



# Cutting Edge Safety

Lawrence Berkeley National Laboratory Lessons Learned

LL-2003-02

**Concern Statement:** Each year, Lab employees suffer a fair number of cuts from improper use of knives and razor blades. Many of these cuts are minor, but several require sutures or result in partial amputations, neurological damage or severed tendons. The damage cannot always be reversed entirely, and these cases tend to be rather expensive.

**Applicable to:** Researchers and staff who work with razor blades and utility knives.

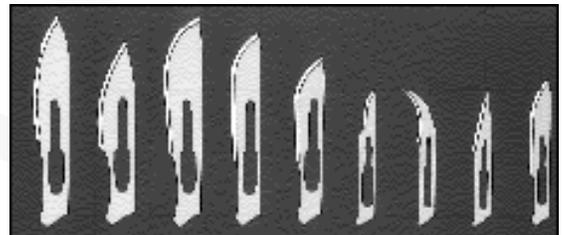
Here are a few ideas to consider if you use knives or razor blades in your work.

**1. Don't use razor blades where you could do a better job with a scalpel or an X-ACTO knife.**



You will have better control with a scalpel or an X-ACTO knife, and the cost is not that great.

The disposable scalpel shown below starts at \$1.10, and replacement blades start at \$0.35. One doctor visit saved will pay for a lifetime of blades.



**2. If you must use razor blades, use them in a holder.**

Razor blade holders are available from any hardware or paint store for a dollar or two. A blade in a holder can be controlled with greater accuracy and with less risk of injury.



**3. Put used blades away safely**



Protect your custodial staff and dispose of used blades in sharps containers. Loose blades on lab benches have caused several injuries. Remember to discard and replace the sharps containers before they overflow.



Please Post

#### 4. There are lots of choices in utility knives

There are lots of choices in utility knives these days. Select one that is appropriate for your work. As a starting point, all utility knives should have retractable blades. There is no application that requires a blade that is always exposed.



If you cut open a lot of boxes, use one of the knives that have been specifically designed for that purpose. On the left is a special knife that is used by many of the big name retailers for cutting open cartons.

On the right is a knife that will automatically retract into its housing at the end of a cut. Our custodians have tested this knife and they like it much better than a standard utility knife.



And finally, a knife with a fixed blade that will retract in a split second if the knife slips and senses an uncontrolled motion.

#### 5. A knife is not always the best choice.

Not every cutting job calls for the use of a knife. As a person who takes pride in your work, determine what other tools are available that may allow you to do your work better and safer. Here are just a few examples:

A Snappy Hooker – this tool is intended for cutting shrink wrap and foam coverings safely. The user's fingers are completely protected against injury, but a sharp razor blade edge is able to cut through the material with ease.



A cable stripper will always do a better job than a utility knife – neater, cleaner, and without damaging the conductors.

A coax cable stripper - this would have come in handy earlier this year when an employee suffered a \$6,000 finger injury while stripping a coax cable.



You are encouraged to find the best cutting tool for your particular application. If you need assistance, feel free to contact the safety office. We will be glad to help you find the safest and most efficient tool for your need.

#### Further Information

Any additional questions regarding this lessons learned may be directed to Matt Kotowski, x-6428 For other lessons learned, go to: [http://www.lbl.gov/ehs/html/lessons\\_learned.htm](http://www.lbl.gov/ehs/html/lessons_learned.htm).