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In this issue, we have an article on how LEPCs can measure the success of their program. *Special thanks to Madeleine Vadeboncoeur, an intern for EPA this semester, for her work on this article.*

Hilary & Steve

EPA Marks 25th Anniversary of EPCRA



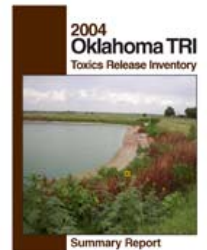
WASHINGTON - This year marks 25 years since the passage of the federal Emergency Planning and Community Right-to-Know Act (EPCRA).

The act was passed in 1986 as a part of the reauthorization for Superfund. EPCRA has played a significant role in protecting people's health and the environment by providing communities and emergency planners with area-specific information on toxic chemical releases.

Public demand for information about chemical releases skyrocketed in the mid-1980s after a deadly cloud of highly toxic pesticide killed thousands of people in Bhopal, India. Shortly thereafter, a serious chemical release at a plant in West Virginia hospitalized 100 people. These events led to the implementation of EPCRA in 1986.

"This law is important to safeguarding our communities from chemical emergencies," said EPA Administrator Lisa P. Jackson. "Twenty-five years after EPCRA was made into law, EPA continues to improve and advance our community right-to-know programs, so that we can ensure the best possible chemical safety protection for every community across the country."

Under EPCRA, Environmental Protection Agency (EPA) collects information on toxic releases through the Toxic Release Inventory program (TRI), a public database containing information regarding the industrial releases of over 600 toxic chemicals from more than 20,000 facilities throughout the nation.



TRI was the first publicly available database in the world that contained information on pollutant releases.

Many other countries have since followed EPA's lead, recognizing the value of making toxic chemical data readily available to the public. TRI information enables every American to make informed decisions on the consequences of toxic releases and empowers communities to take action.

The screenshot shows the EPA Emergency Management website. The main heading is "25 Years of EPCRA". Below the heading, there is a paragraph of text explaining the significance of EPCRA. To the right of the text is a video player titled "EPCRA: What It Means to You (Produced in 1999)". The video player shows a scene with emergency responders in a vehicle. The website also features a search bar and navigation tabs for Home, Our Programs, Our Partners, and Information Sources.

EPCRA has made the lives of every American safer from toxic emergencies by establishing emergency planning groups at the state, tribal, and local levels.

EPCRA brings together emergency responders from fire and police departments, medical personnel, emergency planners, elected officials, environmental group representatives and local citizens to develop plans to respond to chemical emergencies.

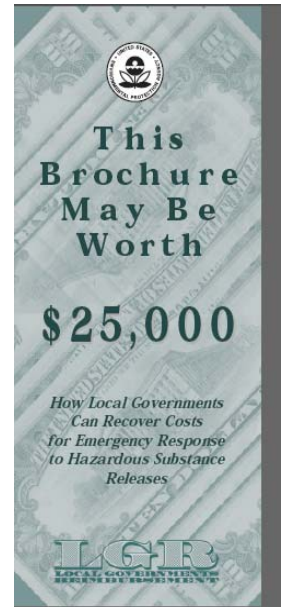
More information on EPCRA and the 25th anniversary:
<http://www.epa.gov/emergencies/content/epcra/epcra25.htm>

Local Government Reimbursement Success Stories

EPA Headquarters has evaluated an application submitted by the City of Mansfield, TX, under the Local Governments Reimbursement Program.

Based on the evaluation:

- Springdale, AR, is eligible for an award of \$ 2,096.50 for costs incurred responding to drug labs in March - April, 2011.
- Fayetteville, AR, is eligible for an award of \$ 2,003.00 for costs incurred responding to drug labs in March, 2011.
- Conway, AR, is eligible for an award of \$ 1,075.50 for costs incurred responding to a drug lab in March, 2011.
- Sherwood, AR, is eligible for an award of \$ 2,615.50 for costs incurred responding to drug labs in May, 2011.
- Morrilton, AR, is eligible for an award of \$ 1,092.00 for costs incurred responding to a drug lab in April, 2011.
- Boone County, AR, is eligible for an award of \$ 2,091.00 for costs incurred responding to a drug lab in May, 2011.
- Vilonia, AR, is eligible for an award of \$ 940.00 for costs incurred responding to a drug lab in April, 2011.
- Marked Tree, AR, is eligible for an award of \$ 2,144.00 for costs incurred responding to a drug lab in March, 2011.



