

Introduction

The Animal Welfare Act (AWA) is the only law which protects the millions of animals that are used in experimentation every year. This law deals with many issues regarding animals that are confined within laboratories. Feeding, watering, cage cleaning, veterinary care, approval of experiments, etc. -- all of these things are regulated by the AWA.

The AWA is enforced by the United States Department of Agriculture/Animal & Plant Health Inspection Service (USDA/APHIS). APHIS inspects thousands of facilities every year. Are laboratories following the law? Is the AWA being routinely violated by major laboratories? How are animals being cared for?

Monitoring all laboratories and examining the use of all species in all laboratories would be an impossibly large task. The USDA regulates over 1.4 million animals in over 1100 laboratories every year. Therefore, this audit will not examine all facilities, but will attempt to look at a broad spectrum of facilities. Labs will be examined which represent a broad geographical range of the U.S. Labs with and without a history of violations will be examined. And facilities with a broad range of animal use (few animals used to large numbers of animals used) will be examined.

However, the use of primates in laboratories will be a substantial focus of this audit. Primates will be used for several reasons. First, a substantial portion of the overall number of primates used nationally can be examined because they are centered in a relatively small number of facilities. Second, relatively new regulations exist regarding environmental enrichment for primates, and the examination of the implementation of these new regulations will provide information on how well laboratories implement new rules.

Scope and Methodology

This audit will examine two different aspects of the Animal Welfare Act (AWA). Statistics published by the USDA/APHIS regarding violations of the AWA will be discussed. In addition, conditions within fifteen nationally known laboratories will be examined. Fourteen of these laboratories house primates. The number of primates confined within these labs ranges from zero to 3000. Laboratories within eleven states, and both USDA regions will be examined.

The documentation utilized for these examinations will have several sources. In some instances internal documentation for the specific laboratories in question will be utilized. In most instances USDA inspection reports for the last three years will be utilized. Published accounts of experimental protocols in medical journals will also be utilized.

This audit will examine trends in violations of the AWA. Specific violation categories will be developed, and quantified. Trends in violations will also be developed regarding a common pattern of violations within laboratories, etc. Special emphasis will be given to instances where animals have died as a result of inadequate care.

In general, the focus of this report will be to disclose the true level of conditions within nationally known laboratories. It is believed that these laboratories will be stereotypical of the entire system of laboratories across the U.S.

National Animal Welfare Act Violations

USDA/APHIS information regarding violations of the AWA is available on the USDA website at <http://www.aphis.usda.gov/ac/violationssumwopara.pdf> and http://www.aphis.usda.gov/ac/FY2002_3_81_violation_sum.PDF.

Upon examining the violations listed by the USDA, it becomes apparent that they fall into two categories. Some violations are relevant only to specific types of facilities. For example, research facilities are required by the AWA to maintain committees (Institutional Animal Care & Use Committees – IACUC) that evaluate and approve research protocols before they are performed. No other type of facility is required to have such a committee. Therefore violations regarding IACUCs are specific to research facilities. The second type of violation is not facility specific. This type of violation would include general requirements (i.e. feeding, watering & housing of each covered species). These violations are not facility specific, and are listed by the USDA in such a way as to make it impossible to determine the type of facility that had the violation.

In the area of violations that are specific to facility type and based on the section of the AWA violated, there were 1106 total violations from research facilities during 2002. These violations affected a total of 16,340 animals. Most salient among these violations were the 286 separate violations for inadequate veterinary care. This indicates that about 1 out of every 4 laboratories was cited for inadequate veterinary care. The table below lists these violations.

Summary of Animal Welfare Act Violations in Laboratories for 2002

Violation Category	#Violations	#Animals Effected
Registration	21	22
Institutional Animal Care & Use Committee	635	3,075
Personnel Qualifications	63	301
Attending Veterinarian and Adequate Veterinary Care	286	12,222
Record Keeping Requirements	33	660
Annual Report	13	60
Miscellaneous	55	2,507
Totals	1106	16,340

The USDA information contained 10,617 other violations in areas such as providing food & water, primary enclosures, indoor and outdoor facilities, etc. However, it was not possible to separate these violations in these areas for research facilities from those for dealers, exhibitors, etc. These violations are in the basic areas which could potentially effect any type of facility.

