DISCUSSION: Recent safety inspections revealed that chain saw chaps produced using USFS Specification 6170-4E (April 1997) are still being used. In 2000, USFS Specification 6170-4E was superseded by USFS Specification 6170-4F (Jan 2000). The current specification (6170-4F) provides a higher level of protection or cut resistance of up to 3,200 feet per minute (fpm) chain speed. The chap was also redesigned to give a larger area of coverage for the legs. Under the older specification (6170-4E), the chap provided a protection level up to 2,750 fpm chain speed. The 2,750 fpm chain speed conformed with the then established American Society for Testing and Materials (ASTM) performance requirement.

In 2004, the ASTM performance requirement was increased to 3,000 fpm. The current USFS Specification 6170-4F exceeds the ASTM performance requirement. However, chain saw operators may not be aware that chain saw chaps constructed using the older specification, 6170-4E, no longer comply with the current industry standard (as promulgated in the current ASTM specification, designated F 1897-04). And, they do not provide the level of protection currently required by the USFS. There have not been any recently reported incidents of saw chain cut-through using the older chaps, but all chain saw operators should be aware of the potential hazard or reduced level of protection of the older chaps and should take action to mitigate this potential hazard.

MITIGATION MEASURES: To reduce risk of injuries due to chain saw cut-through, chain saw operators must inspect their chain saw chaps to ensure adequate protection. Begin removing all chaps from service that are not labeled with USFS Specification 6170-4F or do not meet current ASTM performance requirements (F 1897-04) as soon as possible. Chaps removed from service will not be donated or transferred to other agencies and must be properly destroyed or made unserviceable.
How to identify chaps meeting current specification, USFS 6170-4F, or later:
Chaps meeting USFS Specification 6170-4F, or later, have leg width of at least 14 inches, black-colored webbing and trim, and are labeled with specification number 6170-4F.

Old chaps
Current chaps
USFS Spec. 6170-4F

14-inch leg width
black-colored webbing and trim
green- or orange-colored nylon shell

Labeling

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