For more information concerning the LGR program, go to: <http://www.epa.gov/oem/content/lgr/index.htm>

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September Marked 40th Year of CHEMTREC® Operations

September marked the 40th year of operations for CHEMTREC®, the definitive information resource and solutions provider for hazardous materials and dangerous goods response.

A service of the American Chemistry Council, CHEMTREC is a round-the-clock public service hotline available to fire fighters, law enforcement officials and other personnel who are the first responders in emergency situations.

With links to the largest on-call network of chemical and hazardous material experts in the world, including chemical and response specialists, public emergency services, and private contractors, and more than four million accessible Materials Safety Data Sheets, CHEMTREC provides crucial assistance during incidents ranging from minor to critical.



"When faced with an incident involving hazardous materials or dangerous goods, emergency responders need access to reliable information and assistance immediately," said Randy Speight, managing director of CHEMTREC.

"Every day of the year for the past 40 years, 24 hours a day, 7 days a week, CHEMTREC has been providing immediate assistance to emergency responders to ensure they can properly address any hazardous situation that they are facing."

Over the past 40 years, CHEMTREC has grown and enhanced the services it provides beyond emergency incident response. Today, CHEMTREC also has the capability to assist companies in their disaster recovery efforts and serve as a company's crisis communications service, providing crucial information to company personnel and mass emergency broadcast services during a crisis.

CHEMTREC Operations Center staff also can provide technical services to participating companies regarding company product use information.

CHEMTREC's reach also has expanded internationally in the past decade. In response to demand from the numerous chemical manufacturers that operate around the globe, today, CHEMTREC takes calls from anywhere in the world and provides translation in 180 languages to assist callers during an emergency.

By building relationships with international manufacturers, shippers and emergency response organizations, as well as offering expanded services for customers who ship globally, CHEMTREC is able to meet the needs of an expanding global economy.



"CHEMTREC has been a key partner for Dow, working behind the scenes and evolving over time to provide the right tools to deliver the first-rate response capabilities that we need," said Rollie Shook, Global Emergency Services Leader with The Dow Chemical Company. "CHEMTREC operators have the knowledge, expertise and ability to ask the right questions and direct callers to the right source for information they need."

For more information concerning CHEMTREC and their programs, go to: <http://chemtrec.com/>



CHEMTREC also is a sponsor of TRANSCAER® (TRANSpportation Community Awareness and Emergency Response), a voluntary outreach effort in the United States that helps communities prepare for and respond to possible hazardous material transportation incidents.

TRANSCAER members consist of volunteer representatives from the chemical manufacturing, transportation, distributor, and emergency response industries, as well as the government.

Chemical Hazards Emergency Medical Management



Chemical emergencies are high risk events that require first responders to quickly make a series of complex decisions to minimize the risk of injury to their patients and themselves.

The tools in CHEMM (Chemical Hazards Emergency Medical Management) provide a comprehensive resource to help responders make safer decisions and provide them with the right information when it is needed most.

CHEMM enables first responders and other healthcare providers and planners to plan for, respond to, recover from, and mitigate the effects of mass-casualty incidents involving accidental or terrorist chemical releases.

CHEMM is a web-based resource that is downloadable in advance so that it is available during an event if the Internet is not accessible.



It provides evidence-based information and guidance on a wide variety of topics, including quick chemical identification, acute patient care guidelines, and initial event activities.



CHEMM enhances and builds on the successes of the suite of Emergency Medical Management tools that began with the Radiation Emergency Medical Management (REMM) webbased resource, which provides information for health care providers about clinical diagnosis and treatment of radiation and other injuries anticipated following radiological and nuclear emergencies.

CHEMM and REMM are the result of collaborative efforts between the US Department of Health and Human Services, the Office of the Assistant Secretary for Preparedness and Response (ASPR)-Office of Preparedness and Emergency Operations (OPEO), the National Library of Medicine-Division of Specialized Information Services (NLM/SIS), as well as many medical, emergency response, toxicology, industrial hygiene, and other experts.

You can find more information about this resource at: <http://chemm.nlm.nih.gov/>

What are the goals of this site?

- Enable first responders, first receivers, other healthcare providers, and planners to plan for, respond to, recover from, and mitigate the effects of mass-casualty incidents involving chemicals
- Provide a comprehensive, user-friendly, web-based resource that is also downloadable in advance, so that it would be available during an event if the internet is not accessible

Measuring Progress in Chemical Safety

A Guide for Local Emergency Planning Committees and Similar Groups



Introduction

The Emergency Planning and Community Right to Know Act of 1986 (EPCRA) called for the establishment of LEPCs. LEPCs have broad-based membership whose primary work is to receive information from local facilities about chemicals in the community, use that information to develop a comprehensive emergency plan for the community, and respond to public inquiries about local chemical hazards and releases.

