



# Environmental Protection Agency

Usability Audit Review

Content and Navigation: Mold

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**December 2017**

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# Agenda

- › **Overview of Usability Audit Review**
- Top Usability Issues
- Key Findings

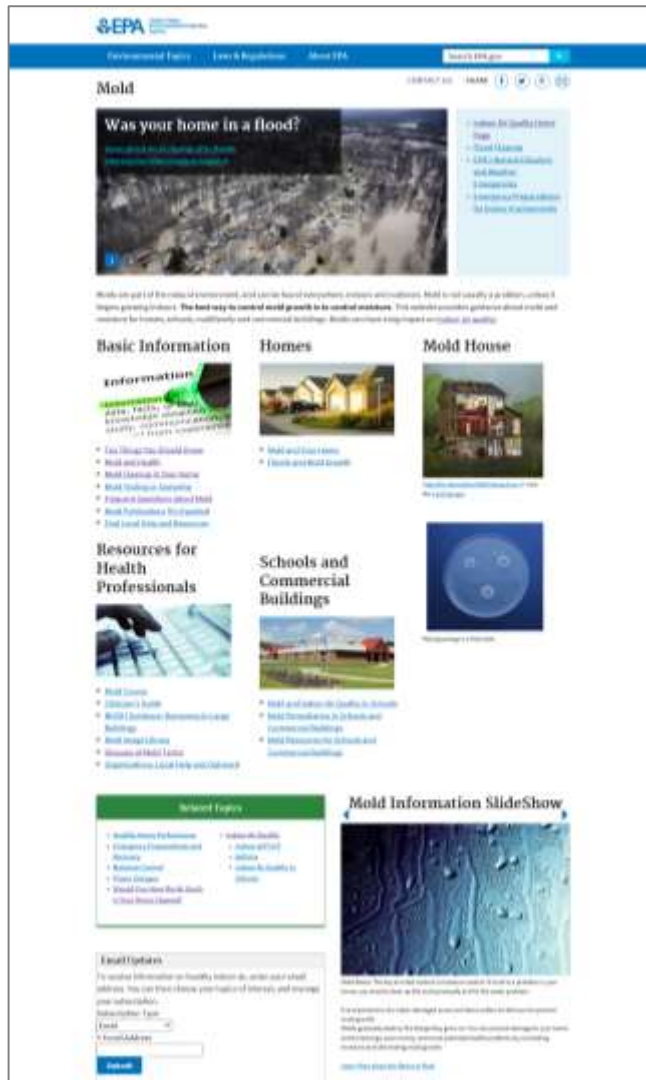
# ForeSee Usability Process

- Audit
- Analysis
- Independent Evaluation
- Target Customer Needs and Expectations

# Usability Indicators

- Individual Application
- Pass/Fail Metric
- Measures Specific Aspect of Usability
- Proprietary to ForeSee
- Website Analysis and External Research
- Best Practice

# Scope and Specifications



- December 2017
- 1366 x 768
- Iterative Evaluation

This audit examines content and navigation within the EPA Mold category to evaluate the organization and categorization of information, the intuitiveness of navigation, and how clearly labeling communicates the nature of content and its structure. Specifically, this audit seeks to answer three questions:

- How well does the section present the most important facts about Mold?
- What factors prevent visitors from finding desired content?
- How well does the FAQ section present this key content?

# Agenda

- Overview of Usability Audit Review
- › **Top Usability Issues**
- Key Findings

# Top Usability Issues

- Home and Landing Pages
- Local Navigation
- Orientation
- Access to Publications
- Readability
- Navigation in Frequent Questions
- Adequate Linkage
- Expected Location
- Image Gallery
- Print and Email

This report contains notes regarding alternative solutions and recommendations discussed during the presentation on December 5, 2017

# Home and Landing Pages



# Links on Mold Home lead to other categories

The Mold homepage prominently displays links to related content in other sections of EPA.gov. The two goals of the home and landing pages are to showcase what visitors can accomplish and learn within a section of a site and to provide efficient navigation to inner pages. The presence of a prominent group of links which lead outside the Mold category dilutes the clear message of what can be accomplished and hinders navigation within the current section.

While providing useful links to related information can be helpful, the lack of a heading to identify them as links to related information creates disorientation when visitors click them .

## Recommendations:

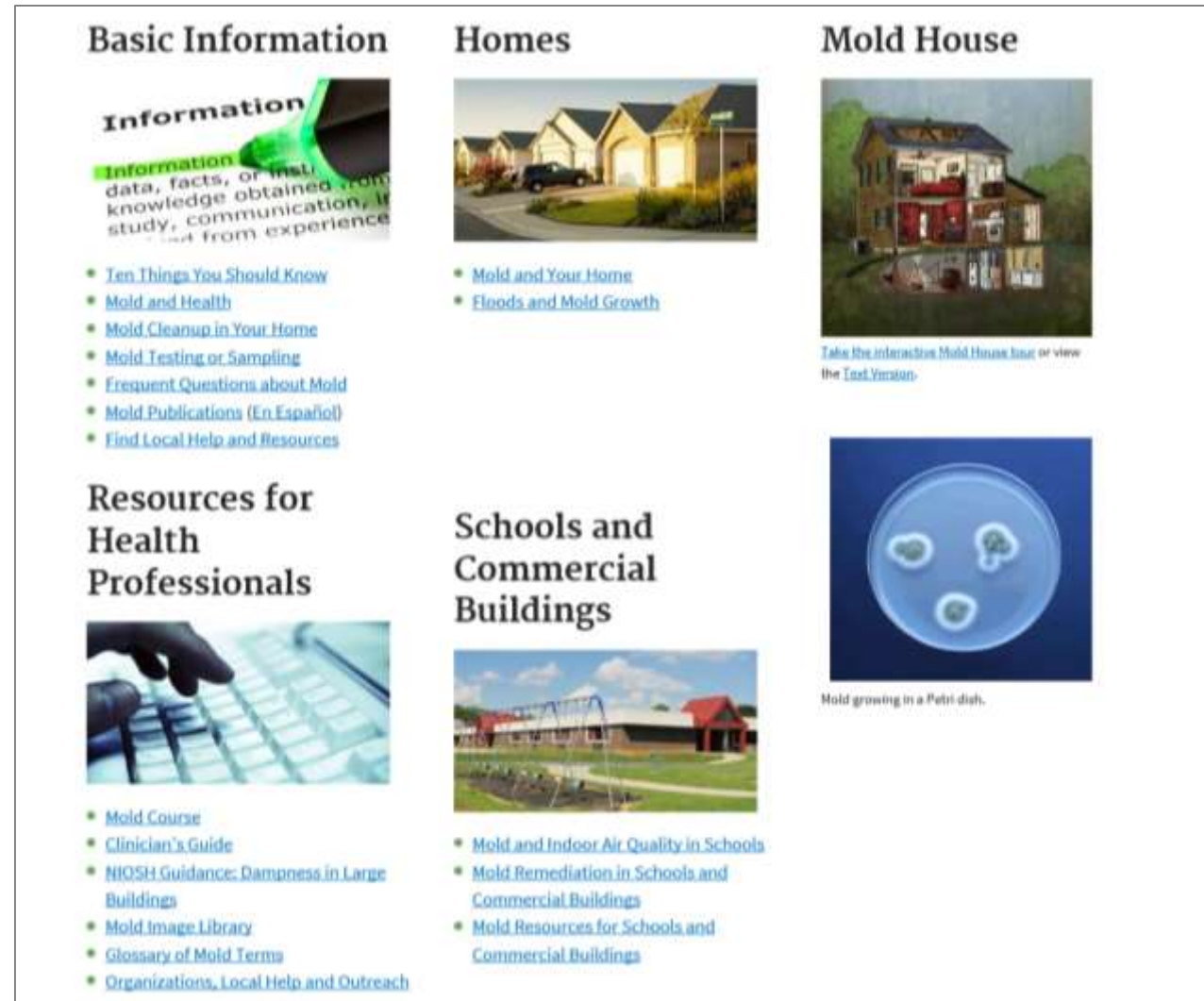
- Relocate links to related content to a less prominent location on Mold home.
- Provide a heading for the group which indicates that they are related links.

The screenshot shows the EPA.gov Mold homepage. At the top right, there are links for 'CONTACT US' and 'SHARE' with social media icons for Facebook, Twitter, Pinterest, and Email. The main content area features a large blue background with water droplets. On the left, a dark box contains the heading 'The Key to Mold Control is Moisture Control' and a paragraph: 'If mold is a problem in your home, you must clean up the mold and eliminate sources of moisture. [Learn more about mold and moisture control.](#)' Below this is a carousel with two slides, the second of which is active. On the right, a light blue box with a red border contains a list of links: 'Indoor Air Quality Home Page', 'Flood Cleanup', 'EPA's Natural Disasters and Weather Emergencies', and 'Emergency Preparedness for Indoor Environments'. Below the main content, there are three sections: 'Basic Information' with a green arrow graphic, 'Homes' with a photo of houses, and 'Mold House' with a photo of a moldy wall.

# Scope notes are missing from the Mold homepage

While the Mold homepage provides linkage to subcategory pages and content pages, the site fails to make use of scope notes on this page to help visitors gain a better understanding of the content and features available within each subcategory. For example, visitors may be uncertain whether to begin their research on the Basic Information page or the Homes page. Without scope notes, visitors are forced to visit each link to discover what content is available there. Depending on the nature of the link or links they are describing, scope notes can range in length from a short phrase to a few sentences.

**Recommendation:** Include scope notes on the Mold homepage.



The screenshot displays the Mold homepage layout with several subcategory sections:

- Basic Information**: Includes a definition of information and a list of links: [Ten Things You Should Know](#), [Mold and Health](#), [Mold Cleanup in Your Home](#), [Mold Testing or Sampling](#), [Frequent Questions about Mold](#), [Mold Publications \(En Español\)](#), and [Find Local Help and Resources](#).
- Homes**: Includes an image of a house and links: [Mold and Your Home](#) and [Floods and Mold Growth](#).
- Mold House**: Includes an image of a house cutaway and a link: [Take the interactive Mold House tour or view the Text Version](#).
- Resources for Health Professionals**: Includes an image of hands on a keyboard and links: [Mold Course](#), [Clinician's Guide](#), [NIOSH Guidance: Dampness in Large Buildings](#), [Mold Image Library](#), [Glossary of Mold Terms](#), and [Organizations, Local Help and Outreach](#).
- Schools and Commercial Buildings**: Includes an image of a school building and links: [Mold and Indoor Air Quality in Schools](#), [Mold Remediation in Schools and Commercial Buildings](#), and [Mold Resources for Schools and Commercial Buildings](#).

Additional images include a Petri dish with mold growing on it, captioned "Mold growing in a Petri dish."

# Landing pages lack introductory content

Similarly, landing pages for subcategories within Mold should provide an introduction to the content of the section and scope notes indicating the content represented by the links. Since visitors have already clicked once to arrive at this page, they should not be forced to click into each link to understand which page has the information they seek.

**Recommendation:** Ensure subcategory landing pages provide an adequate overview and description of the content found within that subcategory.

