We do research in this field for a reason – to have an impact on worker health and safety. Research designs typically include plans to notify participants of the results and publish in the peer-reviewed literature. But most often there is a broader audience that needs to hear about and act on research findings in order to have an impact. The original researcher may be involved in just a first step, effectively handing off their results to others, or in moving the process further down the road toward health and safety goals. A “Dissemination Roadmap” can help researchers and their collaborators to envision the improvements to worker health and safety their research aims to promote and the steps that may be necessary to get there. We have designed this guidance document to be used with the Roadmap Worksheet to help lead your research team through the process of envisioning your research dissemination “journey.”
The r2p Roadmap is a product of CPWR’s Research to Practice (r2p) initiative, which aims to promote research dissemination and encourage widespread adoption of evidence-based safety and health solutions in construction. CPWR collaborates with The National Institute for Occupational Safety and Health (NIOSH) and the Occupational Safety and Health Administration (OSHA) through the r2p Working Group.
Part 1. Identifying the Purpose of Your Trip &

Determining Your Destination

In Part 1, you will answer a series of questions that will allow you to identify overall aims and audiences for your dissemination efforts.
### 1A. What is your “cargo”?

**Intervention or findings to be disseminated.**

**Consider:**

- Think about which of your research results should be transferred to others who can apply them to improve workplace safety and health.

- Pick one key finding or product of your research that you feel will be important to disseminate.

Note: If there are a set of findings or interventions that should be disseminated together, you can group them as one, **as long as they have the same target audience**. Otherwise, you will want to create separate road maps for different results.

**On Your Worksheet:**

- Write down one main finding or group of findings on your Road Map Worksheet in Question 1A.

**Tips:**

*When thinking about how ready your intervention is for transfer, consider:*

**How strong are the findings?** What is the strength of research design & results and are findings supported by other research?

**How large are the potential impact and reach of the findings?** What is the potential impact on injury & illness prevention, the severity of the issue addressed, number of workers/trades affected, etc.?

**How strong is the potential for effective partnerships for the transfer effort?** Are there clear partners/stakeholders? Are partners likely to bring resources to the effort?
<table>
<thead>
<tr>
<th>How achievable is the proposed action/intervention? Is the proposed change an easy or hard one? Is the intervention readily available? Can the intervention be &quot;packaged&quot; with other interventions?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do the findings address high priority areas? (e.g. health disparities, NORA/National Academies Report priorities, gaps in the field, making a unique contribution, impacting safety culture, making &quot;up-stream&quot; change at the industry/societal level, etc).</td>
</tr>
</tbody>
</table>
### 1B. What is the "directional heading"?

**Health and safety goals**

<table>
<thead>
<tr>
<th>Consider:</th>
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</thead>
<tbody>
<tr>
<td>• What is the health or safety goal of your research or intervention?</td>
</tr>
<tr>
<td>• Think about what you wrote in the significance section of your proposal. What is the problem your research addresses and how big is the problem? If your dissemination effort is successful, what would be the impact?</td>
</tr>
<tr>
<td>• Even if the potential impact of this one study alone may be limited, it is important to know the ultimate goal in order to set off in the right direction.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>On Your Worksheet:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• List your health and safety goal on your Road Map Worksheet in Question 1B.</td>
</tr>
</tbody>
</table>

**Tips:**

- **Be specific.** Your goals should say what change will result and what the impact will be (e.g. approximate size of reduction in injuries and illnesses or scope of improvements in health and safety conditions/practices) and how broad the impact may be (all of construction, a specific region, a specific trade or sector, etc.) You may also want to think in terms of short-term and long-term goals. For example:

  **Short-term goal:**
  1. The solution is commercially available as a new tool.
  2. There is widespread awareness of the efficacy and availability of the new tool in the industry.

  **Long-term goal:**
  1. The majority of the industry is using the new tool
  2. 50% decrease in incidence of upper extremity MSDs
1C. What is the “point of departure”?

Dissemination already conducted

Consider:

- Think about what, if anything, you have already done or have already planned to reach and involve your target population(s).
- What can you do to package or frame your intervention for successful dissemination?
- Perhaps your dissemination plans have evolved since you first described them in your research proposal. Consider how they might be different now than they were before.