There are more than 3,000 LEPCs and they reflect the diversity of the country. Most LEPCs are organized to serve a county, some are for a single large city; others cover a larger area of the state.

Many LEPCs have expanded their activities beyond the requirements of EPCRA, encouraging accident prevention and risk reduction, and addressing homeland security in their communities. Composed of representatives from all segments of the community interested in emergency planning and preparedness, LEPCs foster a valuable dialogue among members of the public, industry and government. In some communities LEPCs have formally aligned themselves with FEMA's Citizen Corps Program. These and similar groups can also use this guidance.



There is no doubt that LEPCs have made valuable contributions in chemical safety. This guide provides information about how LEPCs can measure their progress and determine if the actions taken continue to achieve the desired outcomes.



This approach is based on "Guidance on Developing Safety Performance Indicators related to Chemical Accident Prevention, Preparedness and Response for Public Authorities and Communities" published by the Organization for Economic Development (OECD) in December, 2008.

There is also Guidance on Developing Safety Performance Indicators for Industry. The full guidance may be found at www.oecd.org/ehs.

An interactive website allows LEPCs to select and customize their review program at <http://oecdsafetyindicators.org/>.

The mission of the OECD is to promote policies that will improve the economic and social well-being of people around the world.

The OECD provides a forum in which governments work together to share experiences and seek solutions to common problems. The OECD sets international standards on a wide range of things, from agriculture and tax to the safety of chemicals.

Drawing on facts and real-life experience, we recommend policies designed to make the lives of ordinary people better.

Why Measure Progress?

LEPCs have important roles to play with respect to chemical safety. Setting goals and measuring progress allows you to take a step-by-step approach to reducing the likelihood of accidents and improving preparedness and response capabilities.

Depending upon local risks, capacities and conditions, there are several possible goals and metrics that can be applied to the activities of LEPCs. One size does not fit all. The advantage of this program for LEPCs is the ability to set goals and measure progress in a way that is specifically relevant to the community the LEPC serves.



Your LEPC may be evaluated by local government entities, the mayor, the city council, or a similar group, in order to determine an appropriate level of funding as well as whether the work of the LEPC deserves the time and attention of the membership.



Industry may want to know if the chemical information (and often, the financial support) they provide is being used wisely and efficiently. Individual citizens may wonder if your work is effectively protecting them.

Federal agencies may use indicators of success to support grant funding and other decisions related to LEPCs.

And, of course, you, as LEPC members may want to study what you are doing to see if you are satisfied with your work and whether your efforts have led to better protection of the community from chemical risks.

All these and other issues can provide the reason to measure the progress of your LEPC.

How to Measure Progress

Many LEPCs expect a checklist of what they should be doing. However, it is better for LEPCs to have their own vision of success based upon the risks, capacities and conditions in the community they serve.



That vision should be written, clear, and come from a group discussion of the concerns and motivations that caused the participants of the LEPC to join.

It may be that none of the LEPC members believe the vision is obtainable given current resources. That does not matter as long as the LEPC understands its mission is to make progress towards the vision. The vision of success is an aspiration or goal and should set the long-term objectives for the work done by the LEPC.

Some LEPCs have adopted a vision of success along the lines of:

An engaged community with a broad safety and preparedness culture as show by:

- Robust emergency planning and personal preparation
- Effective and safe response
- Chemical accidents are prevented



Obviously, this or any vision of success cannot be achieved in one or two steps. It is, instead, achieved through a progression of activities designed to achieve milestones along the path to success.

To define these steps LEPCs should establish both long-term and short-term goals that it believes will lead to achieving the vision of success. These goals should be a product of clear discussion and agreement among the LEPC membership.

Do not get distracted by terminology. For purposes of the Safety Performance Indicators (SPI) program, goals are often called "outcomes." The key distinction is that "outputs" are the products that your LEPC makes (e.g., your emergency plan, your evacuation plan) or things that you do (e.g., conduct monthly meetings) but they are not the goals or outcomes that lead to your vision of success.



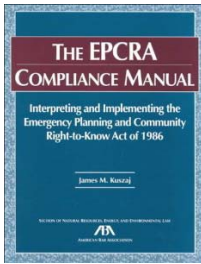
Instead, achieving a goal or outcome requires measuring the results from outputs or activities in a way that is relevant to the goals or outcomes. For the purposes of SPI these results are called targets or metrics.