Indoor Air Quality Home Page

Mold Home

Flood Cleanup

**Mold Basics**

Ten Things You Should Know About Mold

Mold and Health

Mold Cleanup

Mold Testing and Sampling

Frequent Questions about Mold

Mold Publications

Schools and Commercial Buildings

Environmental and Public Health Professionals

Interactive Mold House

Related Topics

## Basic Information

- [Ten Things You Should Know About Mold](#)
- [Mold and Health](#)
- [Mold Cleanup](#)
- [Mold Testing or Sampling](#)
  - [Indoor Air Regulations and Mold](#)
- [Frequent Questions about Mold](#)
- [Mold Publications](#)
- [Find Local Help and Resources](#)
  - [Mold Image Gallery](#)
  - [Glossary of Mold Terms](#)

## More information for Homes, Large Buildings, and Schools.

- [Mold and Your Home](#)
- [Large Buildings and Mold](#)
- [Schools and Mold and Indoor Air Quality](#)

[Contact Us](#) to ask a question, provide feedback, or report a problem.

Indoor Air Quality Home Page

Mold Home

Flood Cleanup

Mold Basics

Ten Things You Should Know About Mold

Mold and Health

Mold Cleanup

Mold Testing and Sampling

Frequent Questions about Mold

Mold Publications

**Schools and Commercial Buildings**

Environmental and Public Health Professionals

Interactive Mold House

## Mold in Schools and Commercial Buildings

- [Mold and Indoor Air Quality in Schools](#)
- [Mold Remediation in Schools and Commercial Buildings](#)
- [Resources about Mold and Large Buildings](#)

[Contact Us](#) to ask a question, provide feedback, or report a problem.

# Best practice: Subcategory landing pages

The screenshot shows the CDC Influenza (Flu) landing page. The page is titled "Influenza (Flu)" and features a navigation menu on the left with categories like "About Flu", "Flu Season", "Current Season", "Health Care Providers", "Past Flu Seasons", "Prevent Flu", "Symptoms & Diagnosis", "Treatment", "Schools, Businesses & Travelers", "Flu Activity & Surveillance", "FluVaxView", "Health Professionals", "International Work", and "Flu News & Spotlights".

The main content area is titled "Current & Past Flu Seasons" and includes a language dropdown set to "English (US)". A red circle with the number "1" highlights the introductory text: "Flu activity is currently low in the U.S. In the United States, flu season occurs in the fall and winter. The peak of flu season has occurred anywhere from late November through March. CDC recommends: a yearly flu vaccine for everyone 6 months and older. CDC guidance for the 2017-2018 influenza season has been published." A "Flu Activity & Surveillance" map of the United States is also visible.

A second red circle with the number "2" highlights a grid of subcategory cards: "2017-2018 CURRENT SEASON", "PAST FLU SEASONS", and "HEALTH CARE PROVIDERS". Each card provides a brief overview of the subcategory. Below this grid are sections for "Additional Resources" (listing About Flu, 2017-2018 Flu Season, Prevent Flu, Symptoms & Diagnosis, and Treatment) and "Communication Resources" (offering access to communication, education, and partner materials).

At the bottom left, there is a "Get Email Updates" form and a section for "Influenza Types".

This site's landing page for Flu Season effectively showcases what visitors can accomplish and learn by providing overview text ❶ and scope notes for each subcategory ❷. Visitors are able to quickly scan the centerwell and locate information that is relevant without the need to visit each topic page.

# Home and Landing Pages

## Recommendations

- Relocate links to related content to a less prominent location on Mold home.
- Provide a heading identifying groups of related links.
- Include scope notes on the Mold homepage.
- Ensure subcategory landing pages provide an adequate overview of the content found within that subcategory.

# Local Navigation



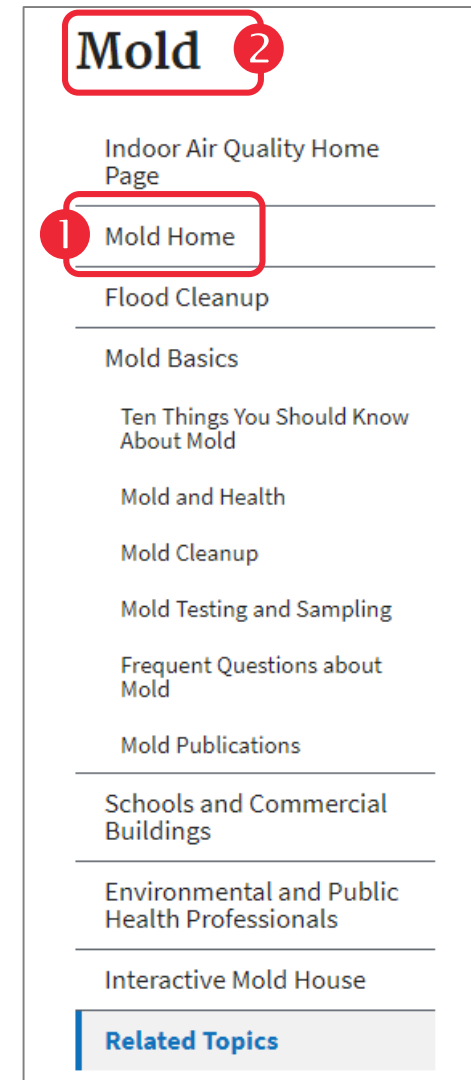
# Current category is unclear

The Mold category does not provide visitors with an efficient local navigation scheme which provides an accurate hierarchical layering of the Mold content. As shown, navigation menus within the category display Mold Home **1** as an item within the menu. As indicated by the menu heading **2**, the Mold homepage is the top-level page within the category. The repetition of the label within the menu deprives visitors of an accurate understanding of the category structure. To avoid confusion and support intuitive navigation, this label should not be repeated within the category navigation. Instead, the menu heading should be linked to the Mold homepage.

## Recommendations:

- Remove the Mold Home link from the local navigation menu.
- Link the menu heading, Mold, to the Mold homepage.

**Discussion Note:** The Mold Home link may be retained if it is displayed at the head of the menu, indicating that Mold is the top-level page in the section.



# Local menu links to content outside the current category

Next, the navigation menu contains two links to content that does not belong to the category. As shown, links to the Indoor Air Quality Home Page **1** and Flood Cleanup **2** are presented with other subcategories of the Mold section **3**. Yet, as shown on the Indoor Air Quality homepage **4**, Flood Cleanup and Mold appear to be separate subcategories, or topics, within IAQ **5**. To support intuitive navigation within the subcategory, the site must avoid interposing linkage to related content in the local navigation.

**Recommendation:** Avoid presenting links to pages that are outside the current subcategory in the local navigation.

Discussion Note: Removing the links to Indoor Air Quality Home Page and Flood Cleanup, as recommended, will align with the topical focus of EPA.gov. However, these links, and links to other IAQ pages, can be displayed in a sidebar throughout the section which may achieve IAQ's goals of identifying their content within the site.

## Mold

- 1** Indoor Air Quality Home Page

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- Mold Home

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- 2** Flood Cleanup

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- Mold Basics
  - Ten Things You Should Know About Mold
  - Mold and Health
  - Mold Cleanup
  - Mold Testing and Sampling
  - Frequent Questions about Mold
  - Mold Publications

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- Schools and Commercial Buildings

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- Environmental and Public Health Professionals


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- Interactive Mold House

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- 3** [Related Topics](#)

## Learn about IAQ



- 4** [Introduction to IAQ](#)
- Popular Topics
  - 5** [Asthma](#)
  - [Flood Cleanup](#)
  - [Mold](#)
  - [Radon](#)
  - [All Popular Topics about Indoor Air Quality](#)
- [En español - Acerca del Calidad del Aire Interior](#)

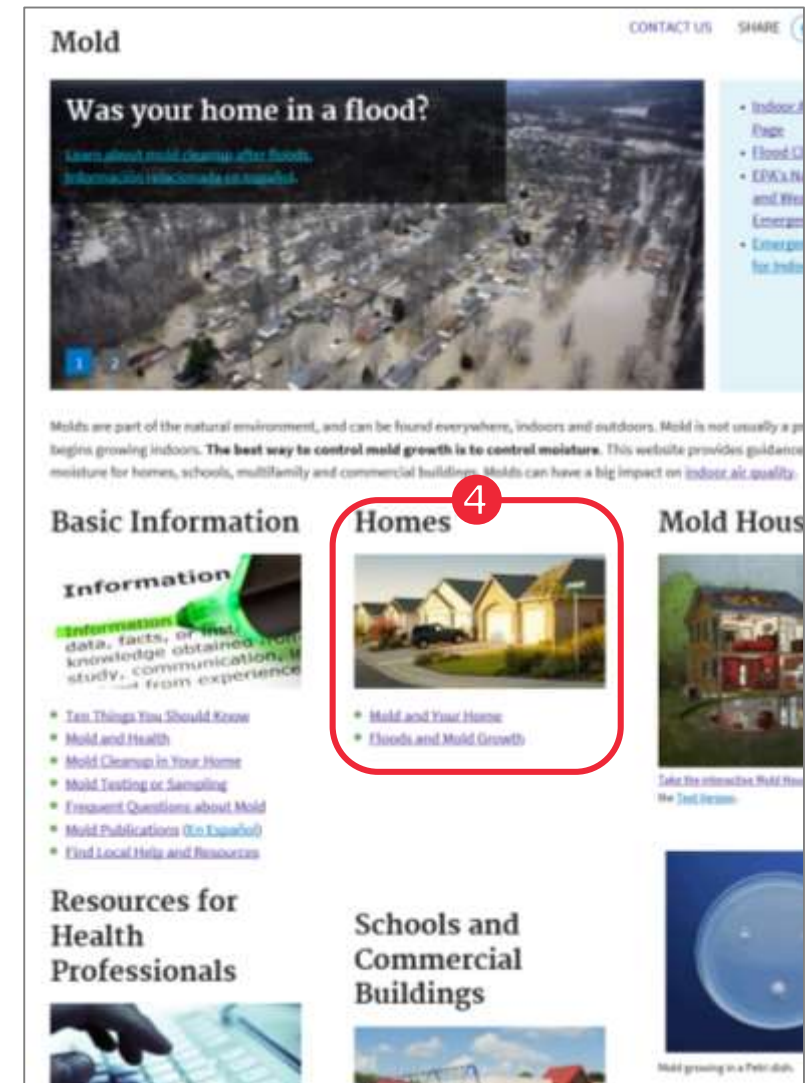
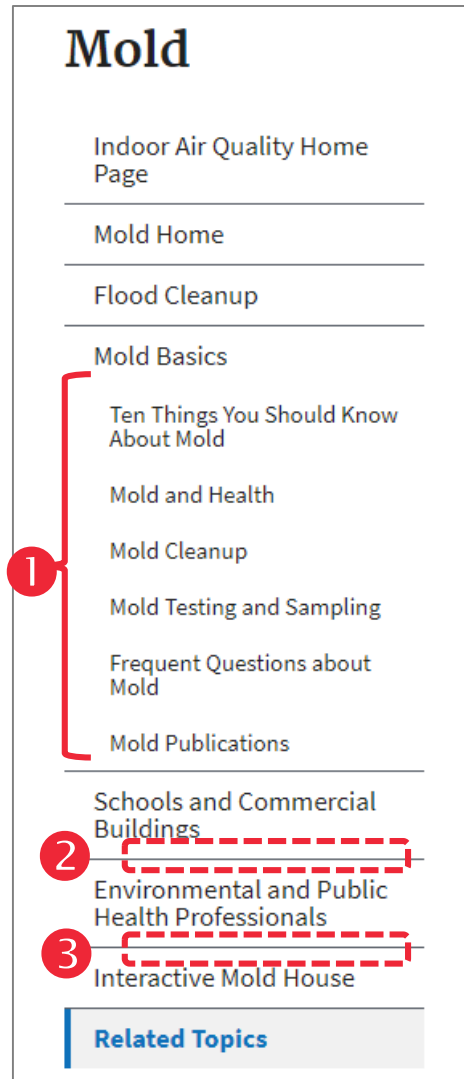


# Some content is not available through the menu

Although the local navigation menu provides access to pages within the Mold Basics subcategory ①, no linkage is provided to pages in the Schools and Commercial Buildings ② and Environmental and Public Health Professionals ③ subcategories. Also, content for homeowners in the Homes subcategory ④ is missing from the local navigation menu. As a result, navigation to these pages is less efficient and there is a risk visitors may fail to find relevant content in these sections.

