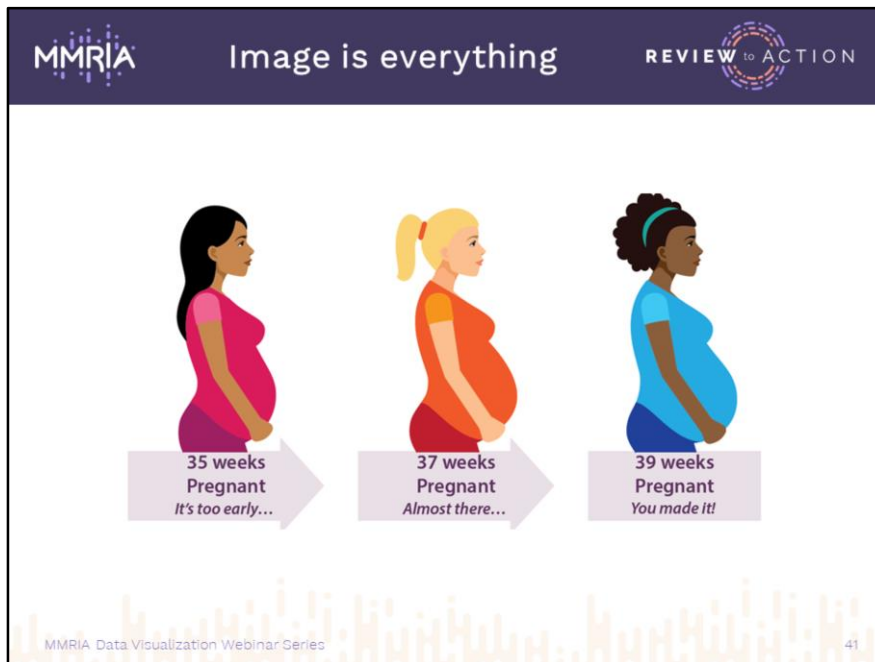
other social media sites have public domain collections as well.

All of these sites are constantly updating their inventory, and many have made great efforts to ramp up their inclusivity checklists. At times I still find many of them lacking in real-world imagery: everyone is either happy and healthy or dramatically the opposite. This may be a function of search engine algorithms or maybe they just haven't filled in some of the racial gaps.



We've been talking about color, mood, and context today. Photographs help people identify directly by like-to-like recognition, but any image of a person connects people to the story. Unlike photos, illustrations allow a little more neutrality because we're not using them to portray actual people or places. They also give you the option to customize or go out in a new direction.

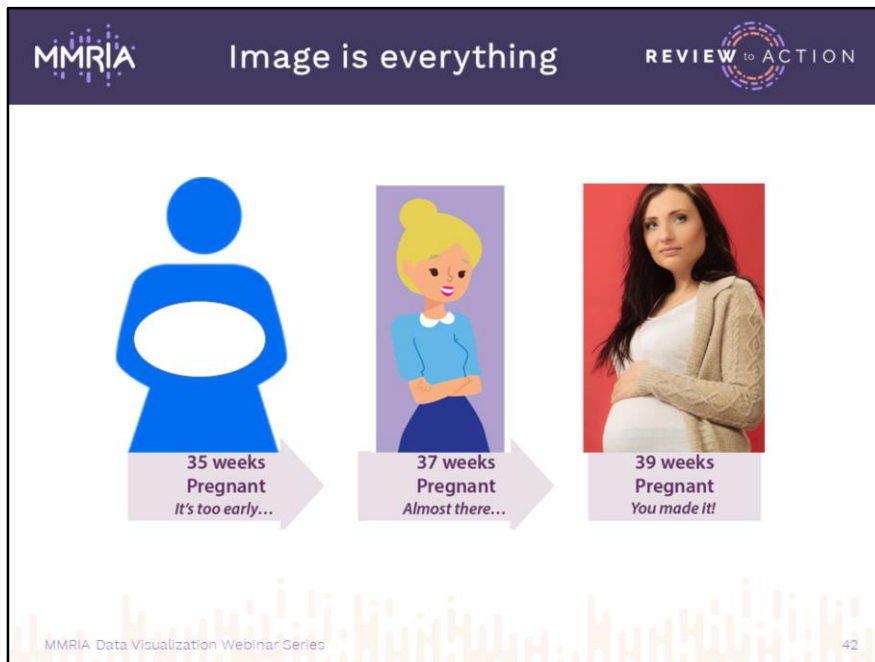
This type of icon, with no identifiable skin tones, is one way to reach a wider range of people. It's also a great way to add a pop of color. Truly customizing these icons requires a specific type of file called "Vector Art", and specific software for manipulating and editing the files, but you'll be able to find plenty of ready-to-use JPEGs or PNGs with plenty of color choices, so buying or learning new software shouldn't be necessary.