It is also significant to note that there were 227 separate violations of the requirements for providing environmental enhancement for primates. Many of these violations took place in research facilities. The trend towards non-compliance with this new area of enforcement will be examined when specific facilities are discussed.

Due to the nature of the USDA data, it is not possible to give totals for all violations that took place within U.S. laboratories. However, it is safe to conclude that the violations total listed above would be substantially increased if this were possible. It is also safe to conclude that all is NOT well within U.S. laboratories.

Violations at Specific Facilities

While national statistics regarding the performance of all laboratories in AWA compliance are useful, they do not provide a detailed picture of what goes on within specific laboratories. The development of this kind of information will require the utilization of documents which focus on specific facilities.

The USDA/APHIS typically inspects most research facilities annually, with some problem laboratories receiving more frequent inspections, and other laboratories receiving fewer inspections. The next sections of this report will discuss substantial violations relevant to specific research facilities.

Northwestern University

Inspection reports from USDA visits to Northwestern University dated 6/11/02 indicate violations within areas including veterinary care, IACUC, and personnel qualifications. Within these documents the deaths of several primates are discussed. Primate 8D4 died within ½ hour of the completion of a marathon 9-hour surgical procedure. Other investigators at Northwestern had completed similar procedures in half the time. Another primate, 9K2, is said to have died as a result of water deprivation. Apparently this primate was involved in a procedure wherein the animal's water intake was severely limited. At the same time the automatic watering system for a set of 4 monkeys, one of which was primate 9K2, was malfunctioning. This caused 9K2 to be water deprived even at times when water was supposed to be available, leading to death. The other three primates in this quad are also said to have been "very thirsty" when they finally received water.

It is quite apparent that negligence, combined with inadequately trained staff, and inadequate veterinary care lead directly to the deaths of two primates, and the suffering of others.

University of Pittsburgh

USDA documents from an inspection dated 9/3/02 discuss IACUC violations regarding a rabbit protocol. This protocol allows 24-hour restraint for rabbits for a period of 30 consecutive days while the rabbits undergo continuous motion on a hind leg.

There were several instances of sanitation violations. Also, there was a violation regarding environmental enhancement for primates. The report discusses seven primates who are individually housed, and one specific primate who was exhibiting stereotypical behavior.

On 11/26/02 the University of Pittsburgh was cited for another IACUC violation wherein a research protocol continued past the approved date. On 12/9/02 the university was again cited for cleaning and sanitation problems in the surgery area. This lab was again cited for sanitation problems on 1/7/03.

On 1/22/03 the University of Pittsburgh Plumborough Primate facility was cited for the use of expired drugs, inadequate care of primates recovering from anesthesia, inadequate storage of primate food, and unnecessary isolation of primates. On 3/4/03 this same facility was again cited for the use of expired drugs. Inadequate (too small) primary enclosures for primates was another violation on this date.

University of Wisconsin, Madison

USDA documents from inspections performed at the University of Wisconsin (Madison) on 8/20/02 discuss an incident of inadequate veterinary care for a pig which was being used in a surgical study. The inspectors observed the pig after surgery as being unresponsive, recumbent, and having a 1.5” diameter burn on the dorsal thoracic area. The inspectors viewed the pig again the following day, with no change. Treatment records for the pig did not show that it had even been examined on the day after surgery.

University of Pennsylvania

USDA inspection reports from 6/20/02 indicate violations in the area of inadequate veterinary care for inadequate monitoring of animals (sheep) after surgery was performed. The sheep were not receiving post-surgical pain relievers.

Cat records for 2001 did not indicate how the cats had been used, or in which experiment. The annual report for the facility was found to be in violation of USDA regulations because there were several potentially painful or stressful studies involving pigs and sheep which induced cardiovascular infarcts.