## Recommendations:

- Include all subpages in the navigation menu.
- Consider displaying subpages for the current subcategory only.



# Local Navigation

## Recommendations

- Remove the Mold Home link from the local navigation menu.
- Link the menu heading, Mold, to the Mold homepage.
- Avoid presenting links to pages that are outside the current subcategory in the local navigation.
- Include all subpages in the navigation menu.
- Consider displaying subpages for the current subcategory only.

# Orientation

# Link labels do not consistently match page headings

The Mold category does not ensure link labels and corresponding page headings have a one-to-one match to orient visitors and reassure them they have accessed the correct page. For example, when visitors click Homes, on the Mold Home page, they are taken to a page with the heading of Mold Cleanup in Your Home ❶. Likewise, clicking on Environmental and Public Health Professionals in the local navigation menu ❷ returns a page with the heading Resources for Health Professionals. Visitors can be momentarily confused by the difference in labeling. Unless there is a compelling reason, the site should ensure page headings exactly match the labels of links visitors clicked.

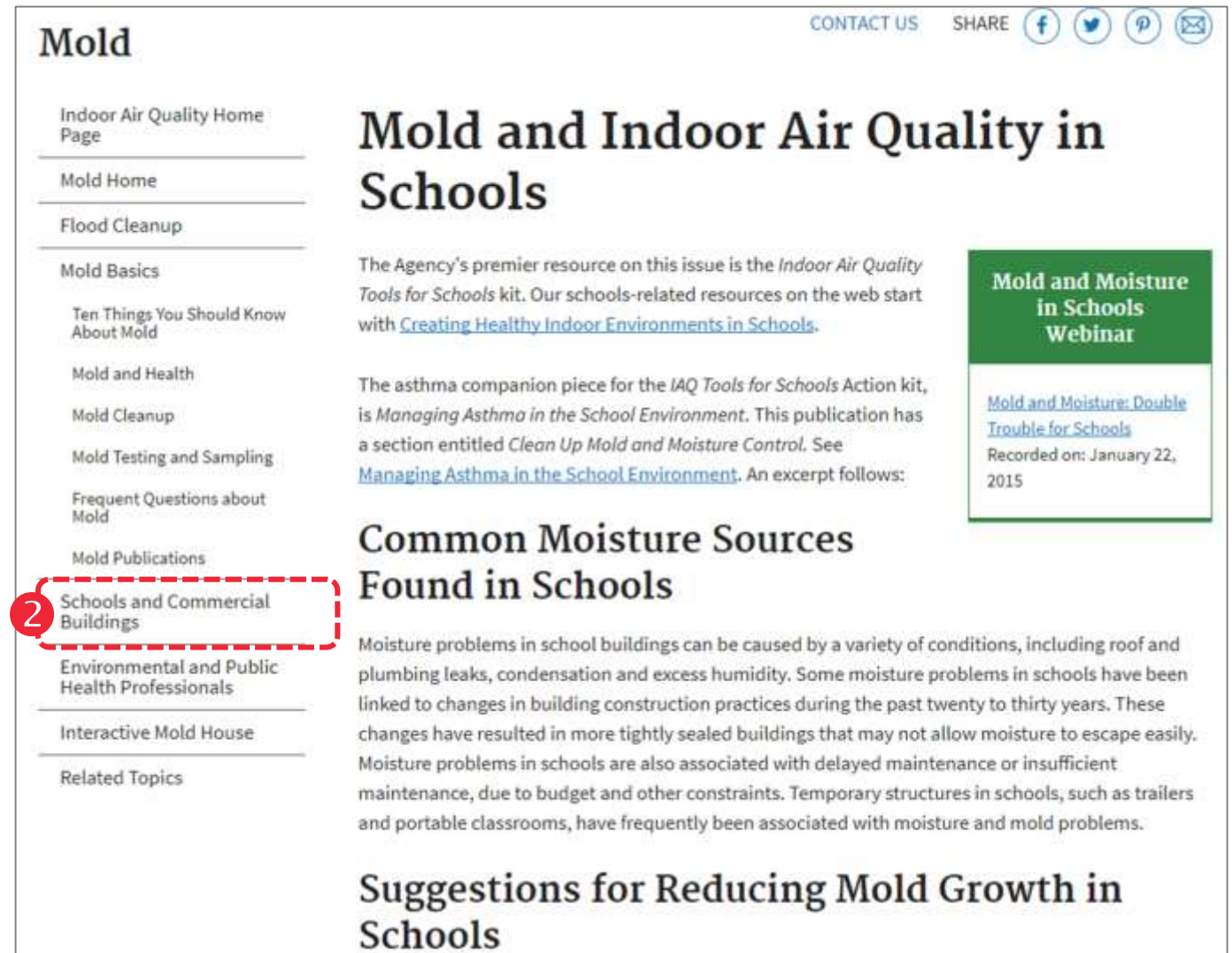
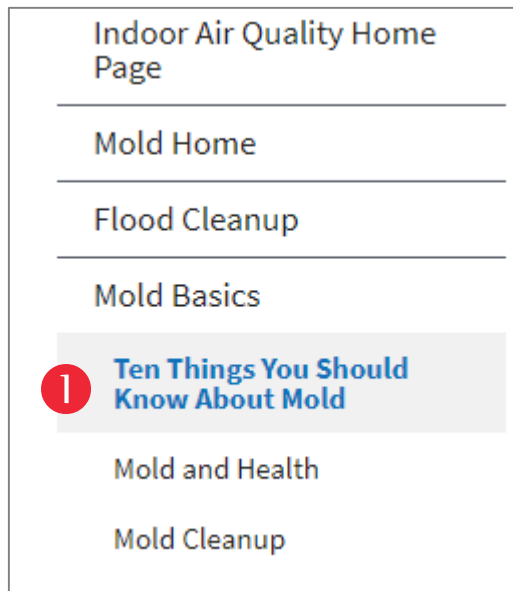
**Recommendation:** Ensure link labels and corresponding page headings have a one-to-one match.

The screenshot illustrates the inconsistency between link labels and page headings. On the right, a navigation menu lists several items, including "Environmental and Public Health Professionals" which is circled in red. On the left, two page examples are shown. The top example shows a link labeled "Homes" (circled in red) that leads to a page titled "Mold Cleanup in Your Home" (labeled ❶). The bottom example shows a link labeled "Environmental and Public Health Professionals" (circled in red) that leads to a page titled "Resources for Health Professionals" (labeled ❷).

# Menu does not always indicate the current category

The site adheres to best practice by indicating the location of the current page by changing the text color and providing a background color for the associated item in the navigation menu ❶. However, this orientation cue is missing for pages that are not included in the menu ❷. Thus, visitors to these pages have more difficulty identifying related pages and returning to these pages.

**Recommendation:** Indicate the location of the current page by highlighting both the subcategory label and the link to the associated item in the navigation menu.





# Best practice: Indicating location in navigation menu

The screenshot shows a website navigation menu with the following structure:

- 1** ABOUT CANCER (highlighted)
- CANCER TYPES
- RESEARCH
- GRANTS & TRAINING
- NEWS & EVENTS

Breadcrumb trail: Home > About Cancer > Cancer Treatment > Clinical Trials Information

**2** CANCER TREATMENT (highlighted)

- Types of Cancer Treatment +
- Side Effects
- 3** Clinical Trials Information (highlighted)

  - Find NCI-Supported Clinical Trials +
  - What Are Clinical Trials? +
  - Paying for Clinical Trials +
  - 4** Patient Safety (highlighted)

    - Informed Consent
    - Children's Assent
    - Scientific Review
    - Ending Trials Early
    - Deciding to Take Part in a Trial
    - Questions to Ask about Treatment Clinical Trials
    - Selected NCI-Supported

In this example, a site aids orientation by highlighting the location at each level of the hierarchy **1** **2** **3** down to the current page **4**.

# Orientation

## Recommendations

- Ensure link labels and corresponding page headings have a one-to-one match.
- Indicate location of the current page by highlighting the associated item in the navigation menu.

# Access to Publications



# Labeling is unclear for links to publications (1 of 2)

The Mold section accommodates the preferences of visitors by providing some publications in both HTML and printable PDF formats. However, some links to the HTML pages are indistinguishable from those which lead to the PDF versions. For example, this link to A Brief Guide to Mold, Moisture and Your Home ❶ appears to link to a printable or downloadable file due to the section heading ❷ which indicates the section includes publications, the thumbnail image ❸ and file size and date information ❹. Yet, the link opens a web page. Visitors who want to print or download must click a second link to access the file ❺.

**Recommendation:** Provide links to both the HTML and PDF versions of content.

**❷ Mold Publications for Homes**

The EPA publication, "A Brief Guide to Mold, Moisture, and Your Home," provides information and guidance for homeowners and renters on how to clean up residential mold problems and how to prevent mold growth.

**❶**

**❸** **❹**

[A Brief Guide to Mold, Moisture and Your Home](#)  
(20 pp, 1 MB, September 2010)

**❺**

**A Brief Guide to Mold, Moisture and Your Home**

Please click on the boxes to the right to view the chapters of the "Brief Guide to Mold, Moisture and Your Home."

**Overview**

This Guide provides information and guidance for homeowners and renters on how to clean up residential mold problems and how to prevent mold growth. The content on these web pages is based on EPA's publication "A Brief Guide to Mold, Moisture and Your Home." Updates have been made to some resources and links.

- Overview
- Mold Basics
- Mold Cleanup
- Mold Cleanup Guidelines
- What to Wear When Cleaning Moldy Areas
- Is the Cleanup

# Labeling is unclear for links to publications (2 of 2)

The Publications about Mold page provides side-by-side links to HTML and PDF versions of publications. However, the link labels are not sufficiently differentiated, and require visitors to read the labels and infer that the print version is the PDF. This risks that visitors may waste time and effort opening a file.

Additionally, these links lack information regarding the size of the files for print and download.

## Recommendations:

- Add an icon or explicit label to identify links to HTML and PDF content when both formats are available.
- Indicate the file size in terms of number of pages and memory requirements.

## EPA Resources about Mold



The publication, *A Brief Guide to Mold, Moisture, and Your Home*, is available in HTML and PDF.

- [A Brief Guide to Mold, Moisture, and Your Home](#)  
[EPA 402-K-02-003] reprinted September 2012
- [Print Version of A Brief Guide to Mold, Moisture, and Your Home](#)  
[EPA 402-K-02-003] reprinted September 2012



The publication, *Mold Remediation in Schools and Commercial Buildings*, is available in HTML and PDF.

- [Mold Remediation in Schools and Commercial Buildings](#)  
[EPA 402-K-01-001] reprinted September 2008
- [Print Version of Mold Remediation in Schools and Commercial Buildings](#)  
[EPA 402-K-01-001] reprinted September 2008

[↑ Top of Page](#)

# Best practice: Identifying file types

## Home Buyer's and Seller's Guide to Radon

This guide answers important questions about radon and lung cancer risk. It also answers questions about testing and fixing for anyone buying or selling a home.

