


# SACRIFICING ONE WON'T SAVE THE OTHER

## Animal experiments don't "save children" because animal experiments don't work.

### YOU MIGHT BE SURPRISED TO KNOW...

**Your tax dollars pay an estimated $12-18 billion a year to breed and kill animals in misleading studies that compromise human safety.** Each year, the National Institutes Of Health (NIH) and more agencies fund old-fashioned experiments to poison and mutilate dogs, cats, primates, mice, birds...

Tens of millions of animals are annually used in safety/efficacy tests for drugs, chemicals, consumer goods. **Animal experimentation is "expensive, time-consuming, uses animals in large numbers, and it doesn't always work."** *Francis Collins, director, NIH Nat'l Human Genome Research Institute*

**Animal research does not protect human health and well being. It endangers.** *Moneim A. Fadali, M.D., Diplomat, American Board of Surgery*

### IS IT EVEN ABOUT THE "RAT OR THE CHILD?"

No. It's actually irresponsible to presume that harmful impact seen in one species occurs in another. Science itself accepts that vastly different genetic, metabolic, anatomic, physiological, psychological...traits between species make extrapolation to humans deceptive.

**9 of 10 experimental drugs fail in clinical studies because we cannot accurately predict how they will behave in people based on laboratory and animal studies.** *Mike Leavitt, former U.S. Health & Human Services Secretary*

**Erroneous animal data propels new drugs from clinical trials to market and has contributed to so many *adverse drug reactions* - ADRs are the 4th top cause of USA fatality. Over 2 million victims annually suffer ADR-related disability, hospitalization; 100,000 die** (*U.S. Food & Drug Administration*)

Lab-induced injury and disease don't yield clinical outcomes related to humans. Animals poisoned with test materials do not parallel human intake or exposure levels. And no two species metabolize test drugs the same way. A digesting drug is exposed to various body functions that deviate significantly from species to species. Physiological pathways inside a pig, mouse, dog or cat don't resemble those in a human system. **Drug studies in animals produce results that are unreliable in humans.** (*Science Journal report*)

**A recent study shows that mice, widely used in medical experiments, are dangerously misleading for immune system analysis (including cancer and heart disease) and a total flop as data sources for at least 3 fatal human ailments — sepsis, burns, trauma.** That explains why all 150 animal-tested sepsis (infection caused full-body inflammation) drugs fail in humans. *Genomic responses in mouse models poorly mimic human inflammatory diseases, Proceedings of the National Academy of Sciences. Feb 2013*

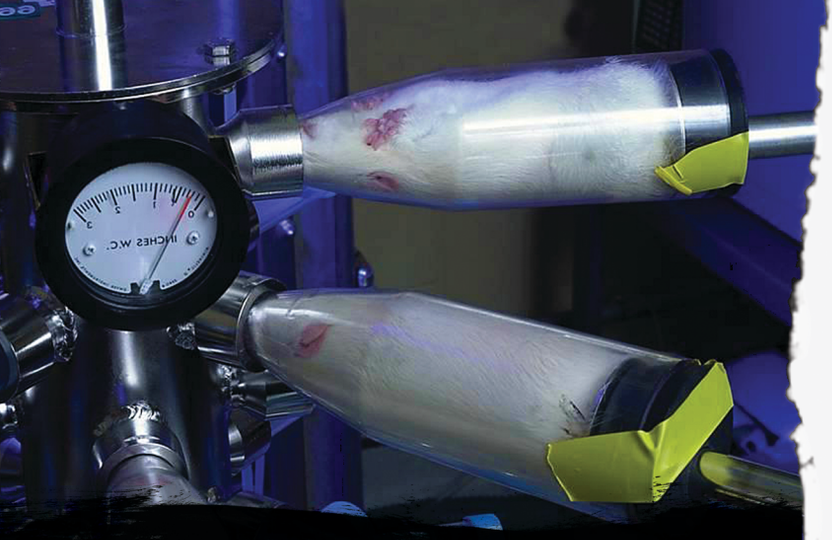
**I was stunned by just how bad the mouse data are. It's really amazing, no correlation at all. I think funding agencies are going to take note.** *Dr. Mitchell Fink, sepsis expert at University of California, Los Angeles*

### SMOKING ANIMALS: WASTED TIME, MONEY, LIVES

*For past tobacco tests, tubes are inserted in cut-open throats of (tracheostomized) dogs to pump smoke directly into their lungs. Monkeys in full-body restraint are forced to smoke cigarettes continually over 6 months.*

## Animals don't smoke. Why do we test on them?

Already known: Smoking harms fetuses and promotes cancer of lungs, larynx, tongue, salivary glands, pharynx and esophagus. Well-documented: Link between smoking and coronary heart disease, strokes and pulmonary illness. Long recognized: Smoking is addictive in humans. Yet animal tobacco experiments, more than a half century old, are still conducted on dogs, cats, primates, rabbits, pigeons, rats, hamsters and mice.



