Webcast:

Part four: Synthesize

This webcast is step four in our series about evidence-informed public health practice. We began by defining the question in a way that we can do a reasonable search, then we examined how to conduct an efficient search and how to critically appraise the information. Now we’re going to examine how to synthesize the information. Synthesis is not about doing systematic reviews. It is more about how to determine which of five studies that you have critically appraised is suitable, for example. How do you put all the information together from a couple of systematic reviews or a few studies in the area that you’ve chosen?

We have put together some criteria to help you with this step. The previous step is critical appraisal, where you look at the relative strength of each one of the studies or the systematic review. What’s the strongest level of evidence you can find to help you make the decision about which evidence to use in this particular situation? If they are all of relatively equal merit in terms of their quality, then you need to think about some other criteria. For example, what research is the most recent? Particularly for systematic reviews, this would be a key factor, because systematic reviews would have the most up-to-date search. Another important piece of information would be how does the research fit with your population? Has the intervention been used with similar populations and could it fit in your population? Finally, other key criteria would be the level of resources or skills needed to carry out the intervention. The kinds of resources or types of skills that are needed may not be available in your region. That will help you decide which studies you can eliminate. If the studies are of equal quality, you need to consider all these criteria to help you decide which study to implement or which findings would be best to implement in your situation.

You may have very diverse results, such as “It’s good to take Echinacea to prevent colds” to “It’s harmful if you take Echinacea.” To decide which of these studies you are going to believe, ask yourself: What’s the most recent study, particularly for systematic reviews? What fits best with your situation, your population, your environment in your region? Do you have the resources to match the interventions that are there?

For more information, go to our website and look at some other tools that will help you with the whole process of evidence-informed public health.