You may need Adobe Reader to view files on this page. See EPA's [About PDF page](#) to learn more.

- [Home Buyer's and Seller's Guide to Radon \(PDF\)](#)

(44 pp, 4 MB) EPA 402/K-13/002

[Contact Us](#) to ask a question, provide feedback, or report a problem.

On this page, the link label to a PDF document includes the file type designation ❶. Visitors' expectations regarding the size of the file are also set ❷.

# Publications are not integrated with local navigation

Next, the navigation menus of the HTML versions of these publications 1 2 have not been integrated with the existing navigation scheme 3 4. This is potentially confusing and risks that visitors may unintentionally navigate away from the publication and fail to view relevant information.

**Recommendation:** Display publication navigation menus within the local navigation menu.

Discussion Note: It may not be possible to integrate the two navigation menus at this time. Providing a descriptive label for the publication navigation menu, such as Contents or Chapters will help to disambiguate between these menus.

The image shows two screenshots of web pages. The left page is titled "A Brief Guide to Mold, Moisture and Your Home" and features a left-hand navigation menu (callout 3) and a right-hand navigation menu (callout 1). The right page is titled "Mold Remediation in Schools and Commercial Buildings Guide" and features a right-hand navigation menu (callout 2) and a top-left navigation menu (callout 4). Red circles with numbers 1, 2, 3, and 4 highlight these specific navigation elements.

**Callout 1:** A vertical navigation menu on the right side of the "A Brief Guide to Mold, Moisture and Your Home" page, containing links for Overview, Mold Basics, Mold Cleanup, Mold Cleanup Guidelines, What to Wear When Cleaning Moldy Areas, Is the Cleanup Complete?, Moisture and Mold Prevention and Control Tips, Hidden Mold, Cleanup and Biocides, and Additional Resources.

**Callout 2:** A vertical navigation menu on the right side of the "Mold Remediation in Schools and Commercial Buildings Guide" page, containing links for Guidance Introduction, Mold Prevention, Investigating, Evaluating & Remediating Moisture & Mold Problems, Table 1: Water Damage Cleanup and Mold Prevention, Table 2: Mold Remediation Guidelines, Checklist for Mold Remediation, Resources List, References, Glossary (Appendix A), Introduction to Mold (Appendix B), Communicating with Building Occupants (Appendix C), and Acknowledgements.

**Callout 3:** A vertical navigation menu on the left side of the "A Brief Guide to Mold, Moisture and Your Home" page, containing links for Indoor Air Quality Home Page, Mold Home, Flood Cleanup, Mold Basics, Ten Things You Should Know About Mold, Mold and Health, Mold Cleanup, Mold Testing and Sampling, Frequent Questions about Mold, Mold Publications, Schools and Commercial Buildings, Environmental and Public Health Professionals, Interactive Mold House, and Related Topics.

**Callout 4:** A vertical navigation menu on the top left of the "Mold Remediation in Schools and Commercial Buildings Guide" page, containing links for Indoor Air Quality Home Page, Mold Home, Flood Cleanup, Mold Basics, Ten Things You Should Know About Mold, Mold and Health, Mold Cleanup, Mold Testing and Sampling, Frequent Questions about Mold, Mold Publications, Schools and Commercial Buildings, and Environmental and Public Health Professionals.

# Best practice: Combining document and local navigation

The image displays two screenshots of a health information website, illustrating best practices for combining document and local navigation. The top screenshot shows the main page for "Acid Reflux (GER & GERD) in Children & Teens". The sidebar menu (1) lists "Digestive Diseases" and "Acid Reflux (GER & GERD) in Children & Teens" (2). The main content area includes sections for "Definition & Facts" and "Symptoms & Causes". The bottom screenshot shows a sub-page for "Symptoms & Causes of GER & GERD in Children & Teens". The local navigation menu (3) is highlighted, and the top-level link (5) is also highlighted. Red circles and arrows indicate the specific navigation elements being discussed.

This other site promotes orientation and navigation within publications on the site by including links to chapters or pages 1 in the local navigation menu 2. At the chapter level 3, the local navigation menu is replaced by linkage to other chapters 4 and access to the containing category is maintained by the top level link 5 in the publication menu.

# Link labels are duplicated

Some navigation labels within the Mold category local navigation menu **1** **2** and the publication chapters **3** **4** are identical. Visitors are often confused by duplicate labels for differing navigation options.

**Recommendation:** Modify the navigation labels to avoid duplication.

**Mold** CONTACT US SHARE

Indoor Air Quality Home Page

Mold Home

Flood Cleanup

**1** Mold Basics

Ten Things You Should Know About Mold

Mold and Health

**2** Mold Cleanup

Mold Testing and Sampling

Frequent Questions about Mold

Mold Publications

Schools and Commercial Buildings

Environmental and Public Health Professionals

Interactive Mold House

Related Topics

## A Brief Guide to Mold, Moisture and Your Home

Please click on the boxes to the right to view the chapters of the "Brief Guide to Mold, Moisture and Your Home."

### Overview

This Guide provides information and guidance for homeowners and renters on how to clean up residential mold problems and how to prevent mold growth. The content on these web pages is based on EPA's publication "[A Brief Guide to Mold, Moisture and Your Home](#)." Updates have been made to some resources and links.

**3** Mold Basics

**4** Mold Cleanup

Overview

Mold Cleanup Guidelines

What to Wear When Cleaning Moldy Areas

Is the Cleanup Complete?

Moisture and Mold Prevention and Control Tips

Hidden Mold

Cleanup and Biocides

Additional Resources



# Access to Publications

## Recommendations

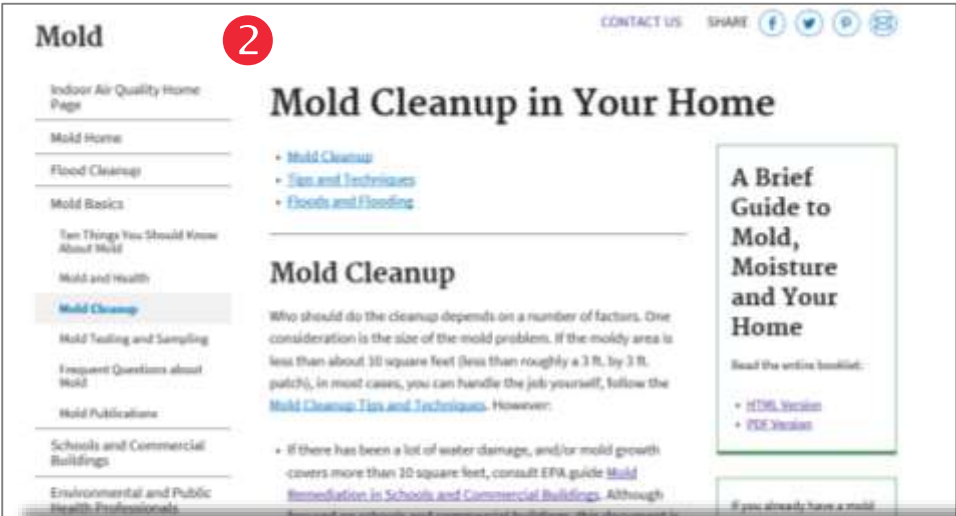
- Provide links to both the HTML and PDF versions of content.
- Add an icon or explicit label to identify links to HTML and PDF content when both formats are available.
- Indicate the file size in terms of number of pages and memory requirements.
- Display publication navigation menus within the local navigation menu.
- Modify the navigation labels to avoid duplication.

# Readability



# Content may be difficult to read (1 of 2)

The reading level of some pages within the Basic Information or Homes subcategories appears to exceed the recommended level for web copy. For example, a readability assessment tool indicates visitors need to have completed 10 – 12 years of education ❶ to easily understand the text on the Mold Cleanup in Your Home page ❷, on the first reading. The recommended reading level for general audiences is at or below 7<sup>th</sup> – 9<sup>th</sup> grade. This page contains a number of complex sentences which may slow visitors. For instance, sentences such as *If you suspect that the heating/ventilation/air conditioning (HVAC) system may be contaminated with mold (it is part of an identified moisture problem, for instance, or there is mold near the intake to the system), consult EPA guide Should You Have the Air Ducts in Your Home Cleaned?* should be simplified or broken into several shorter sentences.



**Mold Cleanup in Your Home**

Average number of syllables per word : 1.64  
Average number of words per sentence: 16.95

*Indication of the number of years of formal education that a person requires in order to easily understand the text on the first reading*  
Gunning Fog index : 11.97

*Approximate representation of the U.S. grade level needed to comprehend the text :*  
Coleman Liau index : 11.26  
Flesch Kincaid Grade level : 10.34  
ARI (Automated Readability Index) : 10.10  
SMOG : 11.96

Flesch Reading Ease : 51.13

\* If you have health concerns, consult a health professional before starting cleanup.\*

# Content may be difficult to read (2 of 2)

Content in Mold and Moisture Frequent Questions ① also tested at a higher reading level ②.

**Recommendation:** Reevaluate reading level of content within the Mold category: where necessary, simplify diction and use shorter sentences.

**Discussion Note:** This problem appears to be more prevalent in the Frequent Questions content.

## ② Can mold cause health problems?

Molds are usually not a problem indoors, unless mold spores land on a wet or damp spot and begin growing. Molds have the potential to cause health problems. Molds produce allergens (substances that can cause allergic reactions), irritants, and in some cases, potentially toxic substances (mycotoxins). Inhaling or touching mold or mold spores may cause allergic reactions in sensitive individuals. Allergic responses

Number of characters (without spaces) :	980.00
Number of words :	190.00
Number of sentences :	14.00
Average number of characters per word :	5.16
Average number of syllables per word :	1.69
Average number of words per sentence:	13.57
<hr/>	
<i>Indication of the number of years of formal education that a person requires in order to easily understand the text on the first reading</i>	
Gunning Fog index :	11.53
<hr/>	
<i>Approximate representation of the U.S. grade level needed to comprehend the text :</i>	
Coleman Liau index :	12.37
Flesch Kincaid Grade level :	9.64
ARI (Automated Readability Index) :	9.65
SMOG :	12.14
<hr/>	
Flesch Reading Ease :	50.13

# Long paragraphs hinder scanning

The Frequent Question articles provided for Mold and Moisture are often long and difficult to scan and digest. Therefore, they require a great deal of unnecessary work as visitors seek relevant information. These answers should be a quick and easy way for visitors to gather facts about mold. However, answers are often provided in large blocks of complicated copy. Instead, the site must ensure that the arrangement of text supports scanning.

**Recommendation:** Utilize bullet points, lists and subheadings to ensure that answers to Frequent Questions are easy to scan and digest.

[Indoor Air Quality - Customer Service](#) > [Mold and Moisture](#)

## Can mold cause health problems?

Molds are usually not a problem indoors, unless mold spores land on a wet or damp spot and begin growing. Molds have the potential to cause health problems. Molds

produce allergens (substances that can cause a cases, potentially toxic substances (mycotoxins), spores may cause allergic reactions in sensitive include hay fever-type symptoms, such as sneezing rash (dermatitis). Allergic reactions to mold are delayed. Molds can also cause asthma attacks to mold. In addition, mold exposure can irritate of both mold-allergic and non-allergic people. Some irritant types are not commonly reported as a result mold and health effects is ongoing. This brochure not describe all potential health effects related to information consult a health professional. You may contact your local health department.

