# Is Your PDF Accessible? Module #2

**MARCH 28, 2022**

## Introduction

### Intro

Is Your PDF Accessible? This is the second in a series of two training modules for MN WIC state staff on creating accessible document.

### In This Module

In this second module, we will walk the tags of a more complex document and review how to resolve the third most common accessibility issue, images missing alt text.

We'll also take a semi-deep dive into tables, including accessibility requirements, as well as familiarizing ourselves with their tag structure so that we can resolve common issues with tables in PDFs.

We'll finish it all off by taking a quick look at lists and hyperlinks.

<no audio> Screen transitions to SiteImprove.

## Images & Alt Text in Word

### SiteImprove

Another of our most common errors that SiteImprove assesses PDFs for is: The image has no alternative presentation.

Which means it's missing Alt Text. So, let's take a look at images.

<no audio> Screen transitions to Word document with images on it.

### No Text Boxes

We'll start in Word.

We shouldn't ever use text boxes because they are read as images, and images of text are not allowed by MDH.

Instead, we should use the Normal Lt Blue style to highlight specific text. If we click Styles…

<no audio> Click **Styles**.

## Normal Lt Blue

…we can see that this is one of the available styles for our templates.

Like all styles, we can right-click the style…

<no audio> Right-click the **Normal Lt Blue** style.

## Modify Styles

…and select Modify if we want to make changes to the default style.

<no audio> Screen transitions to section of document with images.

## Find Alt Text

All images should have alt text or be marked as decorative in the original document.

We can right-click the image to open the menu and select Edit Alt Text.

Or…

## Search Alt Text

…we can always select our image, enter Alt Text into the Search field, and select Display the Alt Text Pane.

It opens on the right. We can enter a short description or we can Mark as Decorative.

## Mark as Decorative

We can use Mark as Decorative as long as the image doesn't add any additional information.

In this case, the image of the formula can enhances the information for a sighted viewer but the formula name, size and type is already provided in the accompanying text.

And if we were to add alt text it would be redundant.

<no audio> Screen transitions to PDF document with images on it.

# Images & Alt Text in PDF

## Check

The document has already been saved. Go ahead and do the accessibility check. Click if you need a hint.

<audio-hint> Click **Accessibility** on the right tool bar.

<audio-hint> Select **Accessibility Check** from the right tool bar.

<audio-hint> Click the **Start Checking** button.

## Alternate Text

OK. Notice, we have a couple of different issues besides just Document issues, which we saw how to correct in the first module and will correct later in this one.

This time though, there is also an Alternate Text, Tables and Headings issue.

Let's start with the Alternate Text.

Click the arrow next to **Alternate Text.**

## Alt Text Failed

Click the arrow next to **Figures alternate text – failed**.

## Figure 1

Evidently, we missed adding Alt Text to two of the document's images.

To identify which figures are missing their alt text, click on Figure 1.

<no audio> Click on **Figure 1** to identify the image missing Alt Text.

## Figure 1 Image

The image is "highlighted" in the document at which point we should return to our Word document and mark the image as decorative or add alt text.

If the image isn't merely decorative and actually serves a purpose, we can also fix it in the PDF.

Start by right-clicking on Figure 1…

<no audio> Right-click on **Figure 1**.

## Fix Figure 1

Select **Fix**.

## Set Alt Text

And we can add our Alternate Text.

<no audio> Can of CVS Advantage powder formula displays in Set Alternate Text field.

We should note that in Adobe Acrobat, we do **not** want to use this Decorative Figure checkbox since it will result in other errors that will need to be corrected.

For images that are merely decorative we can just **delete** the image tags.

Go ahead and click Cancel.

<no audio> Click the Cancel button.

## Image Tags

And open the Tags panel. Click anywhere for a hint.

## Walk the Tags Again

And let's walk the tags, starting with the first <P> tag.

<no audio> Click the first <P> tag.

## Empty Container

Ah! Empty container next to our logos. We know what needs to be done. Go ahead. Click anywhere for a hint.

<audio-hint> Click the arrow to the left of the <P> tag to expand it.

<audio-hint> Click the empty container to select it.