There's a huge abundance of searchable sites with really good images, most of them tied to stock photo companies. And many of them have pre-fab infographics parts available for downloading. Most sites allow image searches according to style, type of artwork, subject matter, file format, and on and on.

Here we've got some representational drawings of women representing Latina, White, and African American constituents. To let you know how closely some people connect to images, one person in the review chain for this wondered if viewers might assume race was a factor in the stages of pregnancy and should we consider making them all the same. But that can look like we're only discussing one group and leaving others out. It can get complicated; this group went out as is.

A personal rule I like to follow, when creating a series of visualizations, is to try to find images that are as similar in style as possible, like the ones on this slide...



...instead of randomly selected like these. Keeping your styles consistent helps viewers make and maintain a stronger connection, and prevents the idea that one of the images might be more or less important than its neighbors. Also easily noted in this example, these three women are at various stages of pregnancy or delivery; obviously there are several layers of details to watch for at once.

This consistency also helps you develop a theme for each visual, and build branding if you can maintain that theme over a series of visualizations.



As with fonts and photos, paying attention to the context of your images is just as important when using illustrations. Do they match what you're trying to convey? Are they appropriate, too risky, too silly? Do they compete or get lost? Maybe I'm missing something, but expectant mothers and tomatoes make for a somewhat abstract tie-in. And I've been staring at this infographic for a long time trying to make a connection.

It's not that visualizations can't be tongue-in-cheek (topic permitting.) Nor should you spoon feed your audiences with icons that spell out every letter of your text. But viewers may not take your data seriously if it appears you're not being serious or if they can't find threads that make sense.

Make sure the characters and images populating your story look like they belong with it, even if they have blue skin:

- If you are reporting on a specific population, match your illustrations to that group or go neutral
- Don't mix happy images with an unhappy story, or vice-versa; use appropriate emotional connectors
- Stay focused: don't use images just because you like them or they're the only ones you have



PowerPoint lets you make quick and simple little graphics like these, which are fun, colorful ways to perk up a bland page.



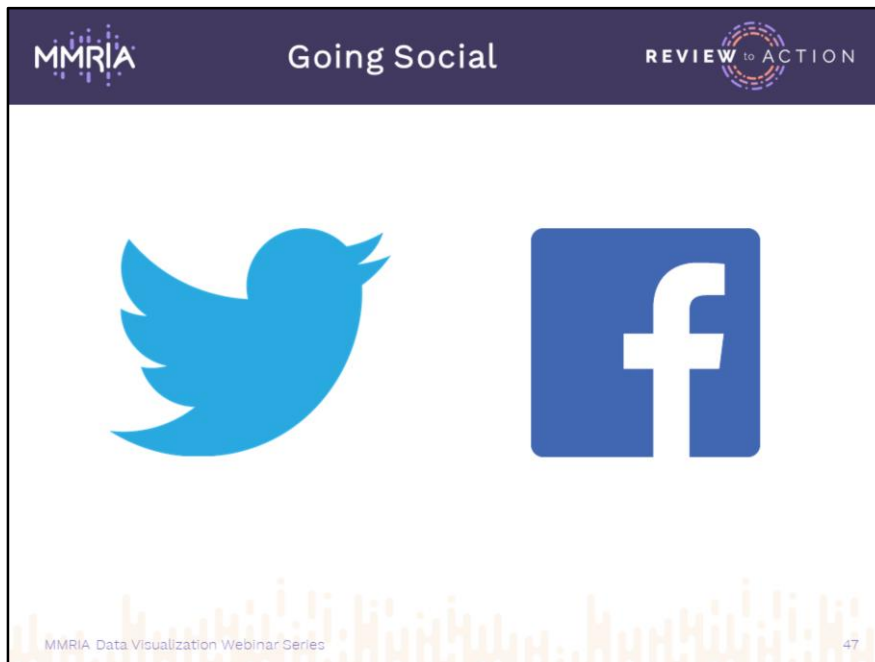
Silhouettes are great

- Easy to find
- Many colors
- Many types

Another easy graphic built entirely in PPT.



