REDUCING ADMINISTRATIVE BURDEN FOR RESEARCHERS: ANIMAL CARE AND USE IN RESEARCH

A Report by the

National Institutes of Health, HHS,

Animal and Plant Health Inspection Service, USDA,

and

Food and Drug Administration, HHS

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Preface

This report describes the recommendations of the 21st Century Cures Act Section 2034(d) Working Group (Working Group) in accordance with Title II, Section 2034(d), of the 21st Century Cures Act, and decisions of the National Institutes of Health (HHS), Animal and Plant Health Inspection Service (USDA), and the Food and Drug Administration (HHS) on the recommendations. The roster of the Working Group is as follows:

Chair

Patricia Brown, NIH

Executive Secretary

Lori Hampton, NIH

Members

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Executive Summary

Title II, Section 2034(d) of the 2016 21st Century Cures Act (21CCA) directs the National Institutes of Health (NIH), in collaboration with the United States Department of Agriculture (USDA) and the Food and Drug Administration (FDA), to complete a review of applicable regulations and policies for the care and use of laboratory animals and to make revisions, as appropriate, to reduce administrative burden on investigators while maintaining the integrity and credibility of research findings and protection of research animals. The Act instructs NIH to: (1) seek the input of experts, if appropriate; (2) identify ways to ensure applicable regulations and policies are not inconsistent, overlapping, or unnecessarily duplicative; (3) take steps to eliminate or reduce identified inconsistencies, overlap, or duplication among such regulations and policies; and (4) take other actions, as appropriate, to improve the coordination of regulations and policies with respect to research with laboratory animals.

NIH, USDA, and FDA convened a Working Group of federal subject matter experts that carried out a review of applicable regulations and policies to identify approaches to reduce the administrative burden associated with research activities with laboratory animals.

To identify inconsistent, overlapping, and unnecessarily duplicative regulations and policies, the Working Group:

- reviewed published reports, communications, and surveys highlighting the regulations and policies that contribute to researchers' administrative burden (Section 1, page 2);
- conducted listening sessions and met with organizations and stakeholders (Section 2, page 3); and
- issued a Request for Information (RFI) on proposed actions and analyzed stakeholder responses (Section 3, pages 3-4).

Following this research and analysis, the Working Group sought input through an RFI on its proposed recommendations in a draft report (Section 4, page 4). The Working Group issues its final report here on behalf of the NIH, USDA, and FDA.

The Working Group identified the following areas in which there is opportunity to reduce administrative burden: semiannual inspections by Institutional Animal Care and Use Committees (IACUC), animal activities (protocol) review, and institutional reporting. Steps by the agencies to reduce duplicative regulations and policies are provided on pages 5-6.

The Working Group identified the following areas in which there is opportunity to improve coordination: guidance on federal standards, agency harmonization, and training and resources. Actions of the agencies to improve coordination of regulations and policies are provided on pages 7-8.

Full details of the Working Group's activities and analysis can be found in the appendices:

- Appendix 1. Analysis of Key Findings from the Reports, Communications, and Surveys
- Appendix 2. Analysis of Responses to the Request for Information
- Appendix 3. Analysis of Responses to the Draft Report of the Working Group
- Appendix 4. Timeline of the Working Group Outreach Activities
- Appendix 5. Acronyms Used in the Report

In the next two years, NIH, USDA, and FDA intend to make progress on the steps and actions described in this final report and will identify additional ways to protect animal welfare while reducing unnecessary administrative burden on researchers.

Introduction

The 21st Century Cures Act (21CCA), Public Law 114-255, is comprehensive legislation intended to accelerate the research and drug approval process and address the opioid epidemic and mental illness, among other purposes. The legislation provides NIH with critical tools and resources to advance biomedical research across the spectrum, from basic research studies to advanced clinical trials of promising new therapies. Included in 21CCA are provisions aimed at reducing administrative burden on the research community. The legislation requires the conduct of activities to promote the development of researchers, including evaluation and oversight of existing programs. Section 2034(d) of 21CCA directs NIH, USDA, and FDA to: "[R]eview applicable regulations and policies for the care and use of laboratory animals and make revisions, as appropriate, to reduce administrative burden on investigators while maintaining the integrity and credibility of research findings and protection of research animals." Section 2034(d) then identifies specific activities expected by Congress:

- 1. identify inconsistent, overlapping, and unnecessarily duplicative regulations and policies with a focus on inspection and review requirements;
- 2. take steps to reduce same; and
- 3. take actions, as appropriate, to improve coordination of regulations and policies with respect to research with laboratory animals.

Accordingly, the NIH, USDA, and FDA 21st Century Cures Act Section 2034(d) Working Group (Working Group), composed only of federal employees, prioritized its work according to the three specified directions: (1) identifying overlapping regulations and policies, (2) taking steps to reduce these regulations and policies, and (3) taking actions to improve coordination.

This final report describes the efforts of the Working Group and others within the federal government, their proposed recommendations to reduce the administrative burden associated with research activities involving laboratory animals while maintaining appropriate protections and scientific integrity, and the decisions of the NIH, USDA, and FDA on the recommendations.

Review of Applicable Regulations and Policies to Identify Inconsistent, Overlapping, and Unnecessarily Duplicative Regulations and Policies

The Health Research Extension Act (HREA) of 1985 (Public Law 99-158; <u>https://olaw.nih.gov/policies-laws/hrea-1985.htm</u>) provides the legislative mandate for the Public Health Service Policy on Humane Care and Use of Laboratory Animals (PHS Policy; <u>https://olaw.nih.gov/policies-laws/phs-policy.htm</u>). The PHS Policy establishes standards for the proper care and treatment of animals used in research, and for the organization and operation of animal care committees. The PHS Policy applies to the use of live, vertebrate animals in any activity supported or conducted by PHS agencies and U.S. Department of Health and Human Services components. The NIH Office of Laboratory Animal Welfare (OLAW) has been delegated authority by the NIH Director for the general administration and coordination of the PHS Policy.

The Animal Welfare Act (AWA) directs USDA to ensure the humane care and treatment of certain animals sold for use as pets or used in research, public exhibition, or commercial transport. USDA, through the Animal and Plant Health Inspection Service (APHIS) Animal Care (AC) program, implements the AWA and Animal Welfare Regulations found in the Code of Federal Regulations (C.F.R.), Title 9, Chapter 1, Subchapter A, Parts 1, 2, and 3.