<audio-hint> Right-click the empty container to open the menu.

<audio-hint> Select Show in Content Panel from the last section in the menu.

<audio-hint> Click the gray-shaded Container <P> to highlight or select it.

<audio-hint> Press the Delete key on the keyboard.

<audio-hint> Click the Tags icon (last icon on left toolbar) to return to the tags pane.

## Walk More Tags

<no audio> Well done (3 second pause).

Continue walking the tags by clicking each <P> tag, or pressing the down arrow on the keyboard, to see what each tag highlights.

<no audio> Click the 2nd <P> tag.

## More Tags

<no audio-hint> Click the 3rd <P> tag or use the Down Arrow key.

<no audio-hint> Click the 4th <P> tag or use the Down Arrow key.

<no audio-hint> Click the 5th <P> tag or use the Down Arrow key.

<no audio-hint> Click the 6th <P> tag or use the Down Arrow key.

<no audio-hint> Click the 7th <P> tag or use the Down Arrow key.

## Image Tag

OK. Let's stop here. Click the **arrow to the left of this P tag** to expand it.

## Image Tag 1

Notice this <p> tag looks different and contains and corresponds with an image.

When we mark an image as decorative, it displays a <p> tag not a <figure> tag like we saw with the logo, which has alt text.

Since it's decorative, we're just going to delete it.

It's already highlighted, so press the **Delete** key on the keyboard.

<no audio> Press the **Delete** key on the keyboard.

## Layering

We need to note that some more complex PDFs may have layering that results in the image disappearing if deleted.

If this occurs, we can CTRL + Z to undo and we will have to set it to the background.

Since that is more advanced, we won't talk about it here.

If it occurs just ask one of the WIC accessibility contacts to assist you.

# Headers Error

## Header Tag

Click the next tag, which is a header tag.

<no audio> Click the **<H2> tag**.

## Return to Checker

Now's a good time to review our accessibility checker results again.

To do that, we can click the Accessibility Checker icon.

<no audio> Click the Accessibility Checker icon on the left toolbar.

## Headings Error

Remember that we had a headings error?

Let's expand the error to see what's up. Go ahead. Click anywhere if you need a hint for what to do next.

<audio-hint> Click the arrow to the left of Headings (1 issue).

## Nesting Failed

<audio-hint> Click the arrow to the left of Appropriate Nesting – Failed.

## Header Element

<audio-hint> Click Element 1 to highlight the headers issue on the document.

## Appropriate Nesting Failed

The error is indicating that our "nesting" failed for this header.

Let's take another look at our tags. Go ahead. Click anywhere for a hint.

<audio-hint> The Tags icon looks like a tag. It's the last icon on the left toolbar.

## H2 Tag

<pause>

Click when ready to continue.

## Mult. Ch. Knowledge Check Slide

We saw a header error earlier. What is the issue with the <H2> tag?

    A. It should be an <H1> tag instead.

    B. The first header tag should always be at the top of the document.

    C. The text it corresponds with isn't a header.

    D. It's an <H2> tag and there isn't an <H1> tag before/above it.

## Answer

The answer was D: It's an <H2> tag and there isn't an <H1> tag before or above it.

Remember, nesting means headers must display in descending order, which means H1, before H2, before H3, etc.

<no audio> Screen returns to PDF from Answer screen.

## Fix Headers

We need to fix our header tags.

Let's start by clicking the second <p> tag.

<no audio> Click the 2nd <P> tag.

And click it again to highlight the tag text.

## Tricky Title

Our title on this doc is a little tricky.

It's two lines and there are probably a couple of ways to fix it.

But we're going to stick to our rules: One H1 tag.

And we will use an H2 tag for the second line of our title.

Type: open carrot, H1, close carrot then press the Enter key on the keyboard.

## Change Header Tags

Now let's change the second line of text to an H2.

Click the new 2nd <P> tag.

And click it again to highlight the tag text.

## New H2 Tag

Type: open carrot, H2, close carrot then press the Enter key on the keyboard.

## Recheck Headers

Let's do another accessibility check to see if that fixed our headers error. Go ahead. Click anywhere for a hint.

<audio-hint> Click Accessibility Check on the right panel.