The automatic watering system in the Stemmler Biosafety Containment Suite was turned off preventing rabbits from having access to water. At least one rabbit drank “excessively” after the water was restored.

There are many instances of violations in areas of environmental enhancement for primates. Several examples are illustrative: “Two single housed rhesus in IHGT are exhibiting stereotypic behaviors but are receiving no additional special enrichment. These are rhesus 94B106 who is stress pacing and AC3H who is very aggressive and exhibiting saluting behaviors.”

Reports for 6/21/01 indicated violations in the areas of IACUCs, Veterinary Care (a repeat violation), Sanitation and Primary Enclosures. The IACUC violations involved improper multiple surgeries performed on rabbits and inappropriate analgesic administration.

Johns Hopkins University

USDA reports from inspections on 6/24/02 reveal violations in many areas. The IACUC is cited for inadequate justification of the use of baboons and squirrel monkeys in drug studies. The university is also cited for inadequate Veterinary Care. Expired drugs were in use and a dog, which was refusing food during experimentation, had not been noted as abnormal. The facility was also cited for using dogs in potentially painful or stressful experimentation without reporting these projects (congestive heart failure in dogs) as potentially painful or stressful.

Environmental Enhancement is also an issue at this facility because “Over half of the nonhuman primates are singly housed. . . . A baboon was housed alone with no other nonhuman primate contact and minimum enrichment at Asthma and Allergy. The baboon was acting distressed, pacing in circles.”

University of Florida

USDA information resulting from inspections at the University of Florida during September of 2002 reveal violations in a number of areas. Enclosures in three separate rooms housing dogs have “. . . excessive amounts of feces in them. The dogs in these enclosures are becoming soiled by the feces and also in some cases by the urine.” Several food storage rooms are contaminated with mouse droppings.

On August 26, 2002 the university is cited for inadequate veterinary care due to an incident involving several primates. There are two squirrel monkeys who had been used in experiments involving food deprivation. However, they still seem to have been underweight even after the food restrictions were removed.

Emory University

USDA inspection reports dated 3/18/03 discuss violations in the areas of IACUCs for improper internal inspections, and Housing facilities for non-human primates. A report from 8/23/02 discusses the death of Rhesus monkey #3566 on 4/16/02. Apparently this primate had been steadily declining since 6/01 – losing 32% of his/her body weight in this 14-month period. This primate had received multiple MPTP treatments over a 6-month period. The primate received treatment for clinical problems on 3/16 & 3/31. Health concerns were again raised on 4/14. However, the researchers did not observe the primate on this day, and were unavailable for contact from the veterinary staff. Husbandry staff didn't report the animal's anorexic condition until 4/15 – when the animal was found with no evident heartbeat or respiration, and hypothermia. The primate was revived, but was found dead the next morning.

Another incident at Emory described in the USDA report involves an “. . . anorexic, barely mobile, syringe-fed monkey that had been living in a sleep study cubicle for ‘several days’ following multiple, systemic MPTP injections.”

The USDA inspector concludes the report with this comment: “Recent incidents described herein demonstrate (a) lack (of) timely communications between investigators/husbandry staff and the attending veterinarian, one of which resulted in an animal death.”

Other inspection reports (from 3/30/00) list deficiencies in space requirements, environmental enrichment, and veterinary care. In relation to the Environmental enrichment violations the inspector makes an interesting statement: “. . . although a significant percentage of the macaques at the Yerkes Field Station are partially or entirely bald, this condition has not been noted as not normal, assessed for the extent of the condition, nor possible reasons or solutions investigated. The baldness appears to be due to overgrooming, and may indicate a need for the opportunity to express other normal behaviors (climbing, exploring) more frequently.”

The care of primates at Emory University is particularly important because Emory is the home of the Yerkes Primate Research Center, which handles over 3000 primates per year.