FDA promulgates Good Laboratory Practice (GLP) regulations (21 C.F.R. Part 58) under the Federal Food, Drug, and Cosmetic Act and Public Health Service Act (<u>https://www.ecfr.gov/cgi-bin/text-</u> <u>idx?SID=ceb39bbba7a0c11775d862a38f45dae0&mc=true&node=pt21.1.58&rgn=div5</u>). The GLP regulations establish administrative standards for the conduct of nonclinical laboratory studies that support, or are intended to support, applications for research or marketing permits for products regulated by FDA.

To identify inconsistent, overlapping, and unnecessarily duplicative regulations and policies, the Working Group:

- 1. reviewed applicable regulations and policies as they relate to published reports, communications, and surveys that address inconsistent, overlapping, or duplicative regulations (including the areas of inspection and review requirements) that contribute to researchers' administrative burden;
- 2. conducted listening sessions and met with organizations and stakeholders to obtain their individual perspectives; and
- 3. issued a Request for Information (RFI) in March 2018 (<u>https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-152.html</u>) to stimulate engagement with stakeholders concerning possible actions the agencies should consider for improving coordination and harmonization of regulations and policies.

The following sections highlight the outcomes of this review.

1. Reports, Communications, and Surveys Reviewed

The following documents were reviewed by the Working Group:

- Rebuttal to Federation of American Societies for Experimental Biology's Reforming Animal Research Regulations, February 2018, People for the Ethical Treatment of Animals (PETA), <u>https://olaw.nih.gov/sites/default/files/DOC_02082018_Peta.pdf</u>.
- Animal welfare regulations must not be compromised to comply with the goals of the 21st Century Cures Act, January 2018, Humane Society of the United States and Humane Society Legislative Fund, https://olaw.nih.gov/sites/default/files/DOC_01082018_HS.pdf.
- Reforming Animal Research Regulations: Workshop Recommendations to Reduce Regulatory Burden, 2017, report of an April 17, 2017 workshop organized by Federation of American Societies for Experimental Biology (FASEB), the Association of American Medical Colleges (AAMC), and the Council on Governmental Relations (COGR), with assistance from the National Association for Biomedical Research (NABR), <u>http://www.faseb.org/Portals/2/PDFs/opa/2017/FASEB-Animal-Regulatory-Report-October2017.pdf</u>.
- Revising the Requirements for Prompt Reporting Under PHS Policy IV.F.3., 2017, NABR, <u>https://olaw.nih.gov/sites/default/files/DOC_2017_NABR.pdf</u>.
- Optimizing the Nation's Investment in Academic Research: A New Regulatory Framework for the 21st Century, 2016, National Academies, <u>https://www.nap.edu/catalog/21824/optimizing-the-nations-investment-in-academic-research-a-new-regulatory</u>.
- Reducing Investigators' Administrative Workload for Federally Funded Research, 2014, National Science Board, National Science Foundation, <u>https://www.nsf.gov/pubs/2014/nsb1418/nsb1418.pdf</u>.
- 2012 Faculty Workload Survey Research Report, 2014, Federal Demonstration Partnership (FDP), <u>https://sites.nationalacademies.org/cs/groups/pgasite/documents/webpage/pga_087667.pdf</u>.
- Findings of the FASEB Survey On Administrative Burden, 2013, FASEB, http://www.faseb.org/portals/2/pdfs/opa/6.7.13%20FASEB%20NSB%20Survey%20findings.pdf.

Appendix 1 contains a summary of the key findings in the reports, communications, and surveys evaluated by the Working Group. It includes the Working Group's analysis of the impact of the findings on animal welfare and scientific integrity, indicating where statutory changes would be required and presenting proposed actions.

2. Listening Sessions and Meetings with Organizations and Stakeholders

The Working Group held listening sessions and meetings, leading up to the release of the RFI, to: explain the requirements in 21CCA, Section 2034(d); provide updates on the Working Group's progress; and encourage the research community, other stakeholders, and the public to provide their individual ideas for how to meet the requirements. In many cases the listening sessions were part of presentations by Working Group members at regional and national conferences and workshops. The slides presented and summaries of comments and meeting notes, where available, can be found at https://olaw.nih.gov/21st-century-cures-act.htm.

The following listening sessions and meetings were held:

- New Jersey Association for Biomedical Research, IACUC 24 Conference, September 22, 2017, Session: Hot Topics in Regulatory Compliance, Working Group member: Patricia Brown
- 68th American Association for Laboratory Animal Science National Meeting, October 17, 2017, Session: Adapting to Change in the Animal Research Oversight Environment, OLAW Update, Working Group member: Patricia Brown
- Scientists Center for Animal Welfare, Winter Conference, December 4, 2017, Session: OLAW Update, Working Group member: Patricia Brown
- Federal Demonstration Partnership Forum, Government-University-Industry Research Roundtable of the National Academies, 21st Century Cures Act NIH-USDA-FDA Listening Session on Animal Research, January 9, 2018, Working Group members: Patricia Brown, Estella Jones, Betty Goldentyer
- AAALAC International Council Teleconference Meeting, January 29, 2018, Working Group members: Patricia Brown, Estella Jones, Betty Goldentyer
- Question and Answer Session with the Animal Welfare Institute, Humane Society Legislative Fund, Physicians Committee for Responsible Medicine, and Humane Society of the United States, March 12, 2018, Working Group members: Patricia Brown, Estella Jones, Betty Goldentyer
- Public Responsibility in Medicine and Research, 2018 IACUC Conference, March 21, 2018, Working Group member: Patricia Brown

3. Public Comments on the Proposed Actions

The Working Group sought individual input from stakeholders on proposed actions that the agencies identified to improve coordination and harmonization of regulations and policies through an RFI issued in NIH Guide Notice NOT-OD-18-152, published March 14, 2018, at https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-152, published March 14, 2018, at https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-152, published as a Federal Register Notice at https://www.federalregister.gov/documents/2018/03/14/2018-05173/laboratory-animal-welfare-coordination-and-harmonization-of-regulations-and-policies.

Information requested in the RFI:

- A. Input on the following proposed actions that the agencies are considering:
 - 1. Allow investigators to submit protocols for continuing review using a risk-based methodology.
 - 2. Allow annual reporting to OLAW and USDA on the same reporting schedule and as a single report through a shared portal.
 - 3. Harmonize the guidance from NIH and USDA to reduce duplicative considerations of alternatives to painful and distressful procedures.
 - 4. Provide a minimum 60-day comment period for new OLAW policy guidance.
 - 5. Other approaches not previously mentioned.