Posting, blogging, sharing, tracking, retweeting... all those social media channels. They wax and wane in popularity from demographic to demographic. They're a lot to keep up with, and each of them have their own rules and specifications for the images you make for sharing. And those specs change anytime they update their format. Luckily, in public health we only focus on a few, which makes it a lot easier to deal with.



Here in CDC DRH, we usually only post on Twitter and Facebook, so I'm going to use these as examples today. We're providing a link with info from all the major channels, and if you can't find what you need there, each of the platform sites has their own guidelines housed somewhere within their pages.

I'm always scratching my head about these specs: I don't measure my photos or check their ratios before posting and they work just fine, so why be so careful? From what I've been able to figure out, what shows up one way on your timeline shows up differently on other viewers' feeds, so what you post isn't necessarily what they'll see due to the way the different platforms crop or reshape your images to fit here or there, or whether the viewer is seeing your post on a desktop or mobile device. So the more you can control your posts at the beginning, the more control you can maintain along the way. And keep in mind that these are merely their guidelines.

<https://sproutsocial.com/insights/social-media-image-sizes-guide/>



[Twitter Help](#)

- A 2:1 ratio
 - min. **440 x 220 pixels** or max. **1024 x 512 pixels**
- Horizontal preferred but not required
- Maximum file size of **5 MB**

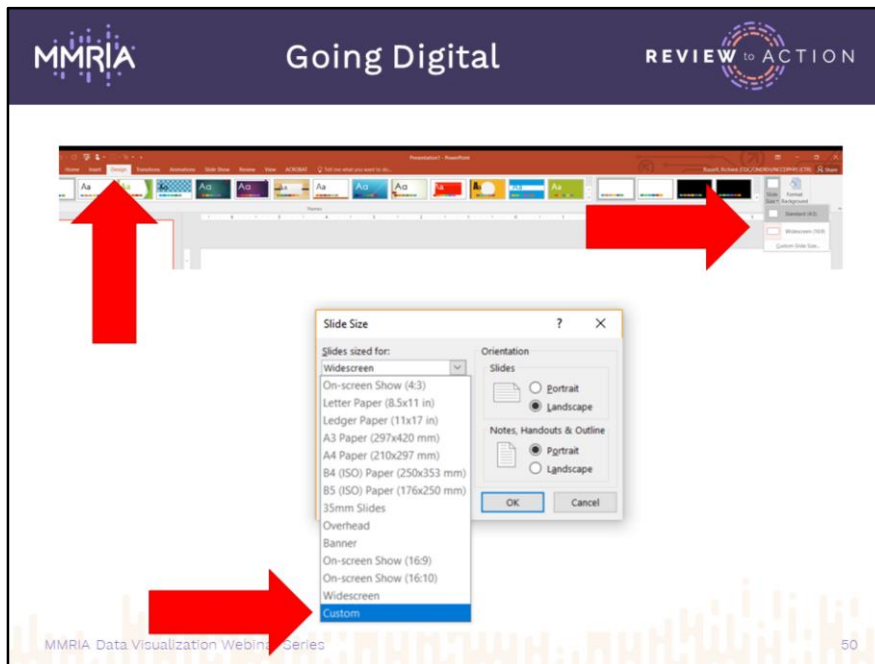
Twitter ([Twitter Help](#)) asks that we set up our visuals at a 2:1 ratio, meaning they're twice as wide as they are tall. Their biggest concern is really the 5Mb file size



[Facebook help](#)

- Almost a 2:1 ratio
 - 1200 x 630 pixels
 - Will resize automatically once posted
- Horizontal preferred but not required