Duke University

USDA documents regarding inspections at Duke University performed on 9/17/02 indicate problems with the Environmental Enrichment program for primates. One specific owl monkey is noted as exhibiting symptoms of psychological distress. These symptoms include: self-clasping, poor haircoat, and depression. These violations follow a previous inspection (8/21/01) which also listed violations in the area of environmental enrichment.

This is significant because Duke University routinely handles over 400 primates per year.

University of Connecticut

The University of Connecticut comprises an instance of a facility that had been the target of enforcement activity by USDA/APHIS. Charges were filed against the University of Connecticut for inadequate Veterinary Care, IACUC violations, Sanitation, Handling and Housing in March of 2001. The charges were settled in January of 2002 when the university paid a \$129,000 fine. However, it appears that the fine has made little difference at the University of Connecticut.

On 5/30/01 the university was cited for many different violations. Uncorrected violations from a previous inspection included: shelter from sunlight, structural strength, and housekeeping.

More serious violations were listed in the area of personnel qualifications. "Twenty-two naked mole rats died after several days of husbandry neglect due to the caretaker/principal investigator being on vacation. The substitute caretaker was not contacted to care for the animals." One research protocol continued after approval for the experiment had expired. "An incident report on 2/01/01 detailed an investigation into a serious veterinary care issue involving a rabbit under protocol Y1401301. A rabbit had eviscerated post-operatively and a technician attempted to surgically correct the problem without contacting the attending veterinarian. The rabbit died." The inspector goes on to state: "The Institutional Official of this research facility has assured compliance with the Assurance statements on the Annual Report of Research Facility (APHIS Form 7023) by signing the Annual Report. It is apparent from the deficiencies described in this report that these Assurances are not being met."

On 8/13/01 the university is cited for a number of violations regarding cat surgeries. The issues cited include IACUCs, Personnel Qualifications, and Veterinary care. Several cats were inadequately observed after surgery, leading to the death of one cat: "Cat F083 surgery on 07-11-01 ended about 11 am. Next observation 135pm by the attending veterinarian, he noted the need to check every 15 – 20 minutes until recovered. Next observation 335pm cat still out, breathing very shallow – non-responsive. Called the attending veterinarian. 405pm not breathing – cyanotic dead. The surgeon explained that the animal was left unattended but checked about every 2 hours due to the people being in another building." There are also violations in the area of record keeping requirements. "Surgery record for cat F083 not available for inspection. The surgeon made out a new record and disposed of the original one."

The inspector makes a telling comment while reporting a repeat violation in the area of personnel qualifications: "It is apparent from the items noted in this inspection that the facility has not ensured that personnel are qualified to perform their duties. The person involved in protocol Y140801 was also involved in the protocol from the last inspection Y 140 1301. The facility procedure for post-op care indicates that the animal will be observed continuously until fully recovered. The surgeon said that the animal was observed every two hours."

On September 11, 2001 the university is cited with 4 repeat violations in the areas of IACUC, Personnel Qualifications, Veterinary care, and watering, and sanitation. On 11/14/01 the facility is again cited for inadequate veterinary care when 7 mole rats died post-op. On 6/11/02 the laboratory is again cited for problems in facilities, and sanitation.

On 8/26/02 the IACUC is again cited for multiple violations regarding protocol Y 140-1801. Incorrect medications were administered, and other drugs were administered at 150% of the correct dosage. As a result "The animal was unconscious for approximately 7 hours after receiving these medications. The animal also had to be supported with fluid therapy for 2 days post-op, and was inappetent during this time and received diazepam as an appetite stimulant. Overdose of medications can result in harm to animals. This protocol has to be reviewed, and no other animals used until the review takes place."

"A previously suspended protocol, Y140-1801, was originally suspended due to personnel qualifications. The protocol was modified, the appropriate personnel received instruction, and the activity allowed to re-commence. The first surgery with this amended protocol, the personnel did not follow the amended anesthetic protocol for this procedure, leading to anesthetic complications. The protocol has again been suspended, and personnel have been notified that they will no longer be allowed to perform this procedure. The use of improperly qualified personnel can result in harm to animals. Personnel must be adequately trained to perform activities they are conducting. The personnel qualifications need to be evaluated thoroughly before any activity is allowed to commence."

