

Basic Facts on Tobacco Cessation

- There are approximately 46 million adult, and five million youth, smokers in the United States
- Smoking currently costs the U.S. economy approximately \$150 billion annually, in health care costs, lost wages, and reduced productivity
- More than premature 400,000 deaths, in the U.S. alone are caused by tobacco, many of which could be prevented by quitting tobacco use at any age
- Approximately 70percent of U.S. smokers say they would like to quit
- Approximately 60 percent of U.S. smokers make a quit attempt each year
- Approximately 3 percent of U.S. smokers successfully quit each year
- Approximately 70percent of all smokers visit a physician at least once a year, providing an opportunity for delivery of cessation treatment
- The single, most important factor in successfully quitting smoking is the strength of the prospective quitter's motivation to quit – when the motivation is strong and they understand, and are prepared to deal with, the challenges involved, success rates are much higher
- It takes most smokers several serious quit attempts, often over a period of years to successfully quit
- Most quit attempts are made without the use of pharmaceutical aids or counseling, but...
 - When a pharmaceutical aid (a nicotine replacement product or Zyban) is used, success rates can double
 - When a pharmaceutical aid and counseling – through a telephone quitline or by a physician or other health care provider – are used, success rates can triple or more
 - Adding social support – from a friend, family member, or quitting “buddy” – further increases the chances of success
- Reimbursement of health care providers who provide treatment for nicotine dependence and smoking cessation, and insurance coverage for smokers who are trying to quit, are considered essential if broad success is to be achieved in the U.S. in reducing the number of smokers
- There are also several policy measures which have been demonstrated to provide impetus for cessation attempts – notably, increasing the cost of cigarettes through higher excise taxes and reducing the number of workplaces and public areas where smoking is permitted

- Currently, first-line FDA-approved smoking cessation products are nicotine gum, nicotine patch, nicotine inhaler, nicotine nasal spray, nicotine lozenge, and an antidepressant, Zyban (or bupropion)

- Two other products (clonidine – an antihypertensive and nortriptyline – an antidepressant) are recommended as second-line medications, to be used only if the first-line therapies listed above are not successful or if there is a patient-specific reason that any of the first-line medications cannot be used

- There is either insufficient evidence to recommend, or evidence which precludes recommending, the use of other therapies for smoking cessation, such as acupuncture, hypnosis, physiological feedback, or restricted environmental stimulation therapy

- While there do not appear to be any new, “breakthrough” therapies – either behavioral or pharmaceutical – on the immediate horizon, some new products will soon be available and promising, exciting research is continuing which could, if proven effective, change the entire way in which nicotine dependence and quitting smoking is treated. The product closest to being marketed is a Pfizer drug, Varenicline, which aims to reduce the urge to smoke by mimicking the effects of nicotine on brain receptors, without actually requiring the delivery of nicotine.

- Ongoing research, much of which, if ultimately proven useful, could substantially change how nicotine dependence and quitting smoking is treated includes:

- Gene therapy approaches, which may help identify people at high risk for nicotine addiction

- Further trials with existing antihypertensive and antidepressant medications, such as clonidine and nortriptyline (mentioned above) and others, such as lobeline, to test the specific circumstances in which they might prove useful

- New forms of delivery for nicotine replacement medications, including such possibilities as liquid drops, sub-lingual (under-the-tongue) tablets, and even lollipops (although lollipops, as currently marketed, have not been tested and approved by the FDA)

- Vaccine development, which can prevent nicotine dependence by blocking nicotine from reaching the brain – one such product, currently undergoing preliminary human testing is called NicVax and could be available for use in several years, depending upon the outcomes of current testing and FDA approval