EW Skorpinski et al. J Allergy and Clin Immunol. (2006) February p 463 – 464
Two cases of accidental epinephrine injection into a finger

Severe allergic reactions are life-threatening but often difficult to guard against (e.g. nut allergy). Teachers, first aiders, and many others can expect to encounter severe allergic reactions in those who they care for. Adrenalin is a life-saving treatment in these cases.

Epipens contain injectable adrenalin. They may be used by first-aiders and suitably trained lay persons for the purpose of saving life. HSE web site information states:

> *first aiders may administer an Epipen if they are dealing with a life threatening emergency in a casualty who has been prescribed and is in possession of an Epipen and where the first aider is trained to use it.*

It is likley that people with the potential for anaphylactic shock will have been idenified by a GP but it is also possible that they have not and even if they had, the first person to the scene may have no idea of the curent prescription status of the casualty. Many first aiders and carers now carry epipens for just such eventualities.

Adrenaline acts many ways, including the constriction of blood vessels. This property is of use when closing wounds. The dose in an epipen (typically 0.3mg) is many times higher than that used in wound repair work and can in principle lead to damaging loss of circulation in the extremeties.

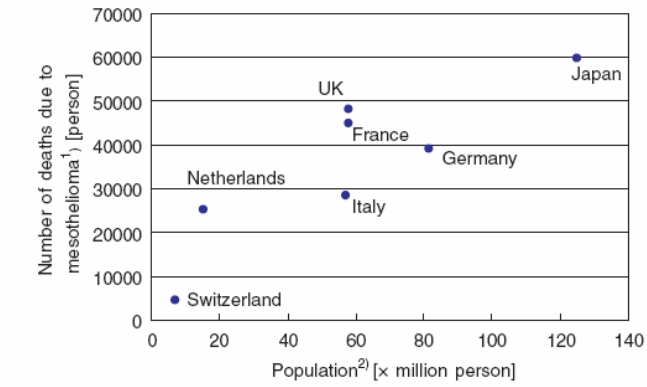
The article refered to here recounts two incidents where the contents of an epipen were discharged into the hand. Both cases took several hours to recover full use of the hand. There were no other side effects and no long-term effects.

H Aksoy et al. Journal of Applied Tox. (2006) Vol. 26 p 10 – 15
Genotoxicity study in lymphocytes of offset printing workers

Several markers for genetic change were detected more often in blood samples taken from printing workers than from controls. The differences in the rates of genetic change were highly statistically significant but the meaning of these differences remains speculative, similar changes are seen in smokers. The authors propose a link with cancer might be expected.

T Murayama et al. Am J Ind Med (2006) Vol.49 p 1 – 7
Estimation of Future Mortality From Pleural Malignant Mesothelioma in Japan Based on an Age-Cohort Model

Use of asbestos in Japan has only recently been subject to regulatory control but began to decline in 1990. the authors note that their prediction of the total mortality from mesothelioma in Japan seems to fit a linear relationship with total population:



TP Brown et al. Env Health Persp (2006) Vol.114#2 p 156 - 164
Pesticides and Parkinson's Disease—Is There a Link?

> *At present, the weight of* [epidemiological] *evidence is sufficient to conclude that a generic association between pesticide exposure and PD exists but is insufficient for concluding that this is a causal relationship or that such a relationship exists for any particular pesticide compound or combined pesticide and other exogenous toxicant exposure.*

[Editor's note: naturally the epidemiology is dominated by case control studies. The review reported here did not report on publication bias]

SK Obendorf et al. Arch. Environ. Contam. Toxicol. (2006) Vol.50 p 31 – 44
Distribution of Pesticide Residues Within Homes in Central New York State

Maximum residue levels were in carpets, in the homes of certified pesticide applicators, and tended to be highest in summer. Levels were typically in the 10 $\mu g/m^2$ range. There is no known method of converting domestic residue levels into human exposure levels; residues may have come from humans in the first place.

L Hou et al. Epidemiology. (2006) Vol.17 p 302 – 307
Pendimethalin Exposure and Cancer Incidence Among Pesticide Applicators

We did not find a clear association of lifetime pendimethalin (*N*-[1-ethylpropyl]-2,6-dinitro-3,4-xylidine)exposure either with overall cancer incidence or with specific cancer sites.

HSE RR408
Genetic variation in susceptibility to chronic effects of organophosphate exposure

Sheep dippers who complain of chronic ill health attributable to sheep dipping were found to have some genetic differences. Differences were observed on genes associated with the metabolism and elimination of organophosphates.

P Wild. OEM (2006) Vol. 63 p 4 – 9
Lung cancer risk and talc not containing asbestiform fibres: a review of the epidemiological evidence

Talc mineral $Mg_3Si_4\ O_{10}\ (OH)_2$ contains the same elements as chrysotile asbestos and forms planar crystals which stack in a similar way to graphite. Fragments of these planar crystals do resemble fibres and are referred to as asbestiform fibres. In 1987 IARC decided that talc containing asbestiform fibres was carcinogenic to man.

This review concluded that in talc millers, where the exposure to other carcinogens was known with some certainty, and where there were no asbestiform fibres, there was no evidence of excess risk of lung cancer.

It is possible to induce cancer in rats when lungs are overloaded with talc, but the same could be said of any particulate material.

Talc has been used as a lung treatment, with no cases of cancer associated.

N Mageroy et al. OEM (2006) Vol.63 p 92 – 97.
A Higher Risk of Congenital Abnormalities in the Offspring of Personnel Who Served Aboard a Norwegian Missile Torpedo Boat.

The prevalence ratio of having a child with congenital malformations associated with working on the *KNM Kvikk* was 4.0 (95% CI 1.9 to 8.6). The prevalence ratio of having a child who was stillborn or died within one week was 4.1 (95% CI 1.7 to 9.9). No reason for this could be found.

F Larese Filmon et al. OEM (2006) Vol.63 p 121 – 125
Latex allergy: a follow up study of 1040 healthcare workers

At baseline, glove-related symptoms were seen in 22% of nurses, 2.3% had asthma and/or allergic rhinitis. Symptoms were highly likely to be related to latex allergy (OR = 9.70; 95% CI 5.5 to 17). Within 3 years of introducing a no-powder policy, symptoms had significantly improved (or completely cleared) and there were no new cases of latex allergy.

R Kanwal et al. JOEM (2006) Vol.48#2 p 149 – 157

Evaluation of Flavorings-Related Lung Disease Risk at Six Microwave Popcorn Plants

Microwave popcorn workers at many plants are at risk for flavoring-related lung disease. Peak exposures may be hazardous even when ventilation maintains low average exposures. Respiratory protection and engineering controls are necessary to protect workers.