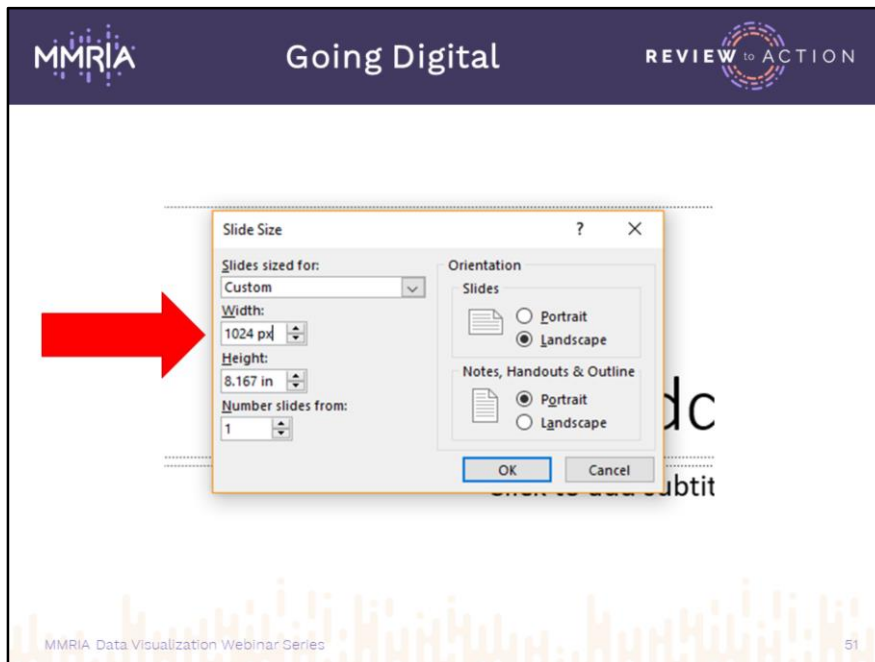
Facebook ([Facebook help](#)) uses a slightly different set-up.



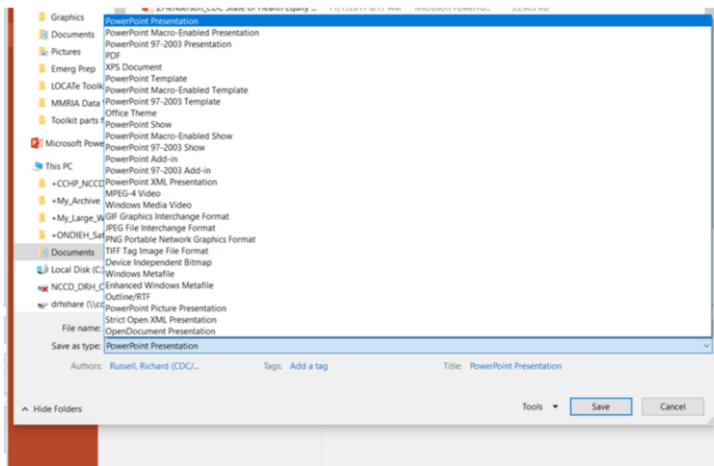
I'm going to attempt to show you how to set up a PowerPoint page to a specific size so you can create your own mini-visualizations. This may take a little practice.

First step is to start a new blank page

- Once you've done that, click the Design tab.
- One the far right, select Slide Size, and choose Custom Slide Size
- From the dropdown menu, select Custom at the end of the list