- B. Feedback on whether the following tools and resources are or would be helpful for reducing burden on investigators:
 - 1. Encourage the use of sections of the AAALAC International (AAALAC) program description in applicable parts of the OLAW Animal Welfare Assurance, for institutions accredited by AAALAC.
 - 2. Encourage the use of the FDP Compliance Unit Standard Procedures (CUSP) as a repository of best practices for standard procedures used for research with animals.
 - 3. Encourage the use of the IACUC Administrators Association (IAA) repository of best practices by IACUCs.
 - 4. Encourage the use of new or existing tools to streamline protocol review through use of Designated Member Review (DMR), DMR subsequent to Full Committee Review (FCR), and/or Veterinary Verification and Consultation (VVC).
 - 5. Expanded IACUC training activities that focus on reducing burden on investigators.
 - 6. Other tools or resources not previously mentioned.

In response to the RFI, the Working Group received approximately 19,240 comments from stakeholders including researchers, academic and research institutions, animal welfare advocacy groups, scientific and professional societies and associations, other not-for-profit organizations, and the public. The Working Group appreciated the interest in the proposed actions and the time and effort taken to provide comments. The Working Group carefully considered the comments when developing the recommendations.

Overview of Public Comments

A significant majority of the comments from the research community were supportive of the proposed actions. This support was balanced by concerns presented by other stakeholders, including animal advocacy groups and the public. Appendix 2 presents a summary of the responses to each RFI topic with the Working Group analysis and proposed actions. Due to the volume of responses, similar comments were combined for brevity and efficiency. Comments that were not responsive to topics presented in the RFI are not included. Working Group responses that apply to multiple comments have been duplicated to allow commenters to easily identify the response to their specific concerns.

4. Public Comments on the Draft Report

The Working Group released a draft report and asked for public comment through a Request for Information (RFI) issued in NIH Guide Notice NOT-OD-19-028, published December 7, 2018, at https://grants.nih.gov/grants/guide/notice-files/NOT-OD-19-028.html and published as a Federal Register Notice at https://www.federalregister.gov/documents/2018/12/07/2018-26557/laboratory-animal-welfare-draft-report-on-recommendations-to-reduce-administrative-burden-on. The Working Group received 1,342 comments from stakeholders including researchers, academic and research institutions, animal welfare advocacy groups, scientific and professional societies and associations, other not-for-profit organizations, and the public. Overall the comments from the research community were supportive. This support was balanced by concerns presented by other stakeholders, including animal advocacy groups and the public. Appendix 3 presents a summary of the responses to the draft report with Working Group analysis and Agency decisions. Due to the volume of comments received, similar comments were combined for brevity and efficiency. General comments relevant to administrative burden or Working Group actions are listed at the end of Appendix 3 with the Working Group analysis and responses. Comments that were not responsive to topics presented in the RFI are not included. Working Group responses that apply to multiple comments have been duplicated to allow commenters to easily identify the response to their specific concerns.

Steps to Reduce Duplicative Regulations and Policies with a Focus on Inspection, Review, and Reporting Requirements

The Working Group was charged with considering steps to reduce inconsistent, overlapping, or unnecessarily duplicative regulations and policies with a focus on inspection and review requirements. The Working Group identified several opportunities to reduce administrative burden based on review of applicable regulations and policies relating to the reports, communications, and surveys listed above; comments during listening sessions and meetings with stakeholders; and responses to the RFIs. The Working Group recommended, and the agencies have decided, as follows:

Semiannual Inspections

- The HREA requires the IACUC to review the care and treatment of animals in all animal study areas and facilities of the research entity, at least semiannually. A change in the frequency of IACUC inspections would require statutory changes to the law and has a strong likelihood of negatively impacting animal welfare. NIH OLAW analysis of self-reports of noncompliance from 2017-2019 showed that approximately 7% of these self-reported noncompliances were identified during semiannual inspections. Review of OLAW-approved Assurance agreements showed that approximately 41% of institutions identified the semiannual inspection as a critical component of post-approval monitoring of approved activities. Taken together, these findings indicate that potential risks to animal welfare of less frequent IACUC inspections outweigh the burden on the IACUC and the principal investigators (PIs). The PHS Policy affords flexibility in the designation of IACUC inspectors and the conduct of inspections. For example, NIH OLAW allows the substitution of the AAALAC site visit for the semiannual program evaluation and provides details on the criteria for this provision. See Frequently Asked Question E.3. at https://olaw.nih.gov/guidance/faqs#650 and NIH Guide Notice NOT-OD-00-007 at https://grants.nih.gov/grants/guide/notice-files/NOT-OD-00-007.html. NIH will develop guidance to address existing flexibilities while fulfilling the purposes of the Act. NIH will seek public comment on the updated guidance.
- Section 2143(b)(3) of the AWA requires the IACUC to inspect, at least semiannually, all animal study areas and animal facilities of such research facility, and review as part of the inspection (A) practices involving pain to animals, and (B) the condition of animals, to ensure compliance with the provisions of the AWA to minimize pain and distress to animals. Exceptions to the requirement of inspection of such study areas may be made by the Secretary if animals are studied in their natural environment and the study area is prohibitive to easy access. According to 9 C.F.R. § 2.31(c)(3), "...the IACUC may determine the best means of conducting evaluations of the research facility's programs and facilities; and Provided, further, that no Committee member wishing to participate in any evaluation conducted under this subpart may be excluded. The IACUC may use subcommittees composed of at least two Committee members and may invite ad hoc consultants to assist in conducting the evaluations, however, the IACUC remains responsible for the evaluations and reports as required by the Act and regulations." USDA allows additional flexibility in how and by whom the semiannual inspections are conducted. For example, AAALAC site visits that are consistent with Section 2.31(c) of the Animal Welfare Regulations may be counted as one of the IACUC semiannual inspections.

Protocol Review

 The agencies will review and enhance current resources to support IACUC's use of existing options for streamlining protocol review and review of significant changes to approved protocols. This action includes updating resources to encourage the use of DMR for low-risk activities and for three-year complete review. DMR and FCR are equally acceptable methods for use by IACUCs when conducting protocol review. DMR and FCR must proceed as outlined in the PHS Policy IV.C.2. and 9 C.F.R. § 2.31(d)(2).