[Indoor Air Quality - Customer Service](#) > [Mold and Moisture](#)

## Is sampling/testing for mold necessary?

**In most cases, if visible mold growth is present, sampling is unnecessary.** Since no EPA or other federal limits have been set for mold or mold spores, sampling cannot be used to check a building's compliance with federal mold standards. Surface sampling may be useful to determine if an area has been adequately cleaned or remediated. Sampling for mold should be conducted by professionals who have specific experience in designing mold sampling protocols, sampling methods, and interpreting results. Sample analysis should follow analytical methods recommended by the American Industrial Hygiene Association (AIHA), the American Conference of Governmental Industrial Hygienists (ACGIH), or other professional organizations.




### Hidden Mold

Investigating hidden mold problems may be difficult and will require caution when the investigation involves disturbing potential sites of mold growth. For example, removal of wallpaper can lead to a massive release of spores if there is mold growing on the underside of the paper. If you believe that you may have a hidden mold problem, consider hiring an experienced professional.

For more information on mold, see our website at [www.epa.gov/mold](http://www.epa.gov/mold)

# Best practice: Scannable copy

**Disposing of Your Mobile Device** Ver este página en español

SHARE THIS PAGE   

Thinking of upgrading to a new mobile phone or device? Maybe returning one that didn't work out for you? It's important to delete any personal information you stored on the device.

**Related items**

- Disposing of Old Computers
- How to Keep Your Personal Information Secure
- Understanding Mobile Apps

→ [How to Remove Personal Information](#)  
→ [Checking Twice](#)  
→ [Discarding with Care](#)

**1 How to Remove Personal Information**

Your mobile device probably holds sensitive information like addresses and phone numbers, passwords, account numbers, email, voicemail, and text message logs. When getting rid of your old device, it's important to take steps to help ensure this information doesn't fall into the wrong hands.

First, try to use the factory reset. Many devices allow you to "wipe" your device and clear nearly all the information in its memory. Sometimes, this is called a "hard reset," or "factory reset." You may be able to save or transfer the information to your new device before you delete it from your old one. For detailed instructions on how to "wipe" your device, read your owner's manual or check the website of your mobile provider or the device manufacturer.

Second, remove or erase SIM and SD cards. Many mobile devices store information on a SIM card or an external SD card as well as in the device's internal memory. If you're keeping your phone number, ask your mobile provider about transferring your SIM card to your new device. SD cards often contain photos and other sensitive information. Even when you "wipe" your device, your SIM card or SD cards may retain information about you. Remove them from your device or delete the data that's stored on them.

**2 Checking Twice**

After you've deleted your personal information, it's good to double-check to make sure it's gone. Check your:

- phone book
- logs for both dialed and received calls
- voicemails
- sent and received emails and text messages
- downloads and other folders
- search histories
- personal photos

If you stored apps on your device, remove them and the data associated with them.

**4**

**Discarding with Care**

Once you have a "clean" phone, it's up to you to decide what to do next.

Recycling it is one option. Many mobile device manufacturers, wireless service providers, and other groups have programs to refurbish mobile devices or recycle their components, including accessories like chargers.

The copy on this page is divided into sections which are identified by subheadings. Bulleted lists increase the scannability of the text.

# Customer Service articles contain extraneous details

In a related issue, some answers to Frequent Questions contain a short list of facts about mold either before or after the article. The inclusion of this information, which does not directly answer the specific question, requires visitors to exert additional effort to focus on the answer to their question.

## Recommendations:

- Avoid introducing irrelevant content within the answers to frequent questions.
- Consider placing mold facts in a sidebar.

Indoor Air Quality - Customer Service > Mold and Moisture

### Should I have the air ducts in my home cleaned?

- **The key to mold control is moisture control.**
- **If mold is a problem in your home, you should clean up the mold promptly *and* fix the water problem.**
- **It is important to dry water-damaged areas and items within 24-48 hours to prevent mold growth.**

EPA's [Should You Have the Air Ducts in Your Home Cleaned?](#) article discusses air duct cleaning and mold which follows, please review the

Indoor Air Quality - Customer Service > Mold and Moisture

### Can mold cause health problems?

Molds are usually not a problem indoors, unless mold spores land on a wet or damp spot and begin growing. Molds have the potential to cause health problems. Molds produce allergens (substances that cause allergic reactions), irritants, and in some cases, toxins.

This brochure does not describe all potential health effects related to mold exposure. For more detailed information consult a health professional. You may also wish to consult your state or local health department.

Read more about mold at <https://www.epa.gov/mold>

1. The key to mold control is moisture control.
2. If mold is a problem in your home, you should clean up the mold promptly and fix the water problem.
3. It is important to dry water-damaged areas and items within 24-48 hours to prevent mold growth.

# Readability

## Recommendations

- Reevaluate reading level of content within the Mold category: where necessary, simplify diction and use shorter sentences.
- Utilize bullet points, lists and subheadings to ensure that answers to Frequent Questions are easy to scan and digest.
- Avoid introducing irrelevant content within the answers to frequent questions.
- Consider placing mold facts in a sidebar.

# Navigation in Frequent Questions



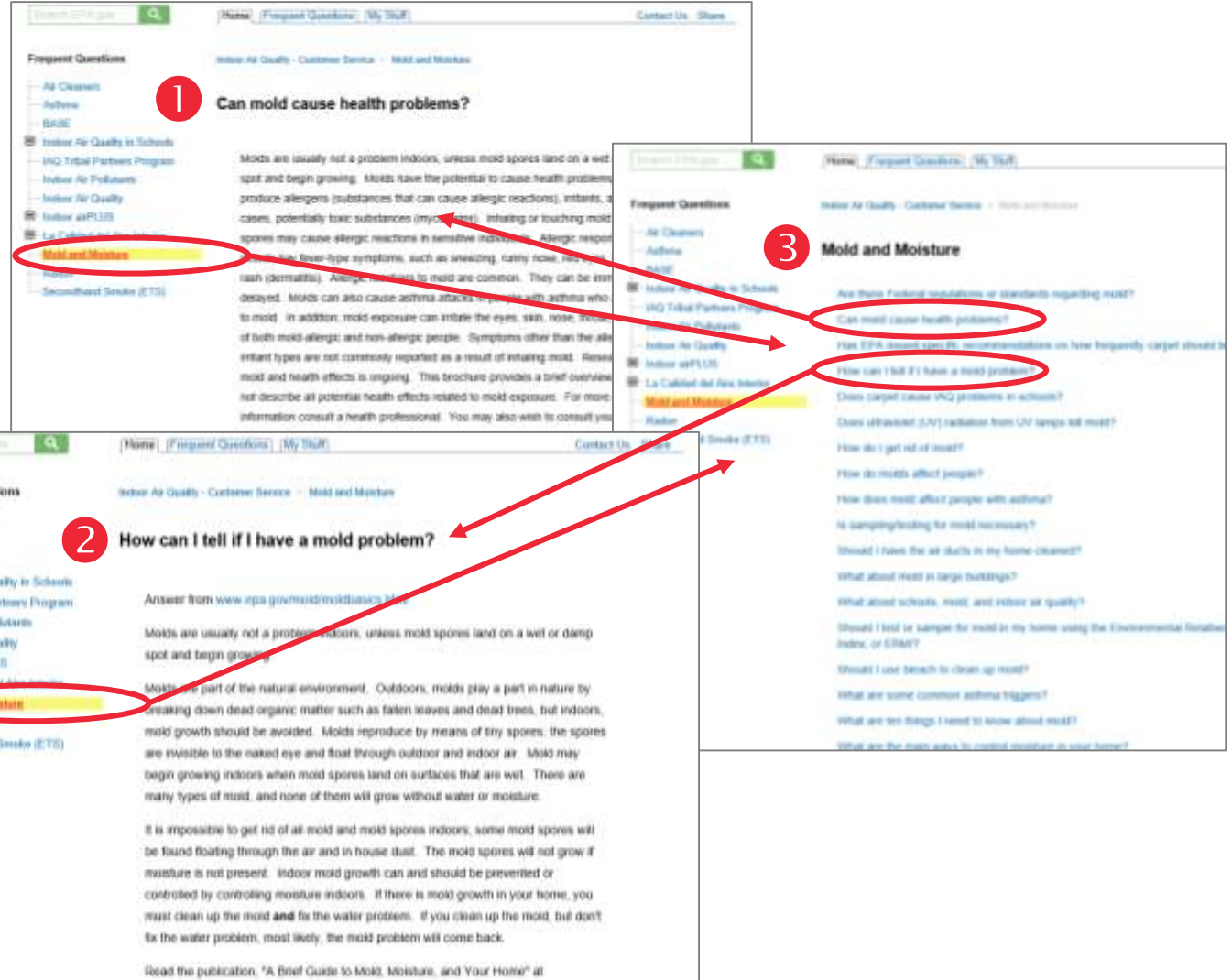
# Navigation between Frequent Questions is inefficient

Answers to Frequent Questions are provided on individual pages that lack access to other questions within the Mold and Moisture group ❶ ❷. Visitors who wish to view several answers are required to return to the Mold and Moisture section ❸ each time they wish to view and select another question. The additional effort required to navigate between answers may discourage visitors from locating desired information.

## Recommendations:

- Implement an expandable interface to maintain access to all questions within the Mold and Moisture section.
- Provide a mechanism to expand or collapse all answers.

Discussion Note: Another solution would be to expand the menu on the left to include the question topics.





# Best practice: Expandable interface for FAQs

## Frequently asked questions


**Help on your Dell job search.**

Applying for a job is exciting and there can be multiple steps in the process. At Dell, our job is to guide you through these steps and give you the best candidate experience possible. To help you understand the application process, we are providing a list of the most common questions. The information below will help you navigate the application process at Dell!

### Frequently asked questions


[Show All](#) | [Hide All](#)


---


 How do I search for current openings at Dell?


First, try the [job search tool](#) on the career site that allows you to find opportunities by keyword and location as well as position type or function. If you want to further refine your search, advanced functionality is available.


---


 Do you have open positions for students and recent graduates?


 Do you have any internship opportunities? How do I apply?


 Do I need to prepare anything prior to applying to Dell?


 What language do I need to apply in?


 Can I attach a file of my resume or CV?

 How long will my profile remain active in the database?

 Is there a limit to the number of applications I can submit?

 How can I change my password? And what if I forget my password?

 If I change my email address, should I create a new account with my new email address?