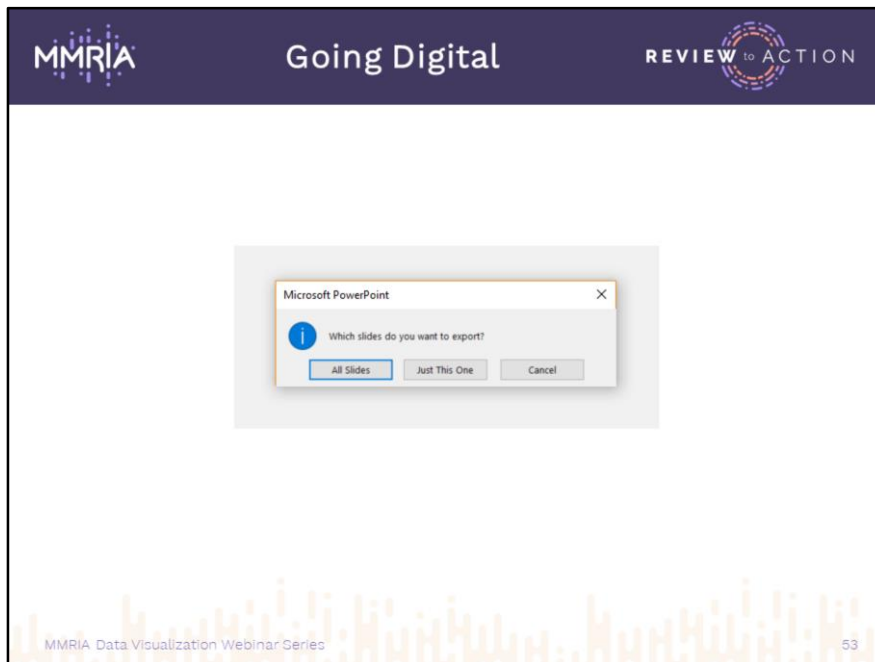


- In the width box, type 1024 **px**. In the height box, type 512 **px**. It's mandatory to type the **px** after the number so PPT understands you want to use pixels as your system of measurement.
 - When you click the next item to type, the measurement will appear in inches again; this is the pixel-to-inch equivalent, but the new slide is being set up at the size you specify.
- Click OK and you'll have wide, short new slide.
- Create your image, edit, revise, name and save as you would any PowerPoint slide



Once you've nailed your visualization, go to the File tab and click on Save As

- Click where you see PowerPoint presentation, and select JPEG... or PNG...
- Locate where you'd like to save the document in your file system



If you only made one slide, or have multiple pages created but only want your current image, choose Just This One.

If you've built out a series of images, choose All Slides and PPT will create an individual JPEG from each slide and place them all in a new folder, which saves a lot of trouble and time in this saving process.

Voila! You now have a graphic file of your new visualization to add to a website, use in multiple PPT presentations, post on Twitter or Facebook, or whatever else you need it. You can use this technique to create any size image you need, or choose from one of the many formats provided. So now, if you'd like to create visualizations to drop into a blog, ask your webmaster if there's a preferred image size and you can whip up next month's captivating infographic.

Further detailed instructions can be found in this link:

<https://support.office.com/en-us/article/change-the-size-of-your-slides-040a811c-be43-40b9-8d04-0de5ed79987e>



Each of the social media channels has it's best practices for uploading, sharing, tracking, and evaluating posts. We can't get into that sphere today. But that's pretty much the basics of creating and using



Prepare your final infographic

- Add design elements
- Finalize messaging
- Ensure story is told clearly and concisely

Present your infographic on the next webinar!

Due: Nov 1st

Photos (Public Domain)

- [USA.gov](#)
- [National Library of Medicine](#)
- [Wikipedia Public Domain Resources](#)
- [PHIL](#)

Free Photo and images

- [Pexel](#)
- [Unsplash](#)

**Photo/Illustration Sources
(Subscription or points)**

- [iStock](#)
- [Getty Images](#)
- [Shutterstock](#)
- [Adobe Stock](#)
- [VectorStock](#)

Tables

- [Table Magic](#)

Design

- [Piktochart](#)
- [Canva](#)
- [Venngage](#)
- [Venngage color picker*](#)
- [Visual.ly](#)
- [Smashing](#)

Fonts

- [DaFont](#)
- [1001 Free Fonts](#)
- [Google Fonts](#)

508 Compliance

- [Color Blind Stimulator](#)
- [ADA Guidelines](#)
- [WebAim Contrast Checker](#)

Social media

- [SproutSocial image specs](#)



MMRIA
MATERNAL MORTALITY REVIEW
INFORMATION APP

REVIEW to ACTION
WORKING TOGETHER TO PREVENT
MATERNAL MORTALITY

Contact Us!

Richard Russell
rdr5@cdc.gov

Nicole Davis
dwg4@cdc.gov



Thank you!