In other words, when you set a goal it should be paired with what you are going to measure that tells you whether you are making progress towards the goal and when you have achieved the goal.

The following examples might help clarify the outcome/output distinction and the role of targets.

- If your community has recently had a chemical release that led to injuries and deaths, the mayor or LEPC could establish a goal: no more injuries and deaths from a chemical accident in this community. That is a clear goal, perhaps overly ambitious in the eyes of some people, but one that is understandable and sensible in the context of your community's recent history.
 - There are a variety of possible metrics/targets: no deaths or injuries this year, no accidental releases this year, and/or a 30% reduction in the number of accidental releases this year.
 - As for "outputs," the products and/or activities that the LEPC undertakes to meet the metric/target for the goal, it could be a revised emergency plan, exercises to test the emergency plan, training for local responders, outreach materials for local citizens to ensure that they know the appropriate steps to take if there is an accidental release, improved notification systems to ensure that citizens are aware of a release, establishing a continuous dialog with industries in your community on risk reduction and accident prevention, and so forth.
 - The LEPC then looks at the metrics/targets, including trends and changes over time, to determine if the outputs are productive and useful in achieving the goal.
- You might have as a goal that local citizens be aware of the chemical hazards present in the community combined with a goal that will involve increased awareness of personal responsibility and appropriate actions in the event of an accident. Your target could be a specific annual increase in the number of people familiar with local chemical hazards. Measuring success could involve some process for interviewing citizens annually or citizen performance in exercises or other tests of emergency plans. "Activities or outputs" to achieve this goal could be public meetings at which chemical hazard information is shared, printed materials with maps showing the location of specific chemicals, video materials for use on television programs and/or at public meetings.





- Another possible goal is to have all facilities in your community that are subject to EPCRA being in full compliance with the law. Targets could be an annual increase in the number of facilities that have submitted information or a reduction in the number of facilities found to be in noncompliance during inspections.

Activities to accomplish these targets might include an annual campaign focused on a specific industry sector, or a public campaign urging all facilities to submit the required information.

- A specific preparedness goal might be for all students and teachers in local schools to be familiar with what actions they should take if there is a chemical release in the community with a possible impact on the school. A possible target could be the number of students/teachers who take the appropriate action during an exercise. As activities the LEPC could conduct training on hazard awareness, shelter in place, develop print and audio/visual materials, and/or prepare signs to post at strategic points.

Why Should You Care?

LEPCs face a terrible burden in demonstrating their worth and the worth of the activities they conduct. LEPCs lack a convincing way to demonstrate this worth because of a tendency to “do things” that seem obviously helpful, for example, hold meetings, make TV announcements describing your LEPC, practice implementing an emergency plan, and share information with the public about the dangers of chemicals in their community.



But it is not always clear that these apparently good activities actually contribute to reaching some vision of success. The various audiences served by LEPCs will have their own vision for the success of what LEPCs do and that vision may not be the same as what the LEPC would craft for itself.

As these examples and the discussion in Appendix I demonstrates, LEPCs should have a goal oriented reason when they choose their activities, and then be able to demonstrate that those activities helped them make progress in achieving their goals in a measurable fashion.



APPENDIX I What Are Safety Performance Indicators and How Are They Used?

The **OECD**, or Organization for Economic Cooperation and Development is an international organization focused on economic and social issues. Its purpose is to boost prosperity by providing a web of compatible policies and practices across countries that are part of an ever more globalised world. Beginning in 1961, the OECD coordinates international efforts related to cross-border problems affecting member states such as money laundering, tax evasion, and corruption and is active in a number of areas including education, sustainable development, and science and technical innovation.





The OECD guidance uses the term "indicators" to refer to measures that provide insights into a concept (i.e., safety) that is difficult to measure directly.

Simply put, the group first identifies some area of concern, and then describes the target they want to accomplish in that area. Subsequently, they identify outcome indicators and activities indicators that can help them determine if they are meeting the target they established. (This is probably a bit murky to you. We will provide a detailed example in a bit.)

Outcome indicators help assess whether actions (e.g., policies, procedures) are achieving their desired results. Activities indicators provide you with a means to check regularly whether you are implementing your priority actions in the way you intended.

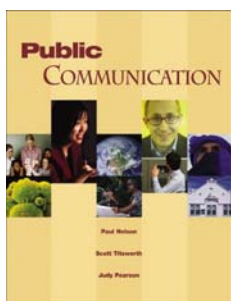
In this way, the activities indicators provide you an opportunity to understand why you are, or are not, achieving your target in a specific area.

