Beyond Labels: Product Safety Information

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You've completed your hazard analysis and identified the safety labels you need to put on your product. You've selected the proper signal words, chosen appropriate pictorials, and agreed on wording for the message. You've ensured that your label vendor is using the specified safety colors and providing durable labels that will withstand the expected use environment.

Great! You're half done.

On-product labels are a critical means to deliver essential safety information to the user, but they are not the only one. In fact, on-product labels are necessarily limited in what they can do. You must restrict on-product labels to those that are absolutely necessary for two reasons:

- Most products have only limited space on which to put labels
- Too many labels can be confusing to users and draw attention away from critical safety issues.

So what do you do with other important safety-related information? As a manufacturer, you have two primary venues for safety information and several secondary ones. The primary ones are the manual that accompanies the product and the packaging that surrounds the product. Each has strengths and weaknesses as a means to deliver safety information.

The manual gives you the space to include not just warnings, but also a fuller explanation of each hazard and how to avoid it. It is likely (but not guaranteed!) to be kept by the user. It allows multiple opportunities to warn of the same hazard encountered in different operations. On the other hand, the manual, though retained, may not be read by the user. Many a machine manual is gathering dust on a bookshelf in the purchasing agent's office. Or the buyer of a consumer product *kept* the manual—but now cannot remember where he put it.

The packaging, unlike the manual, will certainly be seen by the user in most cases. You can be assured that a warning placed on the packaging will reach the user—or at least the installer. On the other hand, you can also guarantee that in most cases the packaging will immediately be discarded. So while you have a sterling opportunity to present a warning that will reach the user, that warning probably has a very short effective life.

Secondary avenues for safety information include package inserts, "quick-start guides," follow-up marketing materials, videos or DVDs, and other collateral materials. Don't underestimate the value of the internet in getting safety information to your users. Post your product manuals on your website in .pdf form for download and your users will always have access to the manual—whether or not they can remember where they put the one that came with the product. Use your company website to highlight safety features of your products and to alert users to hazards or unsafe practices that weren't anticipated when the manual was written. Provide streaming video to demonstrate proper product operation or maintenance procedures.

Are there guidelines for handing safety information in collateral materials? Yes and no. The new ANSI Z535.6 standard, Product Safety Information in Product Manuals, Instructions and Other Collateral Materials, covers formatting of safety messages in manuals and some other materials, but doesn't cover marketing materials, videos, and the like. Even in the areas it does address, the standard, like ANSI Z535.4 Product Safety Signs and Labels, focuses on choice of signal words, format of messages, and so on. Neither one addresses the difficult question of content: what needs to be warned about, what safety issues should be discussed, and so on. But then, no standard could. Each product is individual with its own unique issues. While some hazards may be common to a class of products, such as entanglement hazards with chain-driven machine parts, the particular configuration of the hazard will be different in each case.

Your hazard analysis is your guide to handling safety messages. The most severe and immediate hazards warrant on-product labels, but what of the rest? Here are a few pointers:

- 1. If there's a label on the product, put a corresponding warning in the manual
- 2. Separate safety messages that address general hazards and safe work practices from those that address hazards particular to your product.
- 3. Be sure that you don't give mixed messages.

If there's a label on the product, put one in the manual. Any hazard significant enough to warrant an on-product label certainly warrants treatment in the manual as well. Do the two warnings have to be exactly the same? No—in fact, they probably should not be identical. However, some things *should* match.

Both safety messages should use the same signal word. The criteria for choosing a signal word have to do with the severity of the hazard and the likelihood of injury should the user interact with the hazard. Those factors don't change whether the warning is on the product or in the manual. Both warnings should have the same avoidance information—but the manual may be more indepth. On-product labels are extremely limited in space, so the word message must be kept very short and to the point. Manuals have a little more flexibility, so

you can elaborate a bit. While the label may merely say, "Keep hands away" from moving machine parts, the manual may be able to go into more detail about how to use the product safely without getting your hands too close to moving parts.

Separate general safety warnings from those specific to the product. When you pick up a manual for a product—say a power saw—and start to read the "Safety Section," you will often find that many of the messages say things like, "Keep electrical power cords dry," or "Keep work area free from debris." These messages address general safe work practices, and they may be appropriate to include in the manual. However, many manuals contain more or less the same messages, and as a consequence, people may tend to skip over them, thinking that they have read them many times before. If warnings that are specific to your product are mixed in with these generic messages, users may overlook them.

One way to address this problem is to group your safety messages in logical categories: Electrical Hazards, Flammable Vapor Hazards, etc. In fact, ANSI Z535.6 calls for safety messages in a safety section to be grouped appropriately. You may also want to have a category called "Safe Work Practices." Taking this approach has three advantages. First, it is easier for users to process information that is separated into smaller chunks. An undifferentiated list of 30 safety messages is unlikely to be read—after the first few, most users will ignore the rest. Second, by dividing them up and giving them headings, you are assisting the reader to understand the information—they already know the general topic before reading the first warning. Third, you can make it clear which warnings apply specifically to your product and which are simply reminders of good work practice.

Be sure your safety messages don't give mixed messages. As important as it is to coordinate your on-product labels with safety warnings in the manual, it is equally important to ensure that all your product literature is consistent as well. If your manual directs the user to wear safety glasses and hearing protection when using the product, be sure that any photo of the product in use—in the manual, on the packaging, in a technical bulletin—shows the user wearing the appropriate protective equipment.

If the manual states that the product is not to be used for a particular purpose, be sure that the marketing material does not suggest that use. If the manual includes a warning to lockout/tagout the power before performing any maintenance, be sure that all the procedures in the maintenance section include locking out/tagging out the machine as a first step. If some maintenance needs to be performed with power on—so that the machine can be "jogged," for example—then rethink the warning.

All your product materials—on-product labels, manual, and other associated materials—must present a coherent, integrated package. The best way to

achieve this result is to plan them all at the same time, preferably as the product is being developed. If you have overall responsibility for product safety in your organization, your first task is to make sure that *everyone* involved with product safety—all the people who write the manuals, develop marketing materials, draft service bulletins and design safety labels—talks to each other. Good communication is the first requirement for a coordinated product safety package. The second is a company mindset that commits to product safety as a way of doing business. Reinforce the concept that all parts of the product team must work together to achieve the common goal of safety. Safety can never be an add-on; it must be part and parcel of product design and manufacture.

With good communication and an integrated approach, when you've finished your on-product safety labels, you'll be much more than halfway there—because all the rest of the product safety package will have been developed in parallel, all at the same time. When the last safety label is applied, the product really will be ready to go out the door.

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