- The agencies will provide updated resources on exemptions from IACUC review. The agencies will review existing guidance, clarify activities that are exempt from review, and seek public comment on the updated guidance.
- NIH OLAW, in consultation with FDA, will review and update the guidance on non-pharmaceutical grade substances to further clarify the options for IACUC review. The agency will seek public comment on the updated guidance.
- USDA will propose, through notice and comment rulemaking, a regulatory change to 9 C.F.R. Chapter 1, Subchapter A—Animal Welfare, § 2.31(d)(5), to remove the requirement that IACUCs conduct "continuing reviews of activities covered by [the Animal Welfare Act] at appropriate intervals...but not less than annually," and, instead, insert a requirement that IACUCs conduct a three-year complete review of activities. IACUCs would continue to review, approve, require modification to, or withhold approval of significant changes regarding the care and use of animals in ongoing activities, as required by 9 C.F.R. § 2.31(d)(7) and (e). The regulatory change aligns USDA and NIH requirements and reduces the time and effort dedicated to annual review of protocols, while retaining the benefits of a complete review every three years and ongoing review of any significant changes. The IACUC may choose to review a protocol at an interval more frequently than three years as part of a program review.

Reporting

- NIH OLAW and USDA plan to allow annual reporting to both agencies on the same reporting schedule. The agencies will explore the development of a single reporting portal. A shared portal will not merge the information in the two reports but will increase the efficiency of the submission process. The timing for submission of the reports will be harmonized.
- NIH OLAW will change the instructions to the domestic Animal Welfare Assurance to support the use of AAALAC program description (PD) elements, thereby enabling consistency and limiting the rewriting of responses relevant to both documents. NIH OLAW will coordinate with AAALAC to develop options for harmonizing documents to meet both organizations' requirements. An institution's AAALAC PD would not be collected or viewed by NIH OLAW as part of this plan.
- NIH OLAW will review the guidance in NIH Guide Notice NOT-OD-05-034

 (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-05-034.html) on reporting requirements to refine and update examples of reportable situations, examples of situations not normally reported, the timeframe for reporting, and the information to be reported. Provision of the grant number in the noncompliance report will also be reevaluated. Current accountability and transparency in the reporting process will not be negatively impacted by updates. The agency will seek public comment on the updated guidance.
- USDA recently developed an online portal for submitting annual reports. USDA included the research community in planning and developing the system. Based on user feedback, USDA is enhancing the online annual reporting system to further streamline data submission.
- USDA intends to pursue a regulatory change to 9 C.F.R. § 2.30(a)(1) to eliminate the need to renew registration every three years. The annual report will be updated to contain sufficient information to update USDA records, and no further information regarding the registration would be required.
- NIH OLAW will review existing guidance on IACUC reports of departures from the National Academy of Sciences (NAS) *Guide for the Care and Use of Laboratory Animals* (*Guide*) to the Institutional Official, clarify the requirements for reporting, and seek public comment on updated guidance.

Actions to Improve Coordination of Regulations and Policies

The Working Group was charged with considering actions to improve coordination of regulations and policies with respect to research involving laboratory animals. The Working Group identified several opportunities to improve coordination based on review of reports and surveys, comments during listening sessions and meetings with stakeholders, and responses to the RFI. The Working Group recommended, and the agencies have decided, as follows:

Guidance on Federal Standards

- NIH OLAW will provide a minimum of 60 days for comments regarding significant policy guidance. This will include but is not limited to any new interpretations of the PHS Policy, the NAS *Guide*, or the AVMA (American Veterinary Medical Association) Guidelines for the Euthanasia of Animals. Such guidance will focus on high-risk animal welfare concerns affecting institutions, IACUC functions, and updates to guidance as an outcome of the 21CCA reviews.
- NIH OLAW will review its disclaimer concerning current guidance to emphasize that "unless specific statutory or regulatory requirements are cited, the guidance should be viewed as recommendations in that an institution may use an alternative approach if the approach satisfies the requirements of the PHS Policy." The agency will seek public comment on the updated disclaimer.
- USDA will make significant policies and significant revisions to existing policies involving the use of animals in research, teaching, testing, experiments, or surgery available for public comment using regulations.gov or a similar service. USDA will include a statement in its policies to explain that such policies are clarifications or interpretations of the AWA and Animal Welfare Regulations, which are the only legally binding requirements.
- NIH OLAW will review existing guidance on grant-to-IACUC protocol congruence, clarify the requirements, and seek public comment on updated guidance.

Agency Coordination

NIH OLAW, in coordination with USDA, will engage with the Department of Defense and the Department of Veterans Affairs to develop options for harmonizing requirements to reduce administrative burden on investigators who receive support for research with animals from multiple federal agencies.

Training and Resources

- NIH OLAW, in coordination with USDA, will support the continued development of industry-led training and resources to assist institutional leadership, IACUC members, and IACUC administrators in reducing administrative burden on investigators. Training and resources will focus on improving IACUC function to ensure animal welfare, enhancing IACUC communication with investigators, and recognizing pitfalls that increase burden. Training and resources will be tailored to IACUCs, institutional leadership, and animal program and research staff.
- NIH OLAW, in coordination with USDA, will continue to support the efforts of the IAA to create a
 repository of IACUC best practices. After the repository is piloted, NIH OLAW, in coordination with
 USDA, will offer resources to IACUCs to integrate the best practices into their institutional processes
 to reduce administrative burden on investigators. Use of the repository would be optional and openaccess. The agencies' roles support the efforts of the IAA to encourage best practices that allow
 flexibility to meet the size and complexity of institutional animal care and use programs.
- NIH OLAW, in coordination with USDA, will continue to support the efforts of the FDP members to create CUSP as a repository of best practices for standard procedures used for research with animals. After the CUSP repository is piloted by FDP institutions, NIH OLAW, in coordination with USDA, will offer resources to IACUCs to integrate CUSP into their institutional processes to reduce administrative burden on investigators. Use of the CUSP repository would be optional and openaccess. The agencies' role is cooperative in the efforts of the FDP to encourage best practices to reduce burden and allow improvements in procedures to be readily accessible.