On Your Worksheet:

- Describe what you have already done or are in the process of doing or planning to disseminate your findings or intervention on your Road Map Worksheet in Question 1C.

Tips:

- These are attributes that make solutions more likely to be adopted and diffused:

  Relative advantage: Is the innovation better than what was there before?

  Compatibility: Does the innovation fit with the intended audience?

  Complexity: Is the innovation easy to use?

  Trialability: Can the innovation be tried before making a decision to adopt?

  Observability: Are the results of the innovation visible and easily measurable?

(From Oldenburg and Glanz, 2008. Diffusion of Innovations. In Health Behavior and Health Education.)
1D. Who will be the recipient of your cargo?

**Consider:**

- Think about who will need to know about and act on your results. There are going to be the people you ultimately want to reach and see using your solution or findings, such as contractors or workers. We will call these audiences **end users.**

- There are also going to be people who can influence your end users. Consider those who make the key decisions affecting these populations and those who can help reach, connect with, and influence your ultimate target group. We will call these audiences **intermediaries.**

**On Your Worksheet:**

- List up to 3 key audiences on your Road Map Worksheet in Question 1D. They can be either end users or intermediaries.

- If you have more than key 3 audiences, you can list them to revisit in the future. For this road map activity, you will focus on up to 3 audiences.

*Tip: Use the list below to help you identify possible specific target audiences. Note that some audiences can be both end users and intermediaries. For example, if you want owners to adopt bidding requirements, they may be your end user, but if you want owners to disseminate information to their contractors, then they may be intermediaries.*

- Contractors/Employers (individually)
- Foremen/site supervisors (individually)
- Construction professionals associations (e.g., architects, engineers, etc.)
<table>
<thead>
<tr>
<th></th>
<th>o Trade Associations</th>
<th>o Safety and health professional associations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>o Labor Unions</td>
<td>o Consensus Standard Groups</td>
</tr>
<tr>
<td></td>
<td>o Joint Labor-management apprenticeship programs</td>
<td>o Safety and health professionals (individually)</td>
</tr>
<tr>
<td></td>
<td>o Community colleges/other training providers</td>
<td>o Federal or state OSHA</td>
</tr>
<tr>
<td></td>
<td>o Non-profit community organizations (national, regional, or local community-based organizations)</td>
<td>o Other federal government agency – e.g., CPSC, EPA,</td>
</tr>
<tr>
<td></td>
<td>o Equipment manufacturers</td>
<td>o Local government agency (e.g. local building inspectors, licensing and permitting offices)</td>
</tr>
<tr>
<td></td>
<td>o Material suppliers</td>
<td>o Academic institutions/researchers</td>
</tr>
<tr>
<td></td>
<td>o Tool and equipment rental firms</td>
<td>o Policymakers (e.g., elected officials)</td>
</tr>
<tr>
<td></td>
<td>o Building project owner organizations (public or private sector)</td>
<td>o Public Interest Groups</td>
</tr>
<tr>
<td></td>
<td>o Insurance associations</td>
<td>o Other: _______</td>
</tr>
<tr>
<td></td>
<td>o Insurance companies (individually)</td>
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<tr>
<td></td>
<td>o State-based insurance providers</td>
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</tbody>
</table>
Part 2. Plan Your Route

Now that you have identified your research findings, your goals, and your target audiences, take each of the 3 key target audiences you listed in 1D and go through the remaining exercises.

📝 Start by writing in your first key audience next to “Audience 1” at the top of p. 2.
2A. What is your audience type?

<table>
<thead>
<tr>
<th>Consider:</th>
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<tbody>
<tr>
<td>• Is this audience an end user or an intermediary? (See 1D for details.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>On Your Worksheet:</th>
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</thead>
<tbody>
<tr>
<td>• Check the appropriate audience type</td>
</tr>
</tbody>
</table>
What do you want the target audience to do?

Consider:

- Think about what you would like this audience to do with your findings.