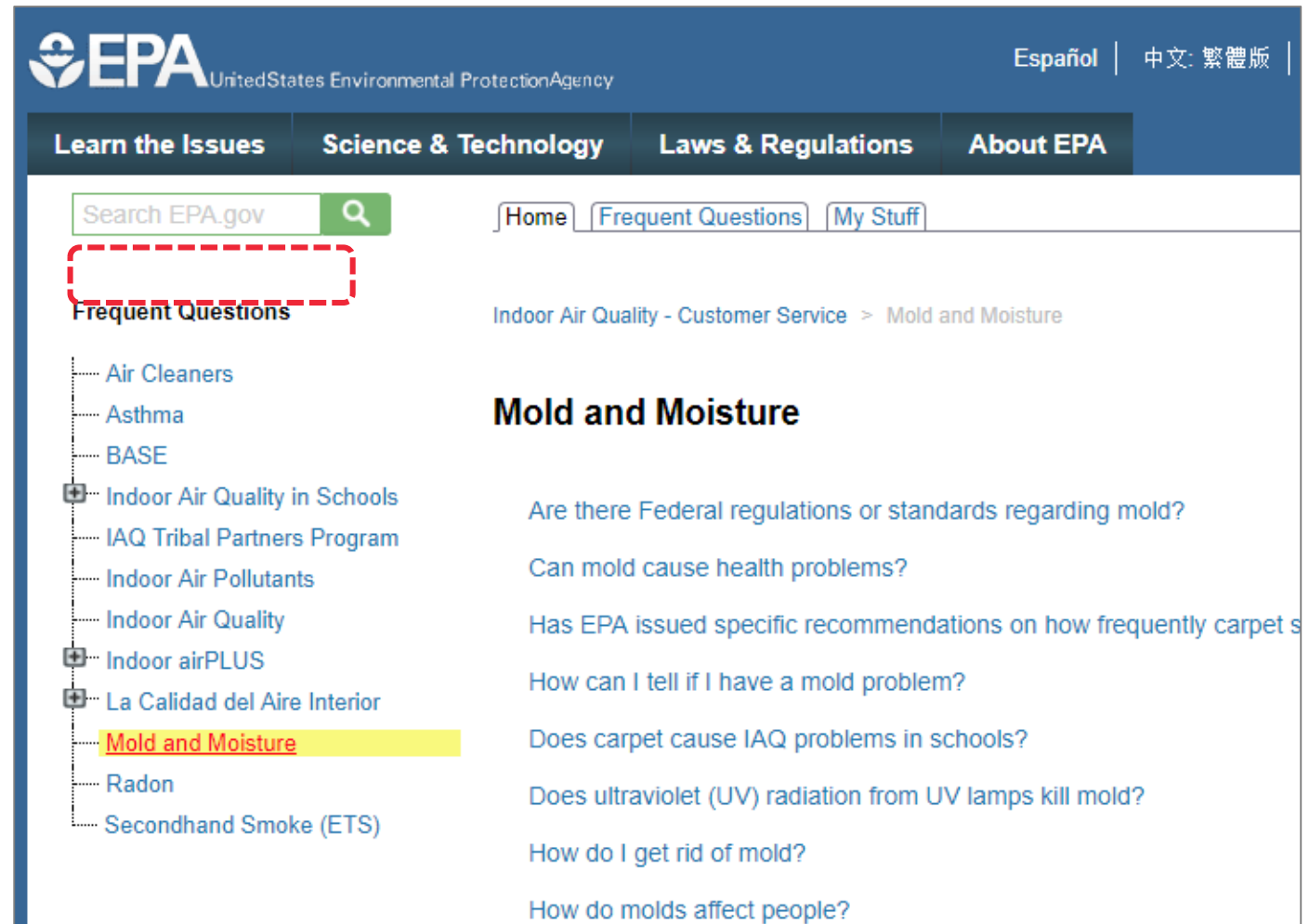
 How do I know my application has been received?

On this FAQ page, visitors can view several or all answers by clicking on the questions to reveal the answers or by using the Show All mechanism. This mechanism also ensures that visitors can print all answers with a single command. As shown, the first answer is open as the page is loaded, which helps visitors identify the functionality.

# Frequent Questions lacks an explicit return link

Return navigation from IAQ Customer Service to the Mold category is hindered by the absence of an explicit link back to this section from Frequent Questions. Visitors who are researching Mold may be required to click on the browser's Back button multiple times if they have viewed several pages. This may frustrate and slow visitors as they explore information on the site.

**Recommendation:** Provide an explicit link to the Mold category from the Mold and Moisture questions in IAQ Customer Service.



The screenshot shows the EPA website's navigation structure. At the top, there are links for 'Español' and '中文: 繁體版'. Below that are main navigation tabs: 'Learn the Issues', 'Science & Technology', 'Laws & Regulations', and 'About EPA'. A search bar is present with the text 'Search EPA.gov'. Below the search bar are links for 'Home', 'Frequent Questions', and 'My Stuff'. The 'Frequent Questions' link is highlighted with a red dashed box. The main content area is titled 'Indoor Air Quality - Customer Service > Mold and Moisture'. Below this title is a list of questions related to mold and moisture, such as 'Are there Federal regulations or standards regarding mold?' and 'Can mold cause health problems?'. The 'Frequent Questions' link in the left sidebar is highlighted with a red dashed box.

# Logo in Customer Service does not link to EPA home

Additionally, these pages do not meet visitors' expectations in providing direct linkage to the EPA.gov homepage by means of the site logo in the header.

**Recommendation:** Link the EPA logo in the page header to EPA.gov.

The image shows two overlapping screenshots of the EPA website. The top screenshot shows the 'Indoor Air Quality - Customer Service' page. The bottom screenshot shows the 'Mold and Moisture' page. A red circle highlights the EPA logo in the header of the bottom screenshot, and a red arrow points from it to the page title 'Indoor Air Quality - Customer Service' in the top screenshot. The EPA logo in the top screenshot is also circled in red. The page content includes a search bar, navigation links, and a list of frequent questions.

# Navigation in Frequent Questions

## Recommendations

- Implement an expandable interface to maintain access to all questions within the Mold and Moisture section.
- Provide a mechanism to expand or collapse all answers.
- Provide an explicit link to the Mold category from the Mold and Moisture questions in IAQ Customer Service.
- Link the EPA logo in the page header to EPA.gov.

# Adequate Linkage

# Linkage to local resources is indirect

## Basic Information

- [Ten Things You Should Know About Mold](#)
- [Mold and Health](#)
- [Mold Cleanup](#)
- [Mold Testing or Sampling](#)
  - [Indoor Air Regulations and Mold](#)
- [Frequent Questions about Mold](#)
- [Mold Publications](#)
- [Find Local Help and Resources](#)
  - [Mold Image Gallery](#)
  - [Glossary of Mold Terms](#)

1

### EPA Regional Office and State Indoor Air Quality Information

#### EPA Regional Information

Each EPA Regional Office is responsible within its states for the execution of the Agency's programs. To get regional information about your EPA Regional Office relating to indoor air quality issues (e.g., radon, indoor air quality, asthma, mold, IAQ Tools for Schools, etc.), click on your region in the map below, or choose your region in the pull-down menu below.

Select your Region from this list or from the map below.

#### EPA Resources

- [IAQ Tools for Schools](#)
- [Chamberlain Map](#)
- [Regional Radon Training Centers](#)
- [EPA's Indoor Assessment](#)
- [EPA's State Environmental Agency List](#)
- [EPA's IAQ](#)

#### Other Resources

- [Centers for Disease Control and Prevention's \(CDC\) Indoor Air Quality Information by State](#)

#### State Information

Visit the [IAQ Interactive State Map](#) to get state or territory specific information relating to indoor air quality contacts. For radon specific information by state or territory visit the [EPA Map of States 2009](#).

[Contact Us](#) to ask a question, provide feedback, or report a problem.

2

## Region 4 (Southeast) Indoor Air Quality

### EPA Region 4

[About EPA Region 4](#)

### Regional Contacts

**Radon and Indian Nations:** [Chandler Milhollin](#) ([milhollin.chandler@epa.gov](mailto:milhollin.chandler@epa.gov))

**Indoor Air Quality in Schools:** [LaShon Blakeley](#) ([blakeley.lashon@epa.gov](mailto:blakeley.lashon@epa.gov))

**Indoor Air:** [Henry Slack](#) ([slack.henry@epa.gov](mailto:slack.henry@epa.gov)) and [Chandler Milhollin](#) ([milhollin.chandler@epa.gov](mailto:milhollin.chandler@epa.gov))

**Asthma:** [Heidi LeSane](#) ([lesane.heidi@epa.gov](mailto:lesane.heidi@epa.gov))

### Asthma in Region 4 - Partner Recognition

The National Environmental Leadership Award in Asthma Management is EPA's highest recognition a program and its leaders can receive for delivering excellent environmental asthma management as part of their comprehensive asthma care services.

#### Past Region 4 Winners:

- 2015 - [LeBonheur Hospital](#)
- 2014 - [Peach State Health Plan](#)
- 2013 - [Greenville Health System's Pediatric Asthma Action Team](#)
- 2012 - [Mission Children's Hospital Regional Asthma Disease Management Program](#)

[Contact Us](#) to ask a question, provide feedback, or report a problem.

#### EPA Regions

- [Region 1, Boston](#)
- [Region 2, New York](#)
- [Region 3, Philadelphia](#)
- [Region 4, Atlanta](#)
- [Region 5, Chicago](#)
- [Region 6, Dallas](#)
- [Region 7, Kansas City](#)
- [Region 8, Denver](#)
- [Region 9, San Francisco](#)
- [Region 10, Seattle](#)

The site does not provide direct linkage to local resources. Although the Basic Information page provides a link labeled Find Local Help and Resources, the referenced page contains linkage to regional and state offices but does not provide linkage to mold resources. Additionally, the subsequent region pages for Indoor Air Quality do not consistently contain resources specifically for mold. As a result, visitors looking for local resources may have trouble finding needed information.

**Recommendation:** Consider providing a page with direct linkage to local resources.

# Some hypertext links to cited content is missing

The site fails to provide sufficient linkage to content cited in the text. Visitors expect links to be provided for content they are directed to, and are frustrated when they are instructed to seek content without the benefit of a direct pathway. In this example from the Frequent Questions section, visitors are encouraged to read several publications. Although the associated URLs are present, providing hypertext links will allow visitors to access these items more efficiently.

**Recommendation:** Provide linked pathways when directing visitors to content.

## Are there Federal regulations or standards regarding mold?

Standards or Threshold Limit Values (TLVs) for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants.

For more information on mold, see our website at [www.epa.gov/mold](http://www.epa.gov/mold)

Read the publication "A Brief Guide to Mold, Moisture, and Your Home" at <http://www.epa.gov/mold/brief-guide-mold-moisture-and-your-home> [EPA 402-K-02-003]

Una Breve Guía para el Moho, la Humedad y su Hogar está disponible en el formato PDF <http://espanol.epa.gov/cai/una-breve-guia-para-el-moho-la-humedad-y-su-hogar>. Documento de la agencia EPA número 402-K-03-008.

Read the publication "Mold Remediation in Schools and Commercial Buildings at <http://www.epa.gov/mold/mold-remediation-schools-and-commercial-buildings-guide> [EPA 402-K-01-001, March 2001]

Mold Resources are available at <http://www.epa.gov/mold/resources-environmental-and-public-health-professionals-about-mold>.



# Adequate Linkage

## Recommendations

- Consider providing a page with direct linkage to local resources.
- Provide linked pathways when directing visitors to content.