During the same inspection the food for one pig was noted to be contaminated by bird droppings. And flies were a major problem in the Upper Swine Unit.

On January 6, 2003 the University of Connecticut is again cited for violations in the area of Personnel Qualifications, Veterinary Care, and feeding.

Yale University

USDA documentation for routine inspections of Yale University dated 9/3/02 cites inadequate veterinary care for the use of outdated drugs (oxytetracycline and penicillin). Three nonhuman primates (94-37, 00-38 and 00-39) are exhibiting signs of distress as a result of insufficient environmental enhancement. Violations also exist in the areas of IACUCs in the area of records regarding experiments with kittens and personnel qualifications relating to inadequate dosing of post-operative analgesics. However, the most significant violation on this date is the fact that several primates were without water at the time of inspection. The inspection of 9/6/01 also showed a primate which indicated signs of psychological distress.

Harvard University

Government documents for 1/22/01 reveal violations in the areas of IACUCs, veterinary care, housing, and environmental enrichment. Several primates were recovering from anesthesia without posting of their condition or observation. Several primates are noted with substantial hair loss (a potential sign of stress), and another primate is showing evidence of a bloody nose. Primate #210-99 – “exhibits hair loss, crouching type behavior, and pattern type movements around cage. No evidence in records that any behavioral abnormalities were noted.” Information from other sources (i.e. a report filed by Harvard with the NIH) indicates that there are hundreds (457 in fiscal 2000) of primates at the New England Primate Research Center (NEPRC --affiliated with Harvard) that exhibit sufficiently aberrant behavior as to be used in studies of self-injurious behavior. The status of primates at Harvard/NEPRC is significant because according to government documents this facility handles well over 2000 primates per year.

McLean Hospital

USDA documents for inspections performed at McLean Hospital on 2/2/00 list many problems in the area of Veterinary Care and IACUCs relative to primates. Drugs that had expired as much as 2 years and 10 months before the inspection were still in use. Primates (#261-85 and #258-90) have “excessive generalized hair loss” and the records for these primates do not indicate that this has even been noticed. Primate #91-94 is “limping and holding left leg up.” Again, this health issue is not even mentioned in the records for this primate. There are violations regarding the IACUC which refer to a project which deprives primates of food.

By December 5, 2000 other expired drugs have piled up at McLean Hospital, and the condition of primates #261-85 and #258-90 have still not been noticed. And primate 91-94 now is “. . . still holding leg up and observations of foot at time of this inspection showed curled up appearance (disuse atrophy?).” Another primate, #347 also has unidentified health care issues.

California State University, Los Angeles

The most recent inspection report available for California State University is from 10/26/01. This report discusses only violations in the area of IACUCs referring to several projects that do not have sufficient information regarding searches for alternatives to painful procedures. This is listed as a repeat violation. More damning information is contained in a report from 9/29/00. In this inspection report the facility is cited for inadequate veterinary care: “There is still no written program of veterinary care by the attending veterinarian at this facility – original correction date was 10/24/99.” Other violations are in areas of sanitation, and housekeeping. The report concludes with: “This is a warning that you have had the same alleged violation(s) documented on your last two inspections. You are being given the opportunity to correct these violations only for the purpose of facilitating compliance with the Animal Welfare Act and the regulations and standards. If legal action is initiated against you, all alleged violations may be used as evidence at a formal adjudicatory hearing.”

It is somewhat puzzling that the most recent report does not discuss the resolution of violations from the previous inspection in the areas of sanitation and registration. Also, no mention is made of the potential regulatory action discussed in the previous report.