As you might be guessing by now, choosing the indicators related to your situation is the key step in this entire process. And the **good news** is that the OECD guidance, often a bit difficult to understand (it was developed for use in many countries with varying safety customs and practices, with different words to describe their safety practices), is actually very helpful when it comes to choosing performance indicators.



In fact, once you have identified an area of concern and an appropriate target, the OECD guidance offers a list of possible outcome indicators and even more activities indicators.

You can choose to adopt the OECD language directly, or you can use the OECD list as a way to get you thinking more about the topic with the result that you develop your own indicators. (If you want to use the OECD language, the interactive website mentioned on the first page, <http://oecd-safetyindicators.org/>, will help you lift the OECD language directly into your local evaluation plan.)



Let's look at an example.

Let's say that your LEPC wants to focus on communication with the public. You should find pages 59-60 in the OECD guidance for Public Authorities and Communities to be helpful.

There is suggested "target" language ("The public understands chemical risk information, takes appropriate actions in the event of an accident and has an effective channel to communicate with relevant public authorities.")

Then there are at least eight outcome indicators, for example:

- Extent the public understands and remembers the chemical risk information that has been provided to them by public authorities.
- Extent the public is satisfied with chemical risk information provided to them by public authorities.
- The number and quality of comments provided by the public on the information they have received.



You can see that, if you chose these outcome indicators, you will need to develop a method for gathering data, and then actually gather the data, to know if the outcome indicators are being achieved.

Next, still on page 59 of the Guidance, you will find a list of potential activities indicators, for example:

- Is there a specific mechanism to share information between public authorities and the public openly and actively?
- Has this mechanism been designed in consultation with the public and other stakeholders?
- Is there a mechanism for the public to request information from public authorities and/or industry?

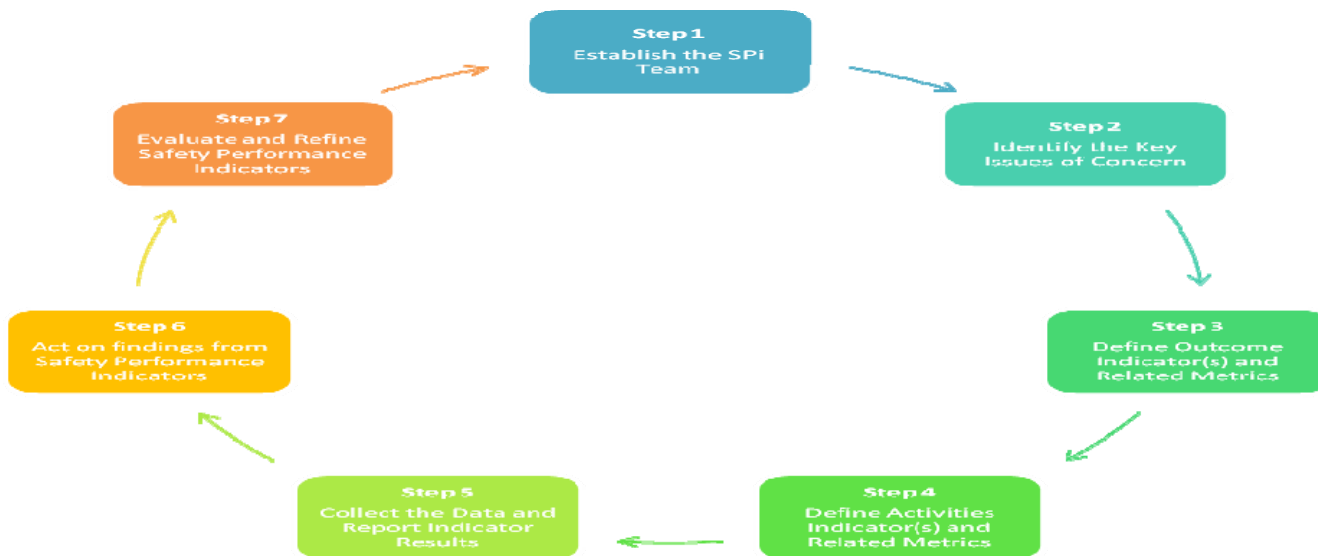


The activities indicators suggest actions and processes that you might want to have in place in order to ensure that the outcome indicators (and the underlying "target") are reached. The activities indicators can often be answered with a "yes" or "no," but the real question is: will these activities promote chemical safety? You can see that the options for activities indicators are very wide-ranging. The good news is that, even though the OECD guidance does not provide an exhaustive list of activities indicators, it does provide some very good suggested indicators, which you can start with and adjust to meet your organizations specific needs.



