

63-003-0299

Just the Facts...

Progressive Lenses ("No Line" Bifocals) in Safety Glasses

1. The Tri-Service Vision Conservation and Readiness Office at the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) recommends that:

Progressive lenses ("no line" bifocals) should not be used in American National Standards Institute (ANSI) Z87.1 safety glasses. In an eye hazardous environment, the advantage of variable focus lenses ("no line" bifocals) is normally outweighed by the distortions produced in the edges of the field of view. Employees who wear ANSI Z87.1 variable focus lenses and have good safety records may be allowed to continue to wear them unless they have an accident attributed in whole or part to the use of variable focus lenses. All others who need multifocal lenses should be required to wear flat top or circular bifocal or trifocal segments. When an employee is authorized to wear variable focus lenses, the employee should bear the additional cost over that of flat top or round segment bifocals.

- 2. Current guidance for multifocal ANSI Z87.1 safety glasses:
- a. The straight top bifocal or trifocal is the standard issue multifocal lens type for DoD, to include ANSI Z87.1 safety glasses.
- b. Use of bifocals or trifocals with lines poses no safety hazard if the user observes standard safety practices and common sense.
- c. "No line" bifocals cost significantly more than the standard issue multifocal lenses.
- d. Fitting of "no line" bifocals is much more difficult than standard bifocals and the number of

remakes due to patient problems is greater than with standard multifocal lenses.

- e. "No line" bifocals have an area of blurred or distorted vision on both sides of the lower half of the lens. There is a channel of clear near vision that widens at the bottom in the middle of this distorted area. This area of distortion may be a safety hazard.
- 3. If a local decision is made to offer "no line" bifocals, then the following should be required:
- a. The individual would have to already be wearing "no line" bifocals successfully and have a demonstrated accident free safety record.
- b. The safety officer would have to sign off on allowing the individual to wear "no line" bifocals.
- c. The individual would have to pay the difference to upgrade from the standard bifocal, to include the administrative costs of such a program. The cost of the upgrade alone to a "no line" bifocal could be an additional \$100.00 or more.
- d. The individual would have to pay the total cost of any remakes of "no line" bifocals or remakes to change back to the standard issue lenses.
- e. Everything would have to be documented, possibly in the medical record, and signed by both the individual and the safety officer.
- f. The Installation Safety Officer would have to approve of this concept and monitor the overall injury rate of employees wearing standard bifocals vs "no line" bifocals.