INTRODUCTION

This Staff Paper responds to a request from Senator Stevens, Chairman of the Subcommittee on Civil Service, Post Office, and General Services of the Senate Government Affairs Committee. Senator Stevens interest relates to a bill he has introduced to restrict smoking to designated areas in Federal buildings.

Three subject areas are covered in this paper: 1) a review of the literature about the health effects of passive, or involuntary, smoking; 2) a description of workplace smoking policies in the Federal Government, at the State and local levels, and in the private sector; and 3) a discussion of factors to be considered in evaluating the cost-effectiveness of smoking policies in the workplace.

Information about health effects comes in part from previous reviews, including work done by the National Academy of Sciences (NAS) and from various volumes of the Surgeons General reports on *The Health Consequences of Smoking*. A portion, but not all, of the primary health effects literature has been reviewed by OTA. Most of the more recent studies have been reviewed by OTA staff, but for earlier work, published synopses have been relied on.

While some information exists in the literature about workplace smoking policies, the workplace situation is changing rapidly. OTA staff collected a great deal of the information presented here through personal contact with individuals in the Federal Government, in State and local governments, and in the private sector, The section on costs and benefits builds on earlier OTA work on the costs of tobacco-related disease (OTA, 1985).

As a point of information, the National Research Council's (NRC) Board on Environmental Studies and Toxicology has a study in progress "toe valuate the problem of obtaining optimal measurements of exposure to tobacco smoke by nonsmokers in epidemiological studies and to evaluate the literature regarding health effects of such exposures." NAS has

assembled a committee of experts in the relevant fields to carry out this task. The final report will include (National Research Council, 1985):

a toxicologic profile of sidestream and exhaled smoke; review of its biological, chemical and physical characterization; identification of potential biochemical markers of exposure to a variety of the constituents of tobacco smoke; review of existing literature on the epidemiology of passive smoking; recommendations for future exposure monitoring, modeling, and epidemiologic research.

EPA's Office of Air and Radiation and the Office on Smoking and Health of the Department of Health and Human Services are supporting the NAS study. The report is scheduled for publication in late 1986.

OTA's review comes at a time when public attitudes toward smoking have been changing rapidly. The rights of nonsmokers have gained importance in policy decisions about smoking, which previously were based largely on considerations of efficiency and safety of workers and materials. A July 1985 survey of attitudes toward smoking conducted by the Gallup Organization for the American Lung Association elicited the following responses. Sixty-two percent of smokers, 85 percent of nonsmokers, and 78 percent of former smokers believe that smokers should refrain from smoking in the presence of nonsmokers. There was an increase of several percentage points for each category of respondents since the same question was posed in a 1983 survey. Of particular relevance to this staff paper was the question, "Should companies have a policy on smoking at work?" The response of 76 percent of current smokers, and 80 percent of both nonsmokers and former smokers was that certain areas of the workplace should be assigned for smoking. A further eight percent of all respondents thought smoking should be banned totally at work (American Lung Association, 1985c).

This Staff Paper does not provide recommendations or options for public health measures that could be based on the information presented. In accordance with the request for