On Your Worksheet:

- List the desired action for this audience on your Road Map Worksheet, by Question 2B. Use the list below to help you.
  - Increased awareness
  - Increased knowledge
  - Change in attitudes
  - Increased skills
  - Change in behaviors (use or apply the solution)
  - Collective/social action
  - Policy change
  - Enforcement

Tips:

- Be as specific as possible. If you are including “increased awareness” as a desired action, is it increased awareness of susceptibility to a hazard? Increased awareness of an effective solution to address the hazard? Increased awareness of requirements to provide protection?
- When thinking about what you would like your audience to do, some ideas from behavior change theories* such as may help. For example:

  **Stage of change** – is your audience in the pre-contemplation, contemplation, preparation, action, or maintenance stage of considering the change? Progress may involve moving them from one stage to another.

  **Does your audience need to:**
  - Believe the problem is serious?
  - Believe it will happen to them?
o See how it will benefit them?
  o See how they can overcome barriers?
  o Feel confident they can accomplish the behavior?

Do members of this target audience tend to be:
  o Innovators?
  o Early adopters?
  o Early majority adopters?
  o Late majority adopters?
  o Laggards?

What aspects of their larger working environment will affect your audience’s ability to make the desired change?

*For more information, see Theory at a Glance at http://www.cancer.gov/cancertopics/cancerlibrary/theory.pdf*
2C. Are there knowledgeable “local guides” who can help you learn more about your destination?

**Partners**

**Consider:**
- Brainstorm potential partners. They may be able to help you to reach and/or to better understand your target audience.

**On Your Worksheet:**
- List any partner group that you would like to involve now or later to better connect to your target audience on your Road Map Worksheet, by Question 2C.

**Tip:**
- *Describe the connection of the partner(s) to your target audience.*
- *Note any leads or in-roads you might have to these partner groups.*
2D.

**What types of “vehicles” are best suited to promote change?**

<table>
<thead>
<tr>
<th>Dissemination strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
</tr>
<tr>
<td>Training</td>
</tr>
<tr>
<td>Health communication outreach/Marketing</td>
</tr>
<tr>
<td>Policy development</td>
</tr>
<tr>
<td>Technology transfer</td>
</tr>
<tr>
<td>Coalition-building</td>
</tr>
<tr>
<td>Making a business case</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

**Consider:**

- Different dissemination strategies have their strengths and weaknesses, and work well for some issues and audiences and less well for others.

- Think about the strategies that are likely to be the most practical and effective for achieving the changes you are seeking. What combination of approaches might work best to spread the word and influence the decisions of your target audiences?

**On Your Worksheet:**

- Write in your dissemination strategy for this target audience on your Road Map Worksheet, by Question 2D. Use the list below to help you.

  o Education
  o Training
  o Health communication outreach/Marketing
  o Policy development
  o Technology transfer
  o Coalition-building
  o Making a business case
  o Other

**Tip:**

- Write down why you chose the dissemination strategy(ies) you indicated.

  *Being as explicit as possible in laying out your rationale will help you be strategic in your research to practice efforts.*
2E. How will you transmit your message?

Consider:

- Communication is an important part of all dissemination efforts. In some cases, it may also be your main dissemination strategy. Think about the best ways to reach and influence your intended audiences – their attitudes, literacy level, preferences, affiliations, etc.

- Are there trusted sources your target population goes to for information?

On Your Worksheet:

- Write in your communication channel(s) for this target audience on your Road Map Worksheet, by Question 2E. Use the list below to help you.
  - Mass media
  - Social media
  - Internet/web
  - Events/meetings
  - Peer-to-peer
  - Influential spokespeople/opinion leaders
  - Written materials (checklists, impact cards, newsletters)
  - Products/swag

Tip:

- Write down why you chose the communication channel(s) you indicated.

Being as explicit as possible in laying out your rationale will help you be strategic in your research to practice efforts.

