

PROPOSED PROTOCOL

SINGLE, MASSIVE, ACUTE VINYL CHLORIDE EXPOSURE

The purpose of this experiment is to evaluate the risk of oncogenesis from the exposure of a community containing a spectrum of age groups to a single, massive dose of vinyl chloride that might result from a "worst credible accident" to tank cars or barge transporting vinyl chloride through an urban area.

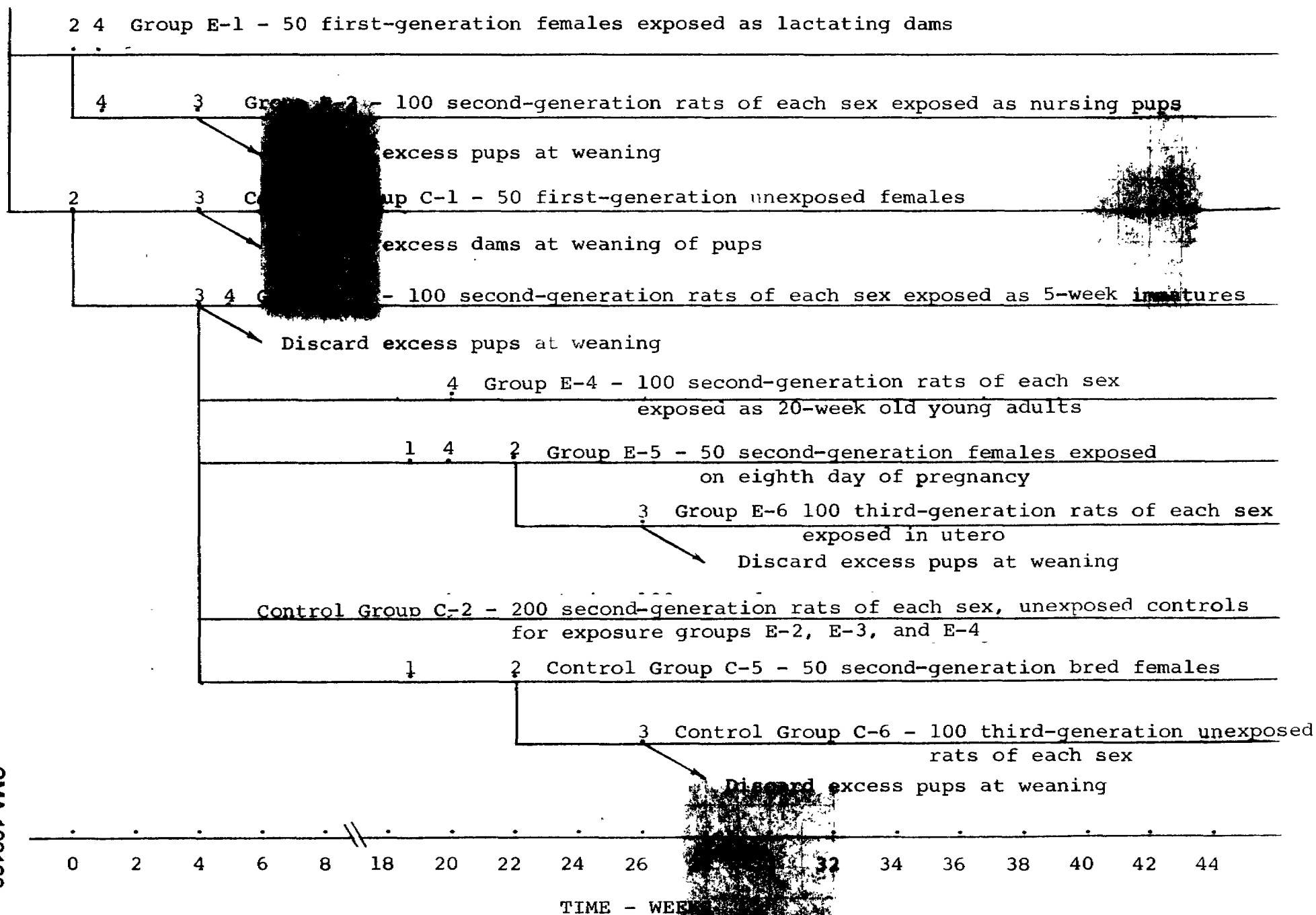
It is proposed to expose rats in the following categories to the highest single acute exposure that the most sensitive members of the exposure groups can tolerate without significant acute mortality. The groups will consist of: E-1 -- lactating dams; E-2 -- nursing pups; E-3 -- immature rats of both sexes; E-4 -- young adults of both sexes; E-5 -- pregnant (8-day) females; E-6 -- animals exposed in utero as the fetuses of group E-5.

In order to maintain synchrony among the various groups, and thus to minimize the control groups required, it is proposed to start with a colony of synchronously bred females, and to expose selected families from the colony as groups E-1 and E-2 one week after whelping. Control group C-1 would be randomly selected from other members of the colony, and the remainder of the first generation colony sacrificed after weaning of their pups.

All remaining test and control groups would be selected from the second generation animals or their offspring as portrayed schematically on the attached flow sheet.

All animals would be observed for the remainder of their normal life spans, and surviving animals then sacrificed for histological study.

Colony stock of synchronously bred female rats, to whelp on day "0"



Legend: 1 = time of br

time of whelping, 3 = time of weaning, 4 = time of exposure