- NIH OLAW will support FDP in the development of a sample animal study protocol form and pilot the revised protocol form through FDP. The updated version will focus on required protocol elements to ensure animal welfare and assist in IACUC review. The use of the sample form will be optional, and it will be provided for the convenience of IACUCs.
- NIH OLAW will consider new website resources in coordination with USDA. Website resources will focus on providing updated policy guidance stemming from the 21CCA review, improving IACUC function to ensure animal welfare, enhancing IACUC communication with investigators, and recognizing pitfalls that increase burden. Specific stakeholder-recommended topics that will be considered include departures reporting, non-animal alternatives, grant-to-protocol congruence, non-pharmaceutical grade substances, statistics, literature searches, and protocol writing for a lay audience.

Implementation

The agencies expect that implementation of the planned changes in policies, guidance, or regulations will begin within the next two years to accommodate time needed for public engagement processes, including notice and, where indicated, the opportunity for public comment. Following the implementation of policy and regulatory changes, the agencies plan to evaluate the outcomes of the efforts, where applicable, to reduce administrative burden while maintaining scientific integrity and animal welfare.

Conclusion

Research regulations and policies enhance the nation's economic wellbeing by ensuring a continued high return on public investment. They are also necessary to codify and enforce the expectations of the American public about how animals are used in biomedical research, teaching, and testing. For over fifty and thirty years, respectively, the Animal Welfare Act and Regulations and the PHS Policy have provided a reasonable balance between expanding the knowledge base in medical and associated sciences and protecting the welfare of the animals used in these endeavors. However, certain existing requirements consume researcher time and are due for review. In this effort, the agencies will continue to promote the highest levels of scientific integrity, public accountability, and social responsibility in the conduct of science.

In the next two years, NIH, USDA, and FDA intend to make progress on the steps and actions described in this report and will identify additional areas to protect animal welfare while reducing unnecessary administrative burden on researchers.

Appendix 1. Analysis of Key Findings from the Reports, Communications, and Surveys

Reports, Communications, and Surveys on Reducing Administrative Burden for Researchers and Research Institutions Reviewed by the Working Group

The following reports, communications, and surveys were reviewed by the Working Group:

Rebuttal to Federation of American Societies for Experimental Biology's Reforming Animal Research Regulations, 2018

In response to the 2017 workshop report from the Federation of American Societies for Experimental Biology (FASEB), the Association of American Medical Colleges (AAMC), the Council on Governmental Relations (COGR), and National Association for Biomedical Research (NABR), People for the Ethical Treatment of Animals (PETA) provided recommendations to the Working Group to reduce administrative burden.

Animal welfare regulations must not be compromised to comply with the goals of the 21st Century Cures Act, 2018

In response to the 2017 workshop report from FASEB, AAMC, COGR, and NABR, the Humane Society of the United States and the Humane Society Legislative Fund provided comments to the Working Group and made recommendations for simplifying regulations related to animal welfare.

Reforming Animal Research Regulations: Workshop Recommendations to Reduce Regulatory Burden, 2017

This is a report of an April 17, 2017 workshop organized by FASEB, AAMC, COGR, and with assistance from NABR.

Revising the Requirements for Prompt Reporting under PHS Policy IV. F. 3, 2017

In June 2017, NABR provided recommendations to NIH OLAW to update current guidance for reporting a serious or continuing noncompliance with the PHS Policy or a serious deviation from the provisions of the National Academy of Sciences (NAS) *Guide for the Care and Use of Laboratory Animals* (*Guide*).

Optimizing the Nation's Investment in Academic Research: A New Regulatory Framework for the 21st Century, 2016

A panel convened by the NAS provided a comprehensive review identifying how a researcher's time is spent complying with regulations. The NAS authors offered several specific recommendations concerning oversight of research with animals.

Reducing Investigators' Administrative Workload for Federally Funded Research, 2014

In December 2012, the National Science Board of the National Science Foundation convened a Task Force on Administrative Burdens. The Task Force issued a Request for Information (RFI) to identify which federal agency and institutional requirements contribute most to principal investigators' (PIs') administrative workload and conducted a series of roundtable discussions with faculty and administrators. The most frequently reported areas associated with high administrative workload were financial management, the grant proposal process, progress and other outcome reporting, human subjects research and institutional review boards (IRBs), time and effort reporting, research involving animals and IACUCs, and personnel management.

2012 Faculty Workload Survey Research Report, Federal Demonstration Partnership, 2014

The Federal Demonstration Partnership (FDP) is a cooperative initiative among ten federal agencies and 119 institutional recipients of federal funds, sponsored by the National Academies, with a purpose of reducing administrative burden associated with federal research grants and contracts. In 2012, the FDP conducted a survey of PIs of federally funded projects to determine the impact of federal regulations and requirements on the research process. In the survey, responses were obtained from 13,453 PIs from 111 FDP member institutions.

Findings of the FASEB Survey on Administrative Burden, 2013

FASEB represents twenty-six scientific societies and over 115,000 researchers. FASEB developed an online survey tool to solicit feedback on administrative burden.

See the summary, below, for the specific key findings considered by the Working Group.

Working Group Analysis of Key Findings from Recent Reports, Communications, and Surveys on Reducing Administrative Burden for Researchers and Research Institutions

This table presents a condensed description of the key findings from the eight reports, communications, and surveys; the Working Group's analysis; and agency decisions. Where a key finding is similar or identical in different documents, it is listed once. The full text of the documents reviewed is available at https://olaw.nih.gov/21st-century-cures-act.htm.

Summary of Key Findings, Working Group Analysis, and Agency Decisions

- 1. Advisory Board: Key Findings
- A group of experts, possibly a subcommittee of the Research Policy Board, should be appointed to serve as advisors during the review of regulations, policies, and guidance as mandated by the 21st Century Cures Act.
- Current PHS and USDA regulations, policies, guidance, and FAQs should be reviewed by an external advisory committee to ensure they emphasize matters of core importance to animal welfare identified in statutory language.

Advisory Board: Working Group Analysis and Agency Decisions

- Based on NIH OLAW's past use of RFIs concerning adoption of the 8th edition of the NAS *Guide*, implementation of the 2013 edition of the AVMA (American Veterinary Medical Association) Guidelines for the Euthanasia of Animals, and guidance regarding significant changes to ongoing animal activities, use of the RFI ensures broad input from interested stakeholders and is cost-effective and efficient.
- USDA will make significant policies and significant revisions to polices involving the use of animals in research, teaching, testing, experiments, or surgery available for public comment using regulations.gov or a similar service. USDA will include a statement in its policies to explain that such polices are clarifications or interpretations of the Animal Welfare Act (AWA) and Animal Welfare Regulations, which are the only legally binding requirements.
- The agencies do not support this approach as it is less transparent, would minimize the impact of input from the broader community, and would slow the process for stakeholder engagement.