REPEAT PART 2 FOR EACH REMAINING TARGET AUDIENCE BEFORE MOVING ON TO PART 3.
Part 3. On the Road: Rest Stops, Detours, and Mile Markers

You have now identified your purpose, destination, and mapped your general route. But this is likely to be a long journey. You may need to make rest stops or allow someone to take over as a relief driver along the way. There may also be unplanned roadblocks you will need to overcome. In this section, you will do your best to plan the specifics of your trip. Complete this section for the dissemination effort overall. You do not need to do it for each individual target audience, unless you would find it useful to do so.
**3A. What are your next stops?**

**Your dissemination efforts**

<table>
<thead>
<tr>
<th>Consider:</th>
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<tbody>
<tr>
<td>• At some point, you may need to hand off further dissemination to others (see 3B). But, how far would you like to take this dissemination effort yourself?</td>
</tr>
<tr>
<td>• Look back over the target audiences, desired actions, proposed strategies, and communication channels from Part 2. What dissemination steps can you take in the next year to advance those aims?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>On Your Worksheet:</th>
</tr>
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<tbody>
<tr>
<td>• Write down the first 3 dissemination steps you will take in the next year of the project.</td>
</tr>
</tbody>
</table>

**Tip:**

• *Be specific, including people, actions, and the connection to target audience(s) and aims you described in Part 2.*
3B. Who are your “relief drivers”? 

Next steps others will take 

Consider:
- Consider who you could approach to take over the next leg of the trip when your leg is completed. This may be another type of research team, an intermediary target group, an advocacy organization, a manufacturer, etc.

On Your Worksheet:
- Write down the steps you hope others will take on after your work is completed. You may want to refer to the potential “local guides” or partners you listed in 2C.

Tip:
- Refer back to your list of “local guides” in 2C. Perhaps they may help along the journey or be able to recommend other relief drivers.
### 3C.

**What “fuel” do you need for the trip?**

**Resources**

<table>
<thead>
<tr>
<th>Consider:</th>
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<tbody>
<tr>
<td>• Think about the resources that are needed to carry out the kind of dissemination plan envisioned, including money, materials, expertise, etc. What resources are already available to you?</td>
</tr>
<tr>
<td>• If you do not already have all the resources you need, think about other outside resources that may be available to you. What types of assistance might CPWR provide (e.g. help with communications products, access to partners, identifying additional expertise needed, etc.)? Who else is addressing the same problem and how might their efforts “intersect” with or join your own? What supplemental funding sources might be available?</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th><strong>On Your Worksheet:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• List the resources needed along with how or where they will be obtained in Question 3C.</td>
</tr>
</tbody>
</table>
3D. What potential “roadblocks” might you encounter?

Consider:

- Examples of common barriers include: resistance to change in your target population, a lack of resources, anti-regulatory sentiment, time constraints, and economic challenges

On Your Worksheet:

- List 1 – 3 major barriers that you think will challenge the dissemination and adoption effort in Question 3D.

3E. What “detours” will you take to get around potential barriers?

Consider:

- Examples of strategies to help overcome barriers include: asking one of your partners to help, reframing your message, engaging in continuous repetition of your message, providing additional education, making the business case, identifying incentives, etc.

On Your Worksheet:

- By Question 3E, provide at least one strategy to address each of the barriers listed in 3D.
3F.

What “mile markers” will you use to measure your progress and ultimate success?

<table>
<thead>
<tr>
<th>Mile</th>
<th>825</th>
</tr>
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<tbody>
<tr>
<td>Measures and indicators</td>
<td></td>
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</tbody>
</table>

**Consider:**

- What indicators will let you know that you are on the right track with your dissemination effort? What are some short-term measures? What are some long-term measures?

- How will you know when your results have been successfully disseminated?

**On Your Worksheet:**

- List up to 3 measures or indicators that you might use in Question 3F. Use the list below for ideas to help you.

  - Reach of your outputs
    - # orders for products or outputs
    - # responses/conversation generated through new media use
    - # requests for additional information, web hits, downloads
  - # of times your output/information is used (by other publications, organizations, etc.)
  - Change in policy, e.g., creation of a voluntary or binding standard
  - Change in awareness, attitudes, or behaviors
  - Documented adoption of a practice/tool on a small or large scale (# or % of employers who adopt)
  - Change in exposures
  - Change in injury/illness rates