The SPI Process

The following figure outlines the SPI process which is described in detail in Chapter 2 of the OECD guidance (beginning on page 9). We shall provide a detailed example in just a bit, but first let us offer some general comments on the process.



The language used in the diagram above is one of many ways to describe the SPI process. We are going to use other language in the description of the SPI process and the example scenario that follow to further explain the purpose of each step and to focus on how they can help organize the development of effective safety performance indicators.

Step 1: Gather a team.

Someone must be responsible for conducting the evaluation for your LEPC. The SPI Team could be the LEPC itself, a subcommittee made up of LEPC members, a committee whose members are totally outside the LEPC membership, or some combination of the latter two options.



In fact, there is another possibility: you might have a one-person team. You will know if there is someone in your community with special talents for this job. Even if you go with the idea of a committee, that "one-person team" could be the ideal chairman for the committee.

Whomever you choose as members, be sure that they are interested in evaluation, have the time to commit (one year, at a minimum), and enjoy the respect of your LEPC and political leaders. You do not want the public to criticize the SPI results on the basis that the team members were not trustworthy.

Step 2: What are the key hazardous materials, issues, and concerns?



The OECD guidance (page 14) has some good advice for this step. You probably know one or two issues that you would like to analyze.

Or your SERC might identify an issue that it would like every LEPC in the state to address. Some very good advice from the OECD guidance: do not fall into the trap of asking what you can measure instead of what you should measure.

Step 3: What does success look like?

Step 4: Identify activities and establish a "yardstick" (outcomes) to show progress.

See the discussion above under "What are safety performance indicators."

Step 5: Do the activity. Collect the data.

See page 24 of the OECD guidance. Note what they say about using existing data as well as not using too many data points when briefing upper management.

Step 6: Act on the findings.

See page 26 of the OECD guidance.



Note that, if there are inconsistencies in the results, it may indicate a problem in your safety program or a problem in the construction of your SPI program.

This step involves addressing problems in your safety program.

Step 7: Evaluate and refine the process.

The results in Step 6 should lead you to look at both the safety program and the SPI program.

Recall that you need a good list of activities indicators, and it might take time to come up with the right ones.

The list in the OECD guidance should be helpful, but only your experience (plus some advice for your SERC if they are involved in the SPI process) can tell you if you need to revise the activities indicators.

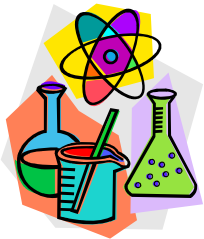


If Step 6 leads you to conclude that you have to change your activities indicators, do that and repeat the process as needed. (If you change or revise the activities indicators, you have already gotten to Step 4 for the second time.)

Some Specific Examples:

The OECD guidance develops three scenarios (one each for a public agency, the local fire department, and a citizen committee) and shows what the SPI team would do at each step of the process.

As an LEPC, you will relate most closely to the citizen committee scenario, but you can also profit from following the other two scenarios through the process.



Begin by reading the scenarios on page 11, and then study what actions are taken at each SPI step for each scenario.

You may find that one of the scenarios fits your situation; in that case, you might be able to lift a lot of material directly from the OECD guidance.

Let's go through one more example in detail so that you can see how the SPI process could be applied to a school lab cleanup project.

Scenario:

Parents of students from the local high school, who are also members of the LEPC, discover storage of chemicals in the school lab while visiting the school during a parent/teacher conference.

Upon researching this further, the parents discovered that if these chemicals are not stored and handled properly, they can create a substantial hazard to students and first responders in the event of fire or spill. The parents have approached the school and LEPC to work together to ensure processes are in place for the proper storage and handling of these chemicals and identify a mechanism to evaluate these processes.