## Recheck Headers 1

<audio-hint> Click the Start Checking button at the bottom of the modal (or press the Enter key on the keyboard).

# Tables in Word

## Headers Passed

Headers are done!

Go ahead and expand the Table error. Click anywhere if you need a hint.

<audio-hint> Click the arrow to the left of Tables (1 issue) to expand it.

<audio-hint> Click the arrow to the left of Headers - Failed to expand it.

## Element 1

Click on Element 1.

## Tables Issue

Evidently, our table has a header issue. So, let's talk tables.

## Transition to Word

<no audio> Screen transition to from selected table in PDF to document in Word.

## Let's Talk Tables

Tables should be used to provide data and not as a method of formatting general information.

Actually, this is an example of exactly **what we should try to avoid**; using tables to present information, not data.

So, here are some general rules about tables.

Title and headers should remain outside of the table.

The top row of a table should be the column headers and should be set to repeat.

To set it, we need to select the header row, and only the header row!

Double-click within the red dot to select both headers.

## Table Layout

We want to select the correct Layout tab, which is the Layout next to Table Design.

Click on Layout.

<no audio> Click Layout next to the Table Design tab.

## Repeat Header Rows

The Repeat Header Rows button makes the first row in our table display as the first row again if the table breaks onto a second page.

Select Repeat Header Row.

## Rows Don't Break

Next, a row in a table should never break across two pages.

The setting for this is found in the table properties and we want to make sure we select the whole table.

We can select the table **and** open the menu by **right**-clicking the icon in the top left corner of the table.

Go ahead and right-click the Select Table icon.

## Table Properties

Table Properties is near the bottom of the menu. Go ahead and select it.

<no audio> Select Table Properties from the right-click menu.

## Table Tab

We want to make sure a row doesn't split across two pages. Which tab should we select? Go ahead. Click anywhere for a hint.

<audio-hint> Click the Row tab.

## Options Checkbox

In the Row tab, under options, we want to de-select the Allow row to break across pages checkbox. Go ahead.

<no audio> Click the Allow row to break across pages checkbox to de-select it.

## Black Box

Before we save our change, notice that the **Repeat as header row at the top of each page** checkbox has a black box and not a checkmark.

This means it was done correctly and is why we make that change from within the Table Layout area instead of the Table Properties.

Click OK to save our change.

## No Table Description

Table cells should never be empty, nor should they be merged or split.

These will result in regularity errors when we convert to PDF.

Oooh. This makes our life easier!

Alt text or table descriptions are not required by MDH for accessibility.

## Bookmarks

Lastly, if our document has more than one table, each table should have a bookmark added.

Please reference available MDH Accessibility documents for information about how to do this.

## Quiz-Table Properties

Which statement is true about the checkboxes under Options in Table Properties?

A)  The first checkbox should be blank, the second should have a checkmark.

B) There should be a checkmark in both checkboxes.

C) Both checkboxes should be blank.

D) The first checkbox should be blank, the second should have a solid black box.

## Answer – Table Properties

D is correct: The first checkbox should be blank, the second should have a solid black box.

The only way to insert the black box into the **Repeat as header row at the top of each page** checkbox is to select the *Repeat Header Rows* button in the Table Layout ribbon.

<no audio> Screen transitions back to PDF from Quiz Answer page.

# Tables in PDFs

## Back to Table Tag

So, let's go walk the table tag. Go ahead and open our tag tree. Click anywhere for a hint.

<audio-hint> The Tags icon looks like a tag. It's the last icon on the left toolbar.

## More Tags 1

Click below the scroll bar.

## Table Tag

Our next tag is the table.

Let's expand some of the table tags.

Click the Table tag.

## Expand Table

Click the arrow to the left of the table tag.

And click the arrow to the left of the first <TR> tag.

## Let's Talk Tables

Let's talk about table structure in a PDF.

## Transition

<no audio> Screen transitions to Reading the Table Structure in PDF – Example #1.

## Reading Tables #1A

This is an example of a table that only has column headers and no row headers.

We start with the Table tag.

Directly beneath is the TR, or table row, tag for the first row.