In addition, the rulemaking process under the Administrative Procedures Act already allows public and stakeholder input on proposed regulations before becoming a final rule.

2. Oversight: Key Findings

- Consider consolidating all agency animal research oversight into a single agency.
- Consider a single set of guidelines, perhaps modeled after the Common Rule used in human subjects research.
- Amend the definition of animal in 7 U.S.C. § 2132 of the AWA to include all vertebrates to align USDA and NIH and harmonize U.S. policy with that of other countries and with industry standards.
- Amend 7 U.S.C. § 2137 and § 2138 of the AWA to prohibit the use of random source dogs and cats in research.
- Amend 7 U.S.C. § 2143 to require the use of alternative test methods and strategies whenever available.
- Harmonize all NIH and USDA requirements on animal welfare to the highest possible standard.

Oversight: Working Group Analysis and Agency Decisions

- The U.S. government is organized with various agencies responsible for oversight of different functions based on various mandates, regulations, and guidelines, with overlapping areas of authority. NIH, USDA, and FDA cooperate to harmonize oversight of research animal subjects, as described earlier in this report. NIH operates by authority of the Public Health Service (PHS) Act; USDA operates under the authority of the AWA; and FDA operates principally under the authority of the Federal Food, Drug, and Cosmetic Act and the PHS Act.
- The conditions of human subjects used in research differ from the conditions of animals; accordingly, they require different oversight and regulation.
- Amendments to 7 U.S.C. are outside the scope of the Working Group and would require Congressionally-initiated statutory changes.

Guidance: Working Group Analysis and Agency Decisions

3. Guidance: Key Findings

- New rules should be considered requiring any proposed policy, guidance, or FAQ to have a 60-day comment period.
- Agencies should avoid regulating through guidance.
- USDA and OLAW could allay concerns by specifically stating when a practice is not required.
- Agencies should refrain from modifying their regulations without consulting the regulated community.
- NIH OLAW will provide a minimum of 60 days for comments to significant policy guidance. This will include but is not limited to any new interpretations of the PHS Policy, NAS *Guide*, or the AVMA Guidelines for the Euthanasia of Animals. Such guidance will focus on high-risk animal welfare concerns affecting institutions, IACUC functions, and updates to guidance as an outcome of the 21CCA reviews.
- NIH OLAW issues guidance as needed to:
 - clarify the meaning or language of policy, guidance, or regulation, as deemed necessary by NIH OLAW or in response to requests from the research community;
 - reduce administrative burden, especially to harmonize with other federal regulations and guidance; and
 - ensure compliance with federal laws, regulations, guidance, and Congressional and Executive directives.

	 NIH OLAW plans to review its disclaimer concerning current guidance to emphasize that "unless specific statutory or regulatory requirements are cited, the guidance should be viewed as recommendations in that an institution may use an alternative approach if the approach satisfies the requirements of the PHS Policy." USDA will make significant policies and significant revisions to policies involving the use of animals in research, teaching, testing, experiments, or surgery available for public comment using regulations.gov or a similar service. USDA will include a statement in its policies to explain that such polices are clarifications or interpretations of the AWA and the Animal Welfare Regulations, which are the only legally binding requirements.
 4. PHS Policy, NAS Guide: Key Findings Eliminate the PHS requirement for compliance with the NAS Guide. Use it as a best practices document. "Should" statements in the NAS Guide should not be enforced as "must" statements. 	 PHS Policy, NAS Guide: Working Group Analysis and Agency Decisions NIH OLAW does not support this approach, as it would negatively impact animal welfare. Assured institutions are required to base their programs of animal care and use on the NAS Guide, a respected resource for best practices in the humane care and use of laboratory animals prepared by leading international subject matter experts. PHS Policy IV.B.3. requires that: "The IACUC shall prepare reports of their semiannual program reviews and animal facility inspections and submit the reports to the Institutional Official (IO). The reports must contain a description of the nature and extent of the institution's adherence to the Guide and the PHS Policy, must identify specifically any departures from the provisions of the Guide and the PHS Policy, and must state the reasons for each departure." OLAW considers "should" statements in the NAS Guide as established standards in animal care and use to ensure animal welfare. OLAW's current guidance affords flexible interpretation of "should" statements in the NAS Guide by allowing alternative approaches based on performance standards to achieve the same results. Deviation from a "should" statement that is not described as an exception in the NAS Guide or is not the result of a performance standard must be reported to the IO. NIH OLAW will review existing

	guidance, clarify the requirements for reporting, and seek public comment on updated guidance.	
5. PHS Policy, Protocol, and Grant Congruence: Key Findings Eliminate the requirement for protocol and grant congruency.	PHS Policy, Protocol, and Grant Congruence: Working Group Analysis and Agency Decisions	
	PHS Policy and the NIH Grants Policy Statement (NIH GPS, chapter 4.1.1.2) require the institution to verify, before award, that the IACUC has reviewed and approved those components of grant applications an contract proposals related to the care and use of animals. This is not ar explicit requirement for the IACUC to do a side-by-side comparison of a application or proposal and the IACUC protocol. However, institutions are responsible for ensuring that the information the IACUC reviews ar approves is congruent with what is in the application or proposal. Granto-protocol congruency is required by NIH only at the first time of competitive award. Institutions are free to devise a workable mechanist to accomplish this end. NIH OLAW will review existing guidance, clarify the requirements, and seek public comment on updated guidance.	
 6. Protocol Review, Continuing Review: Key Findings A risk-based process similar to human subject review should be 	Protocol Review, Continuing Review: Working Group Analysis and Agency Decisions	
A risk-based process similar to human subject review should be established. USDA annual and NIH triennial reviews should be harmonized into a continuing review process without compromising animal welfare. Harmonize regulatory requirements for IACUC approval across the funding agencies.	 According to 9 C.F.R. § 2.31(d), in order for the IACUC to approve proposed activities or proposed significant changes to ongoing activities, the IACUC shall conduct a review of those components of the activities related to the care and use of animals and determine that the proposed activities are in accordance with this subchapter unless acceptable justification for a departure is present in writing. Also, the IACUC shall conduct continuing reviews of activities covered by this subchapter at appropriate intervals as determined by the IACUC, but not less than annually. USDA will propose, through notice and comment rulemaking, a regulatory change to CFR Title 9 Chapter 1, Subchapter A—Animal Welfare, Section 2.31(d)(5), to remove the requirement that IACUCs conduct "continuing reviews of activities covered by [the Animal Welfare Act] at appropriate intervals but not less than annually," and, instead, insert a requirement that IACUCs would continue to review, 	