The Process of an LEPC / High School Example

Gather a Team	<ul style="list-style-type: none"> Representatives of the LEPC, fire department, and other relevant regulatory agencies, if any, along with the school principal and parents meet to scope the project.
What are the key hazardous materials, issues and concerns?	<ul style="list-style-type: none"> Following discussions among the team members, it was agreed that the "vision of success: was to reduced risks to students and faculty from chemical accidents. Key issues of concern included: <ul style="list-style-type: none"> Developing appropriate procedures for the safe storage and handling of hazardous chemicals in school Reducing the risks of a chemical accident by removal of old, unneeded, excess quantities of otherwise hazardous chemicals, and Education of students and faculty on the hazardous of chemicals used in the school labs.
What does success look like?	<ul style="list-style-type: none"> The team determined that success of this effort would include: <ul style="list-style-type: none"> Safe removal and disposal of unused, outdated, and hazardous chemicals from the school lab All teachers and students are properly educated regarding the hazards presented and how to handle those chemicals Programs are implemented to prevent re-accumulation of chemicals, and how to handle those chemicals Procedures are implemented for proper storage and use of hazardous chemicals.
Identify activities and establish a "yard stick" (outcomes) to show progress	<ul style="list-style-type: none"> The metrics would include: quantities of chemicals removed, all teachers and students educated on chemical hazards of school chemicals, institution of inventory control programs as measured by whether old excess quantities are present term-to-term, and development of proper chemical storage procedures as measured by inspection.
Do the activity	<ul style="list-style-type: none"> The team decided that they would take an inventory of the amount and location of the hazardous chemicals and remove those that were at risk to the students and community. This is to be reported to the school, LEPC, and public via a public meeting and report. The team also decided to institute procedures on the safe handling and storage of hazardous chemicals as well as a training program for teachers and students. Procedures are to be reviewed by the science faculty, and re-evaluated each term.
Collect the data	<ul style="list-style-type: none"> The following data will be collected and reviewed: <ul style="list-style-type: none"> Number of teachers/students trained on the procedures and competence of the students/teachers based on post-training testing Number of times procedures are not followed which will be tracked using a log book sign in, observations by teachers of students using the chemicals, and number of accidents which occur due to misuse of the chemicals
Act on the findings	<ul style="list-style-type: none"> The team agreed that each term, reports would be submitted to the school superintendent, PTA student body, and LEPC with the results of the tracking of the activity indicators on inventory practices and chemical accidents. These reports would be reviewed by the LEPC/fire department and school administration and faculty to determine if changes need to be made in the procedures and/or the training program
Evaluate and refine the process	<ul style="list-style-type: none"> At the end of each school year, the team would meet with the LEPC and PTA in order to review the project outcome and the activity indicators to determine if they need to be revised or eliminated and whether new indicators need to be developed and implemented based on the results of the previous year and the experience gained in implementing the SPI program.

Additional examples

LEPCs can submit to EPA any additional examples developed and implemented. These lessons learned will be shared on EPA's website, <http://www.epa.gov/emergencies/>.

Additional information and assistance

The "Guidance on Developing Safety Performance Indicators related to Chemical Accident Prevention, Preparedness and Response for Public Authorities and Communities" was published by the Organization for Economic Development (OECD) in December 2008. The full guidance may be found at www.oecd.org/ehs.

LEPCs can use the interactive website at <http://oecd-safety-indicators.org/> to select and customize their review program. Go to the website, click on "Communities," and then click on "My Targets and Indicators." After creating an account, you can log in and create pages appropriate to your scenario.

You Can't Be Happy and (fill in the blank) at the Same Time!

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Lately, one of my most popular courses has been *Stress Management in Stressful Times*. Many of my friends know I travel around the country training first responders.

Yesterday morning I had coffee with a friend in a chronic stressful situation, with an ailing, failing father and other ongoing family issues, who asked me to condense my course stress course into "something I can understand" and "something I can do now"—in the fifteen minutes he had before he went off to church.

Using the two napkins that came with our bagels, I broke my course into two sections (let's call them Napkin 1 and Napkin 2).

Not having the same amount time I would have in a course (he was going off to church, after all), I did not use my favorite interactive mode to take an hour to elicit responses, but rather gave him the answers that class participants usually give to the following query:

What are the emotional, physical, mental, and behavioral changes that take place when you are under stress?

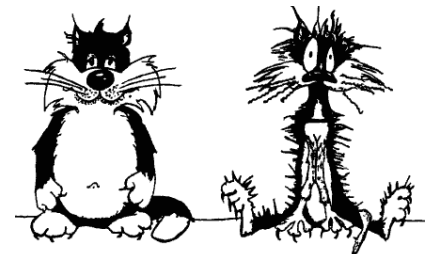
There are usually more responses from class attendees, but having church-start time restraints, I filled the four columns on Napkin 1 with the following standard answers.