University of California, San Francisco

Inspection reports for the University of California, San Francisco (UCSF) beginning in September of 2000 reveal a continuing pattern of animal abuse and neglect. On September 27 & 28 USDA/APHIS officials performed an inspection of UCSF labs as a result of a complaint which was filed against the facility. Their inspections found that the complaint was “basically valid.” The complaint centered around experimentation on primates which denied them sufficient food and water. Violations in areas of IACUC, Personnel Qualifications, Veterinary care (“Monkey #17562 was identified as not being a good candidate for a water restriction study, due to a chronic diarrhea problem, according to veterinary statements in the animal’s medical record. The records did not indicate a resolution of the chronic diarrhea [a water loss problem], yet this animal remained assigned to the protocol and was placed on a long-term water restriction schedule in October 1999. The animal was also noted as thin and not gaining weight as early as July 13, 1999, yet no medical attention was provided for this problem until August, 2000.”), Handling, and Feeding. The inspector concludes the report with a very damning statement: “In my professional judgment, the nutritional requirements of these animals were not met for either food or water.”

On 5/17 – 25/01 UCSF is cited for IACUC violations for performing survival surgery on an animal that was sick, and for inappropriately monitoring a research protocol that involved confining primates to restraint chairs for a period of up to 8 hours, and improper use of post-operative analgesics. UCSF is also cited for inadequate veterinary care of sheep at this time.

On 7/30/01 UCSF is again inspected as a result of a complaint. The complaint was apparently filed because a primate had been ill and vomiting for approximately 5 weeks. This primate was also involved in a training protocol that involved water restriction.

On 11/13/01 UCSF is cited regarding IACUC and Veterinary Care for inadequate supervision of post surgical treatment of sheep.

On 1/28/02 the UCSF IACUC is again cited for ineffective monitoring of experimental procedures. Specifically, the primate water restriction project is mentioned again. Insufficient means of monitoring the weight loss of primates, and the endpoint necessary for the advent of veterinary involvement are deemed to be insufficient. The lab is also cited for inappropriate feed storage, primary enclosures, sanitation, and inappropriate waste disposal.

On 8/5/02 UCSF is again cited for IACUC violations for investigators not following experimental protocols, insufficient administration of analgesics, insufficient consideration given to potentially painful & stressful procedures (in primates), and inadequate veterinary care. The veterinary care incident involved a marmoset that had been allowed to lose 36% of his/her body weight without receiving any treatment. Violations in sanitation and cleaning are again mentioned.

On 2/4/03 UCSF is again cited for IACUC violations regarding post-surgical monitoring of primates and inadequate use of analgesics. These violations involve projects where holes were bored into the skulls of primates. The facility is also cited for falsification of animal records, and inadequate sanitation.

On 4/16/03 UCSF is again cited for IACUC violations for inadequate monitoring of experimental procedures and inadequate veterinary care. This occurrence of inadequate veterinary care resulted in the death of a rabbit. The rabbit was found unable to move, but was prepared for an injection as part of an experimental procedure without regard to his/her health. The rabbit died before the injection could be given. UCSF is also again cited for sanitation violations.

It must be noted that one primate project underway at UCSF, the research of Stephen Lisberger, involves severe restrictions of water intake for primates. It is worthwhile to note that this project has been funded by the National Institutes of Health for at least 22 consecutive years as of fiscal 2002. While the USDA has been making substantial efforts to deal with this protocol within the last several years, the question arises as to what happened to the primates in this experiment pre-2000? Since the experiment involved severe water restrictions, from the beginning, why was this not addressed sooner?

University of Washington, Seattle

USDA inspection reports for the University of Washington, Seattle (UW) reveal multiple violations for 4/1/03. Expired food was being given to cats and guinea pigs. Water was being denied to rabbits in the Comparative Medicine Building. The watering system had been disconnected for a period of 48 hours without being noticed by the animal care staff.