7. Protocol Review, Expedited Review: Key Findings

- Institutions should use Designated Member Review (DMR) rather than a full IACUC review for applicable (low-risk) protocols and protocol modification.
- Agencies should create exempt and expedited review categories similar to those of the human subjects regulations.
- Allow small changes to protocols to be approved through a simplified administrative process.
- OLAW could amend its guidance documents on review of modifications and amendments to permit more rapid turnaround.
- Protocol review and approval time is too long; research can be delayed by months waiting for minor modifications to animal use protocols.
- Encourage IACUCs to use DMR instead of FCR for protocol amendments that do not significantly affect animal welfare.
- Agencies should allow changes to the exact number of animals required for a grant to be approved through a simplified administrative process or rely on reporting of animal use.

8. Protocol Review, Complete Review: Key Findings

- The PHS requirement for re-review of animal use protocols every three years should be changed to every five years to better match grant length.
- Encourage federal agencies to clarify that animal care and use protocols do not need to be completely rewritten to satisfy the requirements for annual or triennial re-review.

approve, require modification to, or withhold approval of significant changes regarding the care and use of animals in ongoing activities, as required by 9 C.F.R. § 2.31(d)(7) and (e).

Protocol Review, Expedited Review: Working Group Analysis and Agency Decisions

NIH OLAW, in coordination with USDA, plans to review and develop resources to support IACUCs' use of existing options for streamlining protocol review and review of significant changes to approved protocols without compromising animal welfare.

Protocol Review, Complete Review: Working Group Analysis and Agency Decisions

• Extending the period of approval poses a risk to animal welfare, as investigators are not able to describe their proposed animal experiments in sufficient detail for adequate IACUC review and approval for the entire five years of a grant. Performing work not described in a protocol is the most frequent noncompliance reported to NIH OLAW, comprising 23% of cases in 2018. Extending the period to five years would increase the risk of noncompliance. In addition, grants have different award periods (not all are five years), and there are no requirements for one-to-one match of protocol to grant. Analysis of NIH-awarded research grants from 2015-2018 showed that less than 41% are five-year awards. Matching protocol

approval to a grant approval decreases the flexibility that institutions

	 currently have with a single protocol covering multiple grants or vice versa. NIH OLAW, in coordination with USDA, plans to review and develop resources to support IACUCs' use of existing options for streamlining protocol review and reviw of significant changes to approved protocols without compromising animal welfare. According to 9 C.F.R. § 2.31(d), in order for the IACUC to approve proposed activities or proposed significant changes to ongoing activities, the IACUC shall conduct a review of those components of the activities related to the care and use of animals and determine that the proposed activities are in accordance with this subchapter unless acceptable justification for a departure is present in writing. Also, the IACUC shall conduct continuing reviews of activities covered by this subchapter at appropriate intervals as determined by the IACUC, but not less than annually. USDA will propose, through notice and comment rulemaking, a regulatory change to CFR Title 9 Chapter 1, Subchapter A—Animal Welfare, Section 2.31(d)(5), to remove the requirement that IACUCs conduct "continuing reviews of activities covered by [the Animal Welfare Act] at appropriate intervals but not less than annually," and, instead, insert a requirement that IACUCs conduct a three-year complete review of activities. IACUCs would continue to review, approve, require modification to, or withhold approval of significant changes regarding the care and use of animals in ongoing activities, as required by 9 C.F.R. § 2.31(d)(7) and (e).
9. Protocol Review, USDA Policy #12: Key Findings	Protocol Review, USDA Policy #12: Working Group Analysis and Agency Decisions
Amend the language of USDA Policy #12 addressing literature searches for consistency with the AWA and Animal Welfare Regulations.	 Section 2143 of the AWA states that the Secretary shall promulgate standards to govern the humane handling, care, treatment, and transportation of animals by dealers, research facilities, and exhibitors. With respect to animals in research facilities, the standards include requirements that the principal investigator consider alternatives to any procedure likely to produce pain to or distress in an experimental animal. Under 9 C.F.R. § 2.31(d), the

USDA Policy #14 should be modified to allow multiple operative	Decisions
10. Protocol review, USDA Policy #14: Key Findings	Protocol Review, USDA Policy #14: Working Group Analysis and Agency
	 IACUC shall determine, to approve the proposed activities or proposed significant changes to ongoing activities, that the principal investigator has considered alternatives to procedures that may cause more than momentary or slight pain or distress to the animals, and that the principal investigator has provided a written narrative description of the methods and sources, e.g., the Animal Welfare Information Center, used to determine that alternatives were not available. The Animal Care policy manual was established in 1997 and revised in 2011. The purpose of the manual was to provide guidance for USDA Animal Care field inspectors and members of the AWA-regulated community on interpreting certain provisions of the Animal Welfare Regulations. Policy #12 provided guidance to investigators on the consideration of alternatives to painful and distressful procedures. It provided information about the narrative of methods used and sources consulted to determine the availability of alternatives, including refinements, reductions, and replacements. The policy manual was removed from the USDA website in July 2018, and the policies are inoperative while USDA conducts a review to ensure conformity with the AWA and Animal Welfare Regulations, harmonize with NIH OLAW guidance, and reduce investigator burden where possible. USDA will make significant policies and significant revisions to policies involving the use of animals in research, teaching, testing, experiments, or surgery available for public comment using regulations.gov or a similar service.

procedures at the discretion of the IACUC.

• Under 9 C.F.R. § 2.31(d), the IACUC shall determine that the proposed activities or significant changes in ongoing activities meet the following requirements, that no animal will be used in more than one major operative procedure from which it is allowed to recover, unless: justified for scientific reasons by the principal investigator, in writing; required as a routine veterinary procedure or to protect the health and well-being of the animal as determined by the attending

veterinarian; or in other special circumstances as determined by the Administrator on an individual basis.