Emotional:

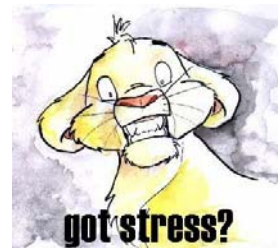
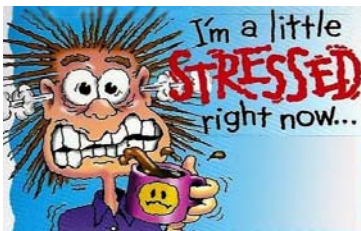
- Anger
- Fear
- Frustration
- Sorrow
- Overwhelmed
- Numb, etc.

Physical:

- High blood pressure and increased heart rate
- Irregular breathing
- Exhaustion
- Headaches and muscle aches
- Sick to stomach
- Diarrhea, vomiting, etc.



Before Work After Work



Mental:

- Can't think and can't remember
- Can't analyze and can't be logical
- Can't concentrate and don't care
- Automatic negative thoughts, etc.

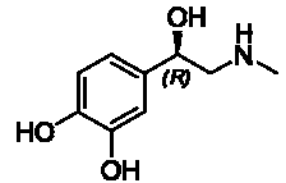
Fill
in
the

_____ Hmm. This is when I ask the question: Which of these is conducive to having a good day, being a good parent/spouse/etc., being a good supervisor/employee, being a decent human being, or just being happy?

_____ Or to bring home the point more effectively, I start repeating "You can't be (fill in the blank with any and all of the above) and happy at the same time!"

This is when I put them on break, and when the course resumes transition to the second half of the course, or in this case, to Napkin 2.

During the course, I elicit and/or explain the effects of the freeze-fight-flight syndrome, the adrenaline rush, and the sympathetic nervous system. I basically try to define or redefine stress as the strain, as the effects of all the hormonal, neurological, and neuropeptid changes taking place in an individual's body.



To my friend I just said: "Those things are the stress, or they are the effects of stress, and if you want to be happy and healthy and stay alive, you will have to aggressively deal with them. Period. No if, ands, or buts!"

Aggressive Relaxation, that's what I call my stress management plan, that's what goes at the top of Napkin 2.



The first word under that heading is **BREATHING**. You can't directly control your heart rate and you can't directly control your blood pressure, but you can directly control your breathing, and that will "entrain" and indirectly help with reducing your heart rate and blood pressure, while at the same time begin to shut down those powerful survival-related responses of the freeze-fight-flight and adrenaline rush syndromes.

Breathing management is the most immediate, the most effective, the most critical and the most necessary component of stress management.

It must be practiced daily, it must become an habitual ritual. Humans have three states: excited, alert, relaxed. Our goal is to drop the excited state down to the alert state, using the same breathing techniques yoga, Zen, and meditation masters use to drop themselves from the alert to the relaxed or super-relaxed state. We don't need relaxed when we are stressed, we just need to quit being over-excited and out of control. We need to practice controlled breathing during our good times, so we have the skill, the habit, to implement during the not-so-good times!

The rest of Napkin 2 had the oft-repeated duo of diet and exercise, along with necessary additions of:

- a) daily or regularly doing something creative (gardening, artistic endeavors, writing, etc.);
- b) volunteering or somehow making the world a better place because you got out of bed; and
- c) practice smiling, laughing, giggling, or otherwise just being silly.

And so my friend went off to church clutching his two napkins. And I felt was hope for him.

Why, you ask?

Because he seemed to get it, that one can be silly, giggly, smiley, laughy, creative, a helper, a good breather, and HAPPY at the same time!



It's his choice, it's my choice, and it's your choice, Napkin 1 or Napkin 2. Really, it's that simple, to be or not to be, happy!

HAS YOUR LEPC:

- Established a permanent address for facilities, the SERC, and EPA to mail required forms and information;
- Notified the SERC of any changes to the LEPC structure, especially a change in the chair or address;
- Provided EPCRA training to emergency responders, specifically local fire departments who often can provide information to facilities during fire inspections and police departments who respond to haz-mat incidents?
- Established a 24-hour manned emergency phone number (i.e., sheriff's office, 911, fire department) for facilities to make release notifications -- an answering machine is not sufficient



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Region 6 Emergency Notification Numbers

Arkansas Dept. of Emergency Management	800-322-4012
Louisiana State Police	877-925-6595
New Mexico State Police	505-827-9126
Oklahoma Dept. of Environmental Quality	800-522-0206
Texas Environmental Hotline	800-832-8224

National Response Center	800-424-8802
EPA Region 6	866-372-7745
CHEMTREC	800-424-9300