Our first row is a header row represented by the TH tag and we have one TH tag for each column.

Each header cell has one line of text in it, represented by the P, or paragraph, tag.

## Reading Tables #1B

The second row is again designated by TR.

There are two data cells in that row, which are represented by the TD tag.

There are three rows of text within each data cell represented by 3 P tags.

A TR tag with TD and P tags under it will exist for each row in the table.

## Reading Tables #2

Our second table example has both column and row headers.

The structure is similar except notice that both rows have TH, table header, tags for the first column, while the second column remains a TD, or table data, tag.

Essentially, there are two rules for table structure.

Rule #1: <P> tags must always fall under, or within, a TH or TD tag, never directly under a TR tag.

Rule #2: TH tags should only be used for header cells, not data cells.

<no audio> Screen transitions back to PDF.

## Quiz - Wrong Table Tags #1

Let's expand the first, then second, TH tags.

OK. Based on the rules we just talked about, what is wrong with this table structure? Click on the problem.

<audio-failure> The <P> tag is directly under the <TR> tag and not under, or within, a <TH> tag.

## P Tag Wrong

Right. Rule #1. The <P> tags must fall under, or within, a <TH> or <TD> tag; never directly under a <TR> tag.

We have it highlighted so simply press the Delete key to get rid of the inappropriate P tag.

## Table Check

Let's see if that fixed our table error. Run another Accessibility Check. Click anywhere for a hint.

<audio-hint> Click the Accessibility Check on the right panel.

<audio-hint> Click the Start Checking button at the bottom of the modal.

## TH and TD Tags

Yep. We are good to go as far as Table errors.

Hmm, notice that our TH and TD also passed. Let's take another look at **that.** Take us back to our tag tree. Click anywhere for a hint.

## Expand TR Tags 1

Let's expand the next 5 TR tags by clicking the arrow to the left of each of them. Go ahead.

<audio-hint> Click the arrow to the left of the first <TR> tag.

<audio-hint> Click the arrow to the left of the 2nd <TR> tag.

## Expand TR Tags 2

<no audio> Click below the scroll bar.

<audio-hint> Click the arrow to the left of the 3rd <TR> tag.

<audio-hint> Click the arrow to the left of the 4th <TR> tag.

<audio-hint> Click the arrow to the left of the 5th <TR> tag.

## Quiz - Wrong Table Tags #2

OK. Based on our table rules, what is wrong with this table structure? Click on the first problem tag you see in the tags tree.

<audio-failure> The first <TH> tag in the tags panel represents a data cell, not a header cell (this table only has column headers, no row headers).

## TH Wrong Tag

Right. The first cell in each row is labeled as a table header, but these are data cells. This table only has column headers; there aren't any row headers.

So, even though our document's table passed the accessibility checker, we still walk the tags just for this reason; so that we can correct structural issues that the PDF checker doesn't see.

And we have to correct these.

Click the <TH> tag again to highlight it.

## TH to TD 1

Type an open carrot, TD, close carrot then press the Enter key on the keyboard.

## TH to TD 2

We're going to do this for each incorrect TH tag. Follow the cues on the screen.

<no audio> Click the <TH> tag to select it.

<no audio> Click the <TH> tag again to highlight it.

<no audio> Type an open carrot, TD, close carrot then press the Enter key on the keyboard.

## TH to TD 3

<no audio> Click the <TH> tag to select it.

<no audio> Click the <TH> tag again to highlight it.

<no audio> Type an open carrot, TD, close carrot then press the Enter key on the keyboard.

## TH to TD 4

<no audio> Click above the scroll bar.

<no audio> Click the <TH> tag to select it.

<no audio> Click the <TH> tag again to highlight it.

<no audio> Type an open carrot, TD, close carrot then press the Enter key on the keyboard.

## TH to TD 5

<no audio> Click the <TH> tag to select it.

<no audio> Click the <TH> tag again to highlight it.

<no audio> Type an open carrot, TD, close carrot then press the Enter key on the keyboard.

## Finish Table

To finish walking the table tags, we expand each tag and click on it to ensure it corresponds correctly with the rows, cells and text.

