**Step 1: Identify Potential Threats**

You can never predict with certainty when a disaster may strike. However, with a little preparation, you can confidently face any emergency. To begin, first decide which hazards pose a serious threat to your operation and community.

The list below reflects common natural hazards that could disrupt operations. The column labelled ***Impact*** next to the listed hazards is an estimate of the average number of days that a facility would be disrupted by each event. For example, you might estimate that a fire is likely to disrupt operations for three days, while a hurricane might take five days to recover from.

Next, estimate the potential loss to your operations if any of these hazards were to force you to close for a period of time. This represents the *direct* losses you would suffer from a shutdown.

For this step, simply estimate the cost of being shut down for one day. For example, if you typically earn $1,000 a day, then write the figure $1,000 in the space provided. You will use this figure to calculate the *Annual Loss Exposure* (ALE) to high-probability events.

Indirect losses are more difficult to estimate and include both the ongoing costs of operations (e.g., rent, utilities, taxes, etc.) and the negative impact on the reputation of the facility from being shut down. Based on this figure, you can begin to calculate the amount of funding you should invest each year in preparedness to overcome your facility’s vulnerability to hazards.

**Step 2: Disaster Frequency**

While potentially disruptive events happen every day, only a few are severe enough to cause a shut down. For example, winter storms occur frequently, but most facilities are prepared to cope with them and continue to operate.

Estimating how frequently each of the hazards selected in STEP 1 threatens to cause a loss of business is an important element of calculating how much to budget for preparedness. The table below using fictional figures illustrates how often the listed hazards might disrupt a hypothetical business. Use this as a guideline as you estimate the frequency with which the hazards you select might impact your operations. Check with your local emergency management office for information on the frequency and severity of each of these hazards.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Hazard** | **Annual Frequency** |  | **Hazard** | **Annual Frequency** |  | **Hazard** | **Annual Frequency** |
| Fire | **1 in 10** |  | Lightning | **1 in 1** |  | Lack of Snow | **1 in 10** |
| Winter Storm | **3 in 1** |  | Wildfire | **1 in 5** |  | Landslide | **1 in 5** |
| Hurricane | **1 in 4** |  | Earthquake | **1 in 4** |  | Drought | **1 in 5** |
| Epidemic | **1 in 30** |  | Terrorism | **1 in 10** |  | Radon | **1 in 10** |
| Flooding | **1 in 1** |  | Dam Failure | **1 in 8** |  | Avalanche | **1 in 15** |
| Tornado | **1 in 3** |  | Rain Downpour | **1 in 3** |  |  |  |

**Step 3: Calculating Annual Loss Exposure**

Now that we have all the necessary information, determining how much to budget annually for preparedness is a straightforward process. To review, you have already:

* Identified the hazards that are of most concern.
* Estimated the financial impact of a shut down for one day.
* Verified the number of days that each of the hazards would affect your operations.
* Determined the frequency with which each hazard may occur with sufficient severity to cause a shutdown.

Using this information, it is possible to develop an annual spending plan that reflects the combined financial exposure your operation faces from the selected hazards. For many organizations, this figure, known as the ***Annual Loss Exposure*** (ALE), represents the upper limit that they are interested in spending on preparedness.

Often, organizations decide to spend significantly less than the calculated amount on preparedness since they realize that the steps they take to mitigate one hazard simultaneously provide a degree of protection against several other threats. For example, having a way of announcing to personnel that they should evacuate a building provides a level of protection against several different threats including fire, violence in the workplace, a hazardous spill, or danger of a structural collapse which might be brought on by excessive snow on a roof or the erosion of the ground due to a flood.

The key to making the most of the annual budget is to find characteristics that the various threats have in common and seek mitigating actions that address these core similarities.

**Step 4: Taking Action**

Please review this list and decide on the **five** most significant threats facing your operations. Indicate your choice by placing a number from 1 to 5, with 1 next to the listed hazard in the ***Priority*** column. Notice that space is provided for you to name other threats not shown in the list below.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Hazard** | **Impact** | **Priority** | **Hazard** | **Impact** | **Priority** | **Hazard** | **Impact** | **Priority** |
| Fire | 3 days | \_\_\_\_ | Wildfire | 5 days | \_\_\_\_ | Drought | 14 days | \_\_\_\_ |
| Hailstorm | 2 days | \_\_\_\_ | Earthquake | 5 days | \_\_\_\_ | Avalanche | 4 days | \_\_\_\_ |
| Hurricane | 5 days | \_\_\_\_ | Terrorism | 6 days | \_\_\_\_ |  |  | \_\_\_\_ |
| Epidemic | 7 days | \_\_\_\_ | Dam Failure | 10 days | \_\_\_\_ | \_\_\_\_\_\_\_\_ |  | \_\_\_\_ |
| Flooding | 7 days | \_\_\_\_ | Extreme Rain | 1 day | \_\_\_\_ | \_\_\_\_\_\_\_\_ |  | \_\_\_\_ |
| Tornado | 5 days | \_\_\_\_ | Lack of Snow | 10 days | \_\_\_\_ | \_\_\_\_\_\_\_\_ |  | \_\_\_\_ |
| Lightning | 2 days | \_\_\_\_ | Landslide | 3 days | \_\_\_\_ | \_\_\_\_\_\_\_\_ |  | \_\_\_\_ |

Use these figures to develop a hazard prevention budget and decrease your vulnerability to future disruptions.