## Animals don't get nicotine addicted, don't even puff or drag like us.

**National Institutes of Health awards over $16 million in grants for nicotine experiments in fetal and newborn animals alone. Total taxpayer price is much higher.** Animals "smoke" via machines, masks, tubes...artificial means so unlike human intake that test findings are inconclusive or useless. For example, some animals acquire nicotine intravenously. Humans inhale it. Inhalation tests dose animals with mass amounts in controlled intervals. People are exposed to tobacco in uneven quantities over long spans. Nicotine addiction is an exclusively human behavior; animals don't get hooked on the stuff.

**Tobacco firms like Philip Morris, R.J. Reynolds and others hire contract labs to animal test each additive, cigarette paper or tobacco blend.** Tests are hidden from public view. Private and public funding for smoking animals could instead support clinical and epidemiological studies, education, prevention and termination programs.

**Animal studies show "no statistically significant increase in the incidence of malignant tumors, even though very long exposures and high doses of smoke were used. All 5 species used to evaluate carcinogenic potential produce results that are at variance with the epidemiological evidence in smokers."** *Review of Chronic Inhalation Studies with Mainstream Cigarette Smoke in Hamsters, Dogs, Nonhuman Primates. Christopher R. E. Coggins. Lorillard Tobacco Company, Greensboro, NC 27420. Accepted for publication in Toxicologic Pathology.*

● Eliot Spindel of Oregon Health and Science University has received millions to dose pregnant monkeys with nicotine via pumps surgically embedded in their backs. Babies are excised during developmental phases so experimenters can dissect their lungs. Since 1992, Spindel has failed to produce data that can't be gleaned from human clinical studies. Yet NIH subsidized his experiments through at least 2012...

● At Texas A&M University, rats ingest formula laced with nicotine, at the equivalent rate of 60 cigarettes a day. Experimenter Ursula Winzer- Serhan then decapitates the animals to analyze their brains.

● Kent Pinkerton, Univ. of California-Davis, confines pregnant rhesus monkeys in smoking chambers for 6-hour inhalation sessions, 5 days a week. Infants are lethally injected at 10-wks to dissect lungs.

● Yale University's Marina Picciotto has collected $15 million+ since 1996 to inject nicotine into abdomens or carved skull holes of mice and rats. Picciotto has even dangled mice by their tails from paper clips to observe nicotine's influence on anxiety and depression.

# AND SPEAKING OF KIDS...

## March Of Dimes spends donated dollars on old-fashioned animal tests, while other child charities sponsor progressive science.

ANIMAL-FREE RESEARCH is responsible for identifying the thalidomide disaster, fetal rubella syndrome, fetal alcohol syndrome, the folic acid deficiency link with spinal cord abnormalities, lead and methyl mercury's effect on development, and other breakthroughs. Decades of animal studies have not reduced rate of birth defects. Still, MOD subsidizes outmoded animal labs where experimenters:

- Sew the eyelids of kitten shut for up to a year before killing them.
- Isolate newborn kittens in lightless enclosures; kill them at 3 to 5 months.
- Excise fetal kittens from uterus, implant pumps in their backs, inject a nerve destroying drug, insert fetuses back in the uterus. At birth kittens are killed.
- Inject pregnant rats with nicotine or cocaine, despite fact that effects of cigarette and cocaine abuse on human babies are already known.
- Inject alcohol into newborn opossums before decapitating them hours later to inspect their gonads, despite ample data on alcohol risks in human babies.
- Transplant organs from pigs to baboons; guinea pigs to rats... in studies irrelevant to human health. Most animals died within hours.
- Damage eardrums of unborn lambs. Kill ewes and lambs to analyze brains.

### ANIMAL TESTS DON'T ADVANCE BIRTH DEFECT RESEARCH

The error margin is too wide to predict teratogenicity (ability to cause birth defects):

**1. SPECIES VARIANCE:** Genotype diversity in species affects how an agent alters fetus development. Plus, no species grow at the same pace. These discrepancies can trigger false conclusions about when/how test substances harm the fetus in development. A uniquely longer human gestation may make fetuses more susceptible to toxins. Placenta variations among species also sway data.
**2. UNALIKE DELIVERY METHODS:** Animals in birth defect studies get drugs by injection into the body cavity, intravenously, or by gastric tubes. Conversely, human exposure to the same drug may be via inhalation or skin absorption.
**3. DOSING TIMETABLES DIFFER:** Animals are usually dosed daily, a schedule

that doesn't reflect human exposure to a chemical or drug and can lead to false conclusions about fetal tissue vulnerability.
**4. TOXIC MOMS:** Animal tests almost always produce toxicity in the mother, whereas human maternal effects are not always present with birth-defect babies.
**5. STRESS FACTOR:** Stress from constant handling, restraint, food/water deprivation, noise, pain, fear, etc. harms fetal development.
**6. IMPRACTICAL:** Costly, lengthy animal tests are unfeasible as evaluation for thousands of existing chemicals, plus 1,000 new ones a year.

Flawed animal data endangers human health and impedes progress of human-relevant tools. Quicker, cheaper and reproducible in vitro studies enhance predictability, but need more funding and industry support before they can thoroughly assess human toxicity.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