The Animal Care policy manual was established in 1997 and revised in 2011 to provide guidance for USDA Animal Care field inspectors and owners and handlers of animals subject to the AWA on interpreting certain provisions of the Animal Welfare Regulations. Policy #14 provided guidance to investigators on the use of surgically-altered animals received from a dealer and subsequently used in a major operative procedure. It also provided clarification of the exemptions due to special circumstances provided in the AWA and Animal Welfare Regulations. The policy manual was removed from the USDA website in July 2018, and the policies are inoperative while USDA conducts a review to ensure conformity with the AWA and Animal Welfare Regulations, harmonize with NIH OLAW guidance, and reduce investigator burden where possible. USDA will make significant policies and significant revisions to policies involving the use of animals in research, teaching, testing, experiments, or surgery available for public comment using regulations.gov or a similar service.

11. Semiannual Inspection: Key Findings

- Congress should amend the AWA, HREA, and PHS Policy requirements for semiannual inspection and program review to at least annual inspection and program review.
- Agents of the IACUC should be able to conduct the inspections.
- USDA should allow for risk-based inspections.
- Reduce or consolidate overlapping inspections by agencies and accreditors.
- Reduce multiple, uncoordinated inspections per year that disrupt research.

Semiannual Inspection: Working Group Analysis and Agency Decisions

 The HREA requires the IACUC to review the care and treatment of animals in all animal study areas and facilities of the research entity, at least semiannually. A change in the frequency of IACUC inspections would require statutory changes to the law and has a strong likelihood of negatively impacting animal welfare. NIH OLAW analysis of self-reports of noncompliance from 2017-2019 showed that approximately 7% of these self-reported noncompliances were identified during semiannual inspections. Review of OLAW-approved Assurance agreements showed that approximately 41% of institutions identified the semiannual inspection as a critical component of post-approval monitoring of approved activities. Taken together, these findings indicate that potential risks to animal welfare of less frequent IACUC inspections outweigh the burden on the IACUC and the principal investigators (PIs). The PHS Policy affords flexibility in the designation of IACUC inspectors and the

conduct of inspections. For example, NIH OLAW allows the

explanation of the circumstances and actions taken with respect to:

	 substitution of the AAALAC site visit for the semiannual program evaluation and provides details on the criteria for this provision. See Frequently Asked Question E.3. at https://olaw.nih.gov/guidance/faqs#650 and NIH Guide Notice NOT-OD-00-007 at https://grants.nih.gov/grants/guide/notice-files/NOT-OD-00-007 at https://grants.nih.gov/grants/guide/notice-files/NOT-OD-00-007. https://grants.guide/notice-files/NOT-OD-00-007. https://grants.nih.gov/guidance. https://grants.nih.gov/guidance. https://grants.nih.gov/guidance. https://grants.nih.gov/guidance. https://gran
12. Noncompliance and Reporting: Key Findings	counted as one of the IACUC semiannual inspections. Noncompliance and Reporting: Working Group Analysis and Agency
 NIH guidance on prompt reporting of noncompliance should only 	Decisions
 include incidents that jeopardize the health or well-being of animals. The current guidance for reporting a serious or continuing 	• The PHS Policy, Section IV.F.3., requires that: "The IACUC, through the Institutional Official, shall promptly provide OLAW with a full

noncompliance with the PHS Policy or a serious deviation from the

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provisions of the NAS Guide should be revised. Currently, the guidance does not distinguish between the two types of reportable incidents in terms of the requirements for reporting or the examples of those that should be promptly reported. Since the PHS Policy specifically addresses the functions of the IACUC, including the review of proposed research activities and the institutional requirements for maintaining required records, any failure to comply with any of the requirements delineated in these sections of the PHS Policy should be promptly reported. The requirement for prompt reporting of deviations from the provisions of the NAS Guide should be based upon whether the incident had a negative impact on animal health and well-being; any incidents that did not directly impact animal health and well-being could be summarized in the annual report. In addition, the level of detail required in the report should be changed so that the report describes the general nature of the incident and how the incident was addressed.

- Agencies should adjust their requirements for reporting so that animal-related noncompliance reports are tiered to the level or significance of impact on animals and included in an annual report rather than submitted on an individual event basis.
- The NIH should revamp animal care compliance regulations to the minimum required for safe animal use.

1) any serious or continuing noncompliance with this Policy; 2) any serious deviation from the provisions of the *Guide*; or 3) any suspension of an activity by the IACUC." All institutions with Animal Welfare Assurances (Assurance) are required to comply with the PHS Policy. NIH OLAW will review the guidance in NIH Guide Notice NOT-OD-05-034 on reporting requirements to refine and update examples of reportable situations, examples of situations not normally reported, the timeframe for reporting, and the information to be reported. Current accountability and transparency in the reporting process will not be negatively impacted by updates. The agency will seek public comment on the updated guidance.

USDA has instituted a process to incentivize registrants to selfidentify, self-correct, and voluntarily report serious noncompliance. This will affect how and when facilities are cited for serious noncompliance. The incentives encourage facilities to proactively self-identify areas of noncompliance and take swift action. Noncritical noncompliance will not be cited on inspection reports if the facility discovers the noncompliance on its own and immediately take appropriate correct action to establish measure to prevent reoccurrence. Critical noncompliance will not be cited on the report if the facility discovered the noncompliance on its own in a timely manner, took immediate and appropriate corrective action and established measures to prevent recurrence, had no repeat or critical noncompliance in the last 12 months, and has not had a critical noncompliance in the same section and subsection of the regulations within the last 24 months at the same site.

13. Annual Reports: Key Findings

 Reporting, Assurances, and verifications to agencies should be reduced and streamlined. Annual reports to individual agencies about animal care programs should be replaced by a single annual report under the proposed Federal-wide Assurance mechanism. Processes that are redundant to the IACUC approval process, such as the Vertebrate Animals section of PHS grant applications and the Department of Defense central administrative protocol review, should be eliminated.

Annual Reports: Working Group Analysis and Agency Decisions

- Syncing the reporting period and due date for USDA and NIH OLAW reports will minimize time devoted to collection of reporting data. IACUCs and investigators will be less burdened with administrative actions and able to attend to their animal welfare and research responsibilities.
- 9 C.F.R. § 2.36 states that the annual report shall: (1) Assure that professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic,

• USDA should modify the Animal Welfare Regulations and annual report to require prospective counts of animals in procedures likely to cause pain or distress.

analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by the research facility; (2) Assure that each principal investigator has considered alternatives to painful procedures; (3) Assure that the facility is adhering to the standards and regulations under the Act, and that it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the IACUC. A summary of all such exceptions must be attached to the facility's annual report