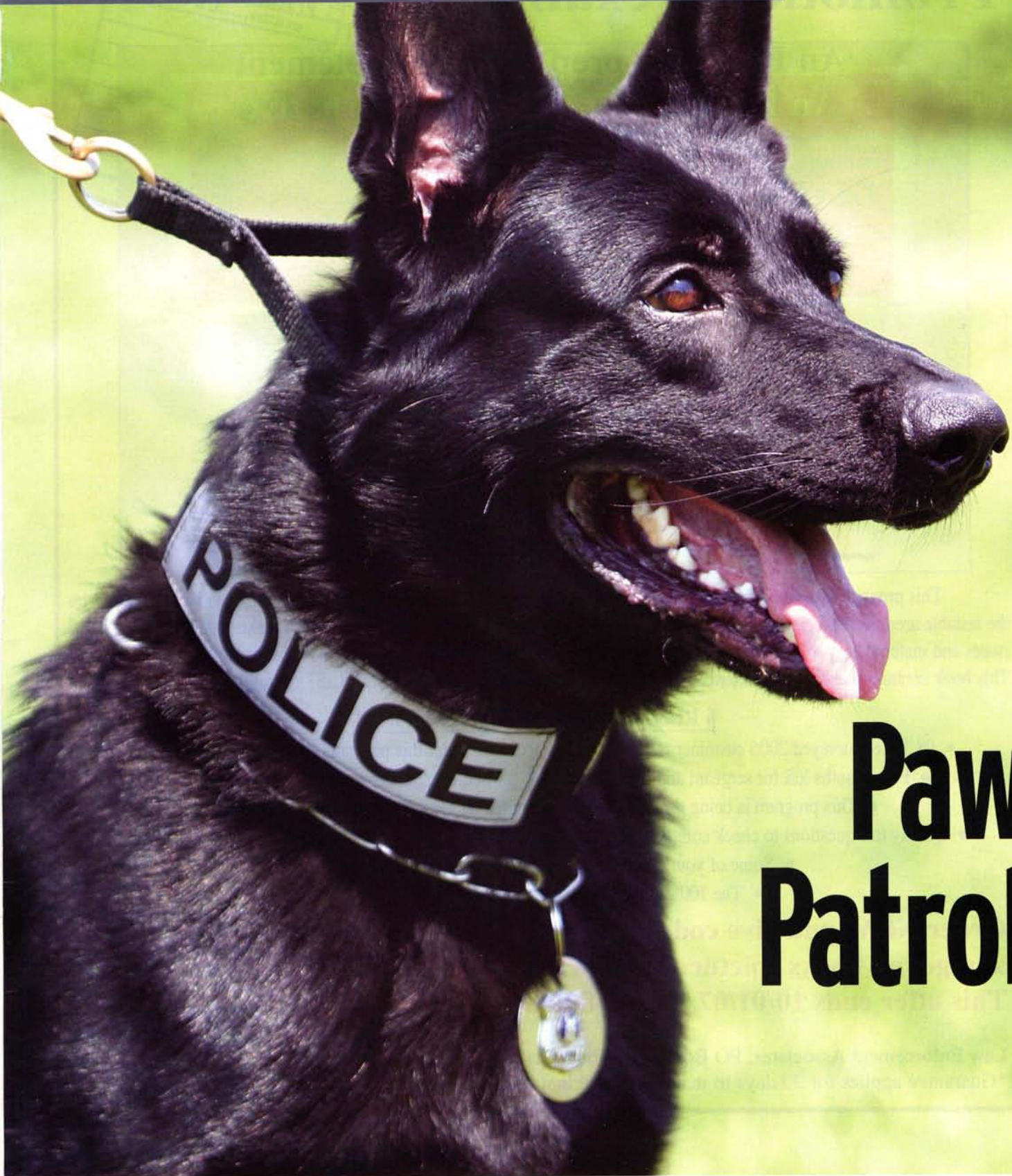


**NEW
JERSEY**



COPS

PRESRT STD
U.S. POSTAGE
PAID
PERMIT NO. 6438
PHILA., PA 191
www.njcops.com
Vol. 11 No. 9



Paw Patrol

Reducing risk of injury

■ BY MATT BRZYCKI

As a protector of the peace, you have a higher risk of injury than most other jobs. One of the salient goals of your training, then, is to reduce that risk.