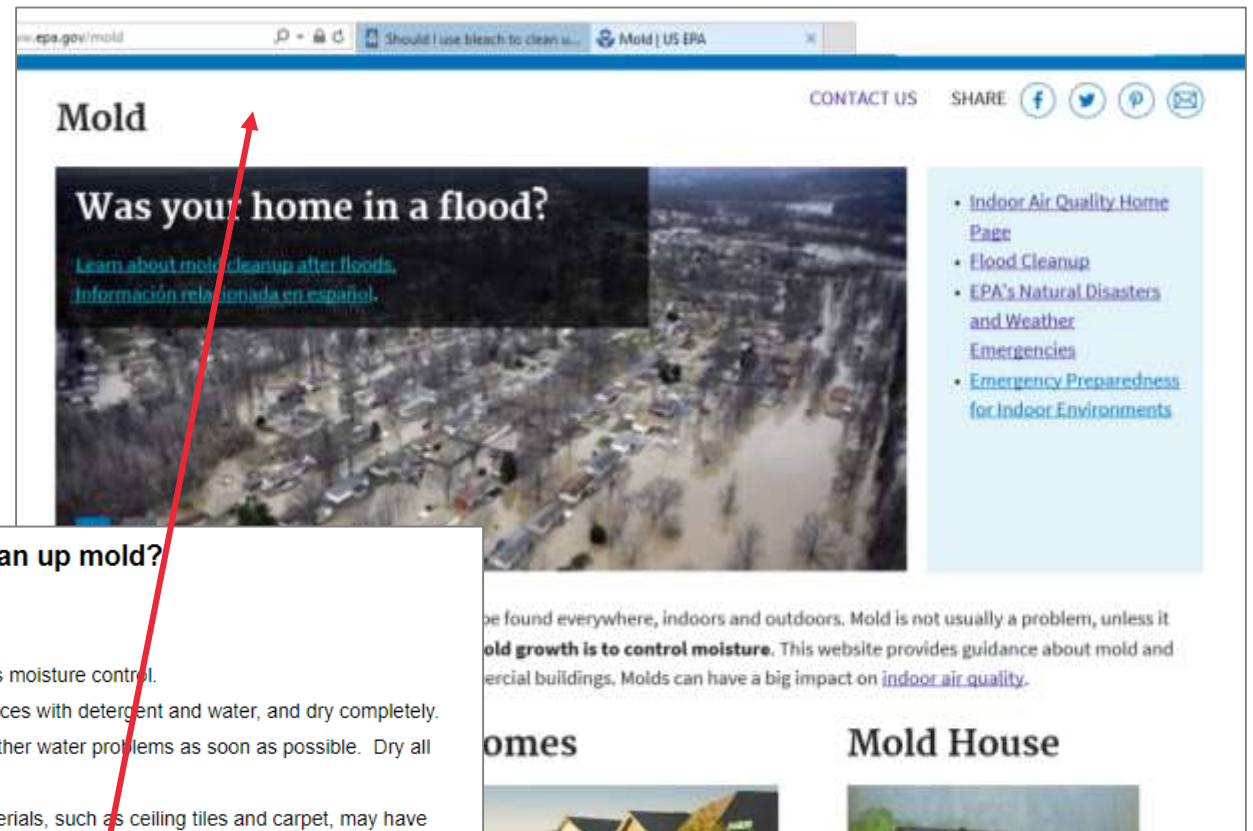
# Expected Location

# Some links do not load the expected content

There are instances when links transport visitors to unexpected locations within the site. For example, visitors who click the links for What to Wear When Cleaning Moldy Areas or Hidden Mold in this FAQ answer may be surprised to be transported to the Mold primary page instead. This is disorienting and confusing for visitors. Furthermore they must spend more time attempting to locate this information elsewhere on the site. To ensure visitors can access information of interest, the site must strive to resolve broken links.

## Recommendations:

- Ensure all links transport visitors to the expected destination.
- Eliminate broken links.



## Should I use bleach to clean up mold?

1. The key to mold control is moisture control.
2. Scrub mold off hard surfaces with detergent and water, and dry completely.
3. Fix plumbing leaks and other water problems as soon as possible. Dry all items completely.
4. Absorbent or porous materials, such as ceiling tiles and carpet, may have to be thrown away if they become moldy. Mold can grow on or fill in the empty spaces and crevices of porous materials, so the mold may be difficult or impossible to remove completely.
5. Avoid exposing yourself or others to mold (see discussions: [What to Wear When Cleaning Moldy Areas](#) and [Hidden Mold](#)).

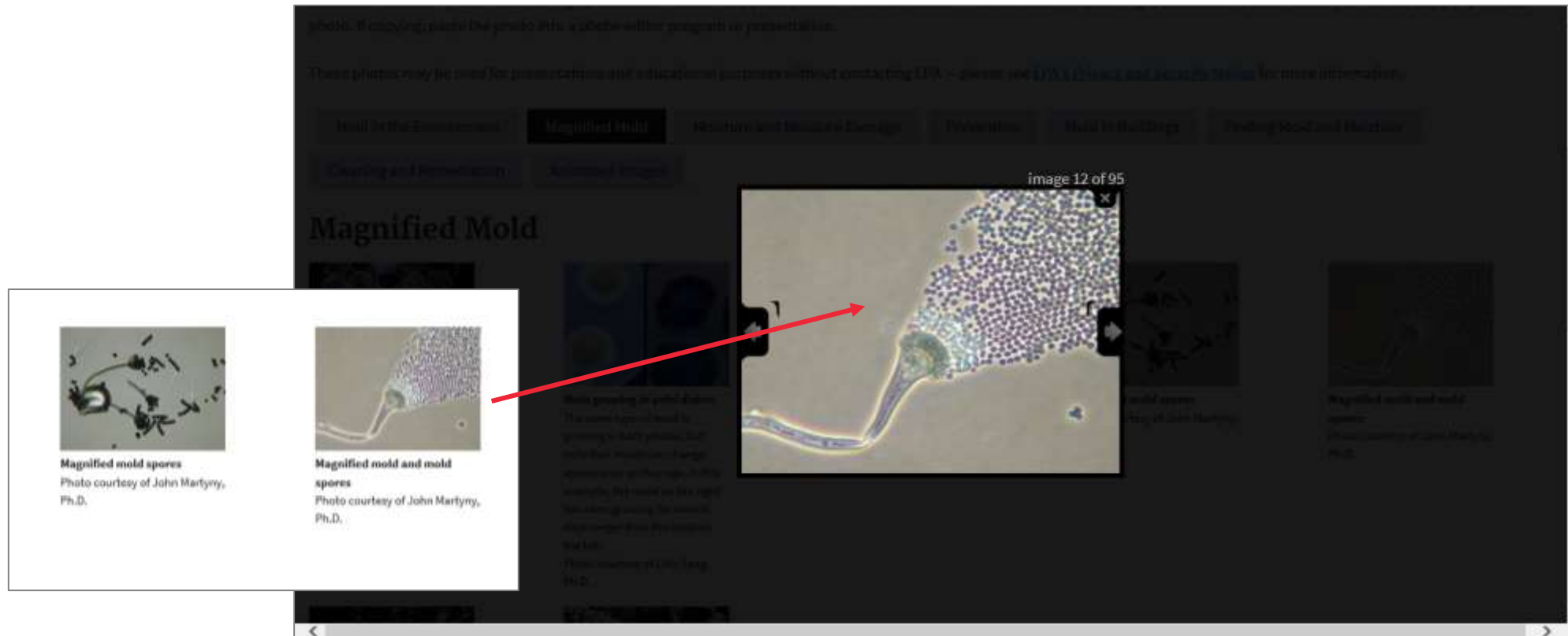
# Expected Location

## Recommendations

- Ensure all links transport visitors to the expected destination.
- Eliminate broken links.

# Image Gallery

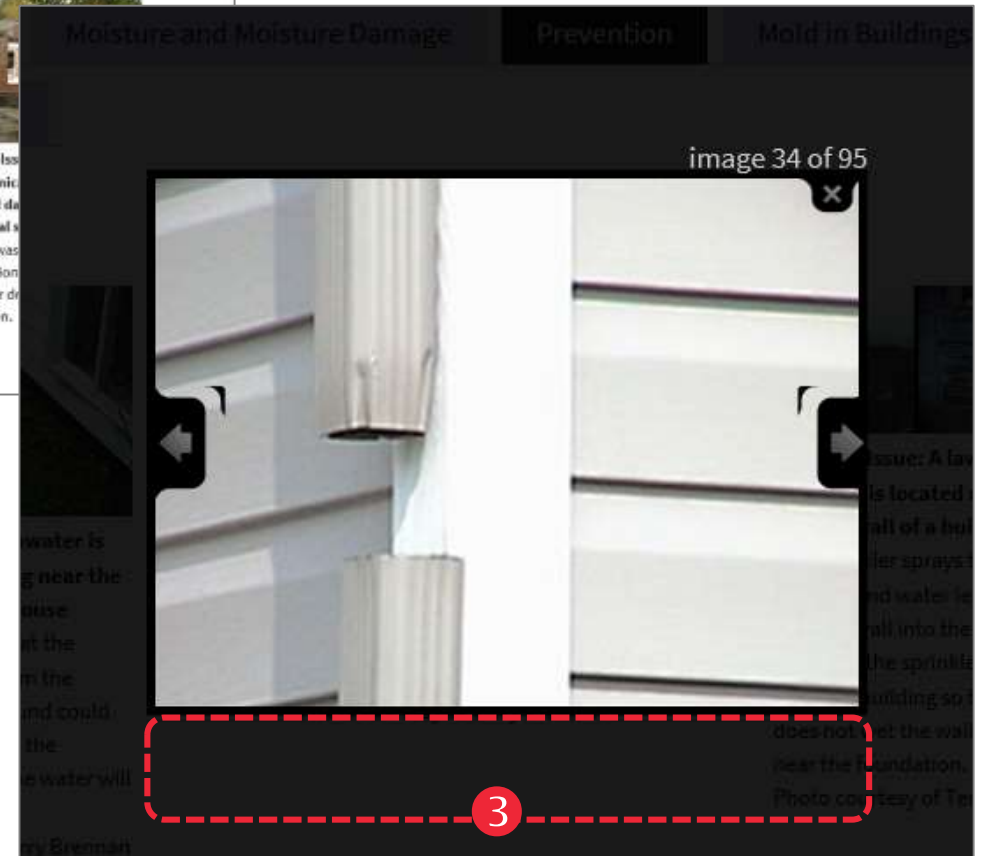
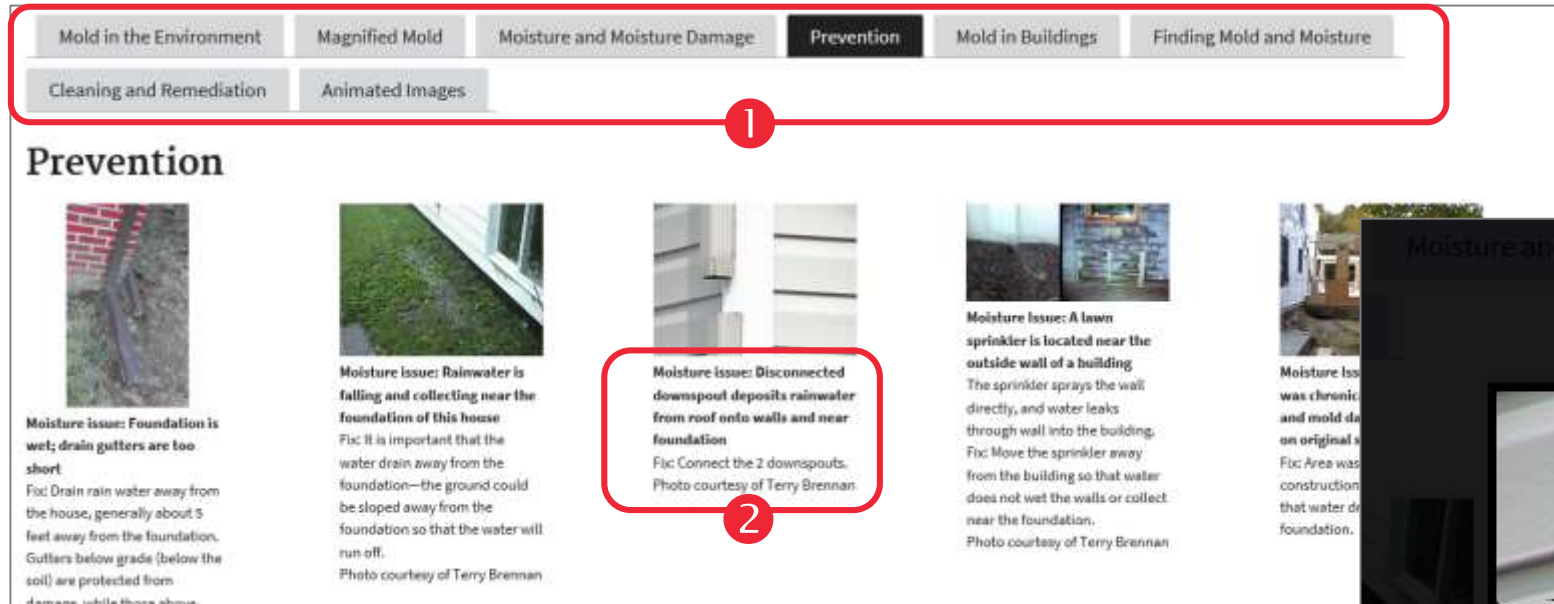
# Gallery does not provide zoom functionality



While the image gallery offers an enlarged view of the images, the feature is not optimized to take full advantage of the available screen space. Visitors may wish to examine the pictures in greater detail, however, additional levels of enlargement are not available.