Internal documents obtained from the UW indicate significant problems in areas of primate care. One primate (K93464) died (9/01) as a result of ingesting a set of latex gloves. Another primate (T93497) died (1/01) after being anesthetized for a blood draw, potentially as a result of anesthetic overdose. Another primate (#93169) died (7/00) of anesthetic overdose. Two primates (A00131 & 98026) in the care of investigator CC Tsai died with "total absence of body fat stores" and "total absence of subcutaneous fat." Dehydration is also discussed in reference to primate #98026. Primate F93276 died 6/01 is discussed as having "Malnutrition, chronic, severe" and "Dehydration, severe."

Conclusion

This audit has examined both national trends in violations of the Animal Welfare Act (AWA) by all U.S. laboratories as well as instances of AWA violations by specific facilities. The national pattern of violations tends towards the largest percentage of non-compliances in areas of IACUCs (635) and Veterinary Care (286). The national statistics (though not specific to laboratories) also pointed to significant violations (227) in the area of environmental enhancement for primates.

When these statistics are examined more closely we discover that approximately 1 out of every 4 labs have been cited for inadequate veterinary care, and 3 out of every five labs have been cited for inadequate functioning of the Institutional Animal Care & Use Committee. The only conclusions that can be drawn from these statistics are:

- 1. Significant percentages of the approximately 1.4 million animals that are housed in labs are not receiving adequate veterinary care.**
- 2. The Institutional Animal Care and Use Committees system is primarily ineffective at regulating animal experiments.**
- 3. A significant percentage of the primates confined within U.S. laboratories are severely stressed and potentially psychologically abnormal.**

When looking at the specific fifteen facilities discussed in this report, similar trends are seen. Thirteen of the fifteen labs had violations in the area of Veterinary Care. Eleven of the fifteen labs had violations in the area of IACUCs. Seven of the fourteen (University of Connecticut had no primates) had violations in the areas of Environmental Enhancement for primates. Two of the most consistent violators of the AWA – the University of California San Francisco (UCSF) and the University of Connecticut (UCONN) have repeated violations in the area of Veterinary Care and Institutional Animal Care & Use Committees. Within a three year period UCSF was cited for IACUC violations no less than seven times, and Veterinary Care five times. Despite having paid a \$129,000 fine for previous violations which included IACUC and Veterinary Care issues, UCONN violated these same regulations three times each in a three-year period, combined with a torrent of other serious violations.

The picture that is painted of laboratories by USDA reports is not a pretty one. Animals are suffering and/or dying of dehydration (Northwestern, University of Pennsylvania, University of Connecticut, Yale, University of Washington, UCSF). Primates are dying of inadequate veterinary care (Northwestern, Emory). Expired drugs are used without compunction. Rabbits eviscerate following surgery. The unused leg of a primate goes unnoticed for ten months until it shrivels from disuse atrophy. Severely stressed primates pace their cages ripping out their hair. Animals of many species are deprived of food or simply ignored until they die. And all of this is watched over by ineffective Institutional Animal Care & Use Committees constituted of professional personnel (i.e. DVMs, PhDs, and MDs) that apparently can't be bothered to insure adequate use of pain relievers or the following of experimental protocols.

It is quite apparent that the system designed to protect animals in laboratories is broken, possibly beyond repair. In some instances regulatory actions are not taken by appropriate agencies, and even when stiff fines are levied (i.e. \$129,000) it appears to make no difference. Regulations are broken repeatedly; faulty experiments are carried out by unqualified personnel. Animals suffer and die unnecessarily behind the locked doors of laboratories across the U.S.

Appendix I
Facility Violation Trends

Violations in:			
Facility Name	Environmental Enhancement	Veterinary Care	IACUC
Duke	X		
U of CT		X	X
Yale	X	X	X
Harvard	X	X	X
McLean Hospital		X	X
Northwestern		X	X
U of Pittsburgh		X	X
U of PA	X	X	X
U of WI, Madison		X	
U of FL		X	
Emory	X	X	X
U of CA, San Francisco	X	X	X
U of WA, Seattle			
California State University, Los Angeles		X	X
Johns Hopkins	X	X	X
Totals	7	13	11