Matt Brzycki

What the research says

A study that was published in *Medicine and Science in Sports and Exercise* investigated the risk factors for injuries that occurred during U. S. Army Basic Combat Training at Fort Jackson, South Carolina. Although the study focused on the military, many lessons can be learned from its findings and applied to law enforcement. The information is especially relevant to those who participate in tactical training and operations that are physically demanding such as members of a SWAT team.

In the study – which involved 1,230 men and women – an injury was defined as “an event that resulted in damage to the body and for which the subject visited a medical care provider.” Specifically, data was collected for two main types of injuries: overuse (resulting from cumulative micro trauma) and acute (resulting from sudden trauma). Not included were injuries from heat and cold and animal bites.

Here’s a synopsis of the relevant findings from the study:

Site of Injury

For men, the five most common sites for injury were the knee (21 percent), ankle (16 percent), foot (14 percent), lower back (11 percent) and shin (8 percent); for women, it was the ankle (20 percent), foot (20 percent), knee (19 percent), shin (10 percent) and lower back (7 percent). The lower body and lower back accounted for 83 percent of all injuries sustained by men and 87 percent by women. Stated otherwise, relatively few injuries were to the upper body.

The obvious implication of these data

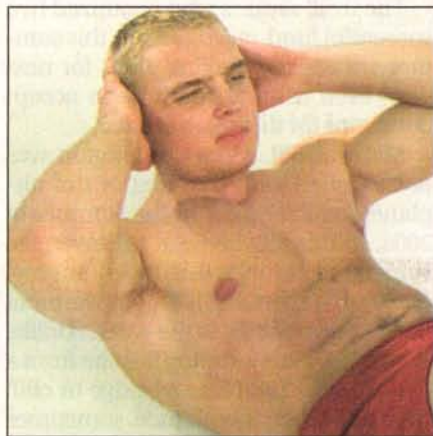
is that you need to focus your attention on strengthening the muscles that affect those areas. The muscles that must be addressed include the hips, quadriceps, hamstrings, calves, dorsi flexors and lower back.

Although the training of these muscles is fairly straightforward, the fact of the matter is that most of them are frequently overlooked. One area that merits a closer look is injuries to the “shin” or lower leg. The exact nature of these injuries wasn’t detailed in the study but it’s most likely either a stress fracture or “shin splints.” Regardless, there are several precautionary measures that you can take to avoid injuries to your lower leg. For one thing, you should wear a good pair of running shoes that provide you with adequate shock absorption. Another thing is to limit the amount of running that you do on hard, unforgiving surfaces such as paved roads. In lieu of running, you should occasionally perform some type of non-impact activity such as biking or swimming.

Physical Characteristics

The researchers found that there was a strong correlation between the time that it took to complete a two-mile run and the risk of injury: Individuals who ran slower had a greater tendency to get injured than those who ran faster. This finding is consistent with that of several other studies. Since faster times are directly related to higher levels of aerobic fitness, it can be said that those with lower levels of aerobic fitness have a higher risk of injury. The message here is loud and clear: Make sure that you include aerobic training in your program on a regular basis (without overdoing it, of course).

In addition, the study showed that individuals who did fewer push-ups and – at least in the case of men – fewer sit-ups had a greater tendency to get injured. This implies that muscular endurance – or lack thereof – is associated with a greater potential for injury. However, you can increase your muscular endurance by increasing your muscular strength.



Interestingly, the study also revealed that men who were either very flexible or very inflexible had an increased likelihood of injury. For many years, it was thought that being more flexible reduced the risk of injury. But apparently, you can be too flexible. The point here is that a moderate amount of flexibility is good. So while you should strive to improve your flexibility, there’s no need for you to be a contortionist.

Lifestyle

Here’s something else of interest: Individuals who smoked had a greater tendency to get injured. Cigarette smoking has negative effects on the immune system. As a result, smoking cigarettes could delay the healing process and increase the risk of complications. In addition, smokers may be more susceptible to future injury.

THE BOTTOM LINE

By the very nature of your job as a police officer, you have a higher risk of injury. One of your goals in preparing for your job, then, is to reduce that risk.

Matt Brzycki is the assistant director of Campus Recreation, Fitness at Princeton University. A former Marine Drill Instructor, he has authored, co-authored or edited 16 books on strength and fitness, including SWAT Fitness (available at www.optacinternational.com).