Smoking negatively impacts physical activity—immediately and long-term. In addition to cancer, heart disease and respiratory diseases, smokers have less endurance, reduced physical performance and higher rates of injury.

Smoking Reduces Physical Health and Athletic Performance
Tobacco smoke contains carbon monoxide. When inhaled, it binds to red blood cells, which displaces oxygen and prevents its delivery to muscle cells. Smoking also constricts blood vessels, limiting blood flow to the muscles. Less blood and oxygen flow means that it’s harder to build muscle and muscles tire more easily.\(^1\) The nicotine in tobacco narrows blood vessels and puts added strain on the heart, too, which can weaken it, over time.\(^2\) All of these factors affect physical health and athletic performance.

- The decrease in oxygen caused by smoking causes smokers to have higher resting heart rates than nonsmokers, which means their hearts are always working harder to pump blood and oxygen to the body—even for everyday activities, like walking up stairs. Smokers also have lower maximum heart rates than nonsmokers, because their hearts are not able to efficiently pump the extra nutrients and oxygen rich blood to their muscles during times of stress, including exercise.\(^3\)
- Smoking at any age damages your lungs, but smoking during adolescence also stunts lung growth and can cause lung function to decline years earlier than nonsmokers. As a result, children and teens who smoke are less physically fit and have more breathing problems.\(^4\)
- Smokers suffer from shortness of breath almost 3 times more often than nonsmokers.\(^5\) Smoking is related to chronic coughing, wheezing and asthma in children and teens.\(^6\)
- Smoking disrupts bone growth. This can be particularly concerning during adolescence, when teens’ skeletons are growing rapidly. Smokers have a higher risk of bone fractures, and their broken bones take longer to heal. This is because the chemicals in cigarette smoke limit your body’s ability to form healthy, new bone tissue and also break down existing bone tissue. Over time, this lessens bone density and causes bones to become weak and brittle.\(^7\)
- Smokers tend to be less physically active than nonsmokers.\(^8\) While some people unwisely begin or continue to smoke as a weight control measure, research suggests that the links between smoking, less physical activity and decreased physical performance actually hinder healthy weight control.\(^9\)
- People who quit smoking demonstrate improved exercise performance compared to those who continue to smoke.\(^10\)

Physical Activity Prevents Smoking and May Help Smokers Quit
The good news is that individuals who exercise are less likely to smoke, and engaging in exercise may be able to help smokers quit.\(^11\)

There are benefits to quitting smoking at any age. While some of the benefits occur long-term, there are immediate benefits that can boost physical performance, too. For example:

- 20 minutes after quitting, your heart rate drops.
- 12 hours after quitting, carbon monoxide levels in your blood drops to normal.
- 2 weeks to 3 months after quitting, your lung function begins to improve.
- 1 to 9 months after quitting, your coughing and shortness of breath decrease.\(^12\)

运动和体育活动可以防止吸烟，并可能帮助吸烟者戒烟
好消息是，进行体育活动的人更不可能吸烟，而且参与体育活动可能有助于帮助戒烟。吸烟者的体育活动水平和下降的体育表现实际上妨碍了健康的体重控制。

戒烟有好处。虽然某些好处的长期，有即刻的好处可以提升体能，例如：

- 20分钟后，心率下降。
- 12小时后，血液中的碳氧合物水平下降到正常。
- 2周到3个月内，肺功能开始改善。
- 1到9个月内，咳嗽和气短降低。
More information on the health harms of tobacco use is available at http://www.tobaccofreekids.org/facts_issues/fact_sheets/toll/products/.