**Recommendation:** Provide zoom functionality for the Mold Image Gallery.

# Images in layer lack captions



The section headings ❶ and captions ❷ provided on the Mold Image Library page are not available to visitors as they browse in the viewer layer ❸. As a result, visitor using the layer must first close the layer, then locate the image on the page to discover the subject and commentary associated with the image. The difficulty of this task is increased if they have navigated to images on adjacent tabs, since the underlying page does not change as the images in the layer are advanced.

**Recommendation:** Display the section heading and caption associated with each image in the layer.



# Image Gallery

## Recommendations

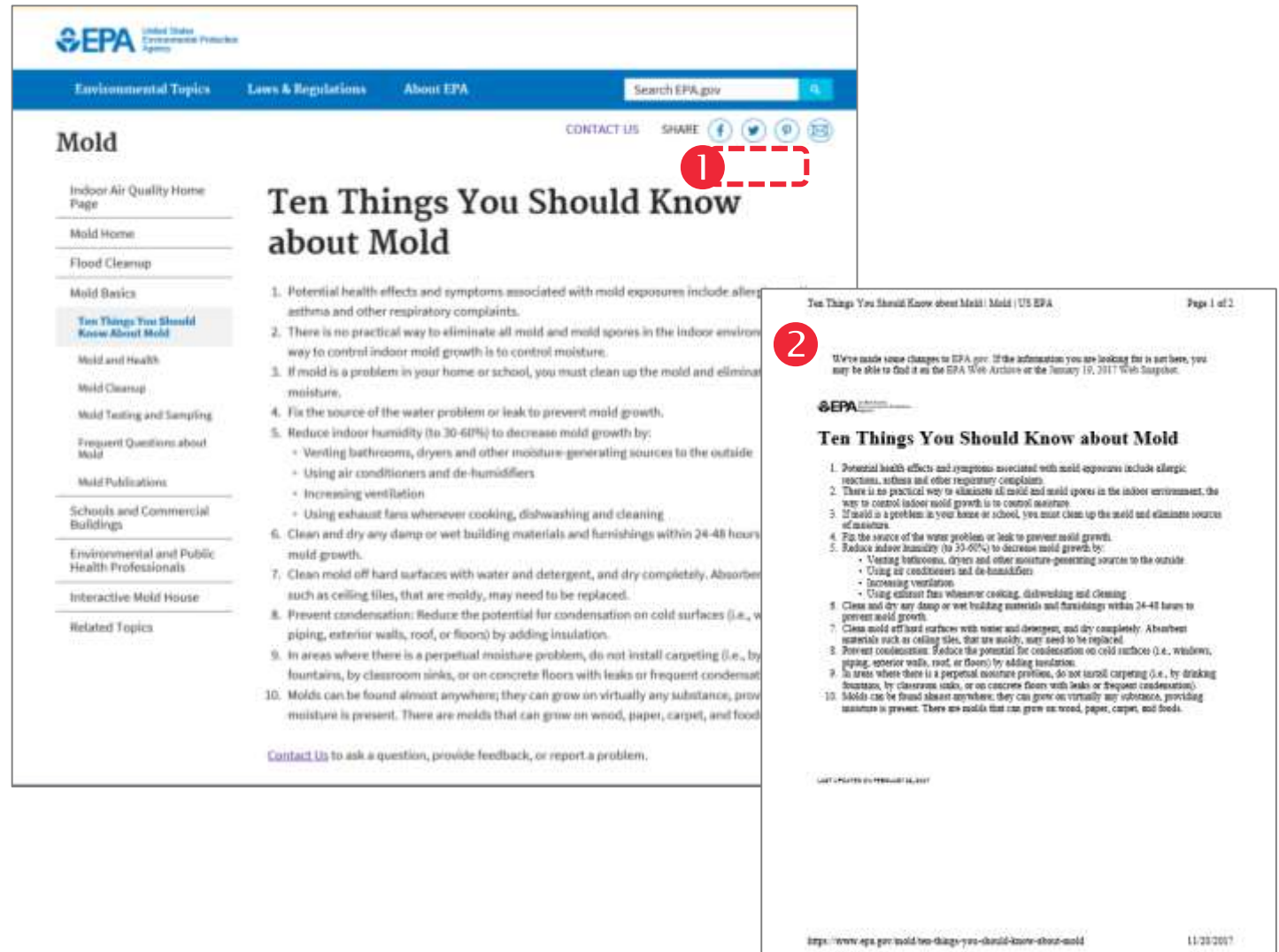
- Provide zoom functionality for the Mold Image Gallery.
- Display the section heading and caption associated with each image in the layer.

# Print and Email

# Link to Print is missing

The site does not provide an explicit Print functionality ❶. As a result, visitors may not realize content on the site is formatted for printing ❷. Furthermore, those whose experience with the browser-based Print functionality often results in poorly formatted printed pages, may decide not to print.

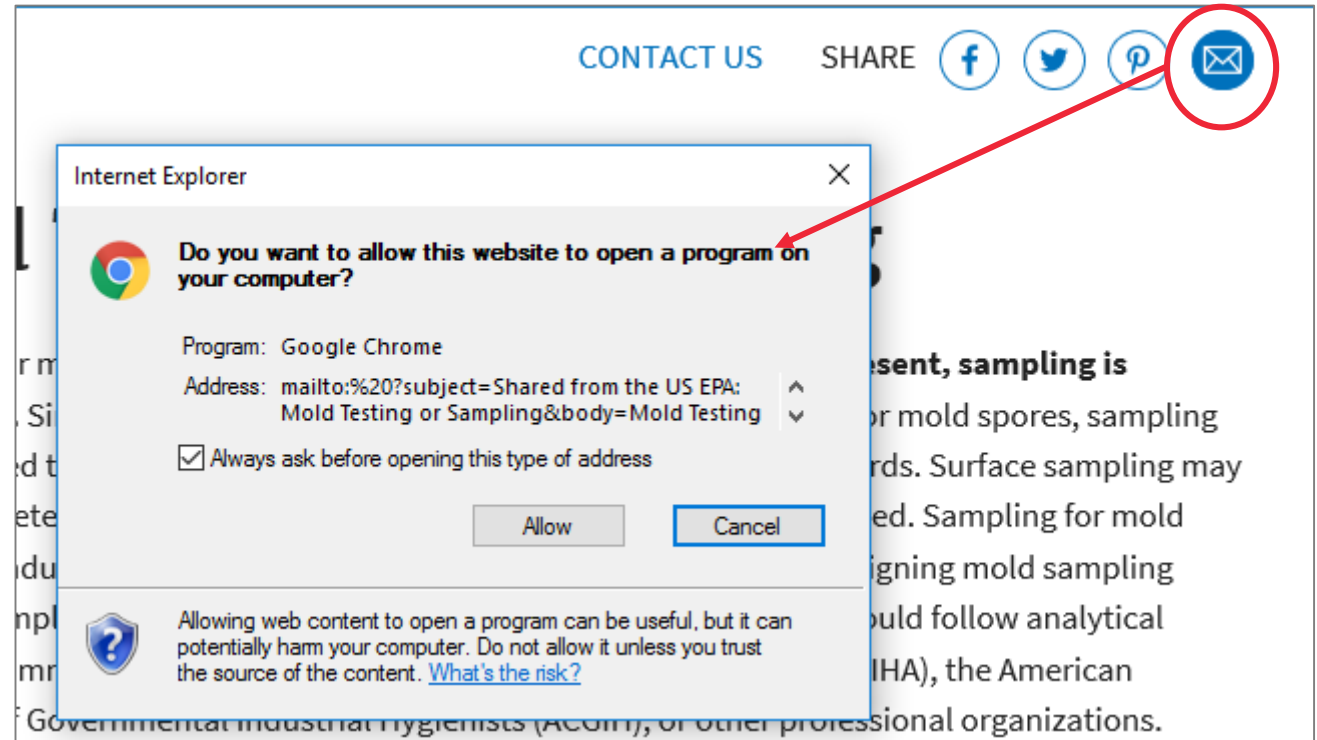
**Recommendation:** Provide an explicit link to Print.



# Email functionality is inefficient

Although EPA provides email functionality, the implementation can be improved. As shown, the email link opens the visitor's email program and relies on that program being set up correctly. This is also problematic for visitors using a public computer. Instead, the link should open a pop-up window or layer containing a form visitors may complete to easily share the page they are viewing.

**Recommendation:** Provide form-based email functionality.



# Best practice: Print and Email functionalities

The image shows a screenshot of the American Lung Association website. At the top left, the logo and name 'AMERICAN LUNG ASSOCIATION' are visible. To the right, the phone number '1-800-LUNGUSA' and a link 'Submit a Question' are displayed. A vertical sidebar on the left contains social media icons for Facebook (181), Twitter, Google+, LinkedIn, and a plus sign (117). Below these are icons for 'Our Initiatives' (circled with a red '2') and 'Healthy Air' (circled with a red '1'). The 'Healthy Air' section lists 'Indoor' and 'Outdoor' categories with links to 'Protect Your Air at Home', 'Indoor Air Pollutants and Health', 'Air Quality at Work', and 'Healthy Air in Schools'. A modal window titled 'Email a Friend' (circled with a red '3') is overlaid on the right. It contains a form with fields for 'To', 'From', 'Subject' (pre-filled with 'Indoor Air Pollutants and Health'), and 'Note'. A 'Send' button is at the bottom, along with a 'I'm not a robot' checkbox and a CAPTCHA image.

This site provides convenient access to email and print functionalities by providing links in a fixed element on the page which remains in view as the page is scrolled. The email link opens a layer containing a form which allows visitors complete the action without leaving the site.

# Print and Email

## Recommendations

- Provide an explicit link to Print.
- Provide form-based email functionality

# Agenda

- Overview of Usability Audit Review
- Top Usability Issues
- › **Key Findings**



# Key Findings

## How well does the section present the most important facts about mold?

While the basic facts are clearly messaged, complexity of language and lack of expected functionality in the image gallery may prevent visitors from fully exploring content.

Review content for readability and provide captions and functionality in the image gallery.

## What factors prevent visitors from finding desired content?

Misrepresentation of the site hierarchy in the local navigation menu combined with poor orientation cues may impede visitors from finding answers to their questions.

Visually present the site structure and reinforce orientation by improving indentation and highlighting in the menu.

## How well does the FAQ section present this key content?

Densely presented content and lack of efficient navigation may prevent visitors from accessing information.

The site should increase the scannability of the copy and improve navigation between FAQ articles by implementing an expandable interface.



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