Once we've clicked on the first tag, a shortcut is to use the keyboard's arrow keys.

We can then use the up and down arrow keys to walk the tags and the right arrow key to expand them.

## Finish Tags

Let's finish walking our tags. Click below the scroll bar.

Remember, our images are redundant, so we want to delete the Figure tags.

Select it then press the Delete on the keyboard. Delete the next two figure tags.

<no audio> Select the <figure> tag.

<no audio> Press the Delete key.

<no audio> Press the Delete key.

<no audio> Press the Delete key.

## Header 3

Notice our H3 tag has highlighted the 3 images along with the header text.

Expand the H3 tag using your mouse or the down arrow on your keyboard.

Click the first figure tag to select it then delete the images.

<audio> Press the Delete key on the keyboard.

<audio> Press the Delete key on the keyboard.

<audio> Press the Delete key on the keyboard.

# Lists and Bullets

## Keep Walking

We're almost there.

Click the next <P> tag.

Now expand the <L> tag, or List tag, which is something new.

<no audio> Click the arrow to the left of the <L> tag to expand it.

## List Styles

<no audio> Screen transitions to Word document from PDF.

As we indicated when we reviewed the styles, we always to want to use the bullets and numbered lists from the Styles section and not the Home ribbon, which can result in accessibility issues.

## Transition to PDF

<no audio> Screen transitions to PDF document from Word.

## List Tags

L tags are lists and we're going to walk these tags using our arrow keys on our keyboard.

Like tables, lists have a structure too.

The <L> tag is like the table tag.

Each <LI> represents a bullet.

Within the <LI> tag, there must be an <LBody> tag that corresponds with the bulleted text.

## Finish the Walk

Remember what to do with <P> tags that correspond with nothing? Go ahead. Click anywhere for a hint.

<audio-hint> Press the Delete key on the keyboard.

## Finish the Walk 1

Use the keyboard, starting with the down arrow key, to finish walking the tags.

<audio-hint> Use the down arrow key to move to the next <P> tag.

<audio-hint> Since this <P> tag does not correspond with any text, press the Delete key on the keyboard.

## Links

Nice! We are done walking the tags.

One last note, however, about links.

Links should always be double-checked once the document is a PDF.

If a link is in the footer, an error will be generated.

Our guidance is to never put a link into the footer, which is why our "footer statement" displays at the end of our documents and not in the footer.

## Another Check

OK. Time for another Accessibility Check. Go ahead. Click for a hint.

<audio-hint> Click Accessibility Check on the right panel.

<audio-hint> Click the Start Checking button or press the Enter key on the keyboard.

## Resolve Doc Issues

All of our other issues are resolved.

Click the Document (3 issues) link.

We've walked the tags and the reading order looks good.

We used the template so our color contrast should be fine.

Now, we just have the title error left.

Go ahead and fix it. Click anywhere for a hint.

<audio-hint> Click File on the menu bar.

## Properties

<audio-hint> Select Properties.

We completed the Advanced Properties in the original Word document that's why they've auto populated these fields.

What's next? Go ahead. Click for a hint.

<audio-hint> Click the Initial View tab.

## Initial View

What's one thing we do that is not required but nice for consistency. Go ahead. Click for a hint.

<audio-hint> Click the Magnification drop-down.

<audio-hint> Select 100%.

And lastly? But also most importantly?

<audio-hint> Click the Show drop-down.

<audio-hint> Select Document Title.

<audio-hint> Click OK or press the Enter key on the keyboard.

## Last Check

Our title looks good.

One last check though.

But before we do, a quick note. We do not have to repeatedly run accessibility checks. We did that here for the sake of the training but in general, run it once at the beginning, correct the errors, then run it again to ensure all errors have been corrected.

OK. Go ahead and run it.

<audio-hint> Click Accessibility Check on the right panel.

<audio-hint> Click the Start Checking button or press the Enter key on the keyboard.

## Finished

And we're done!

Hopefully the information we've reviewed in these two accessibility modules will enable you to confidently create accessible documents, as well as assess and resolve most accessibility issues common to our documents.

<no audio> Transition to End Slide.

## End Slide

Thank you for taking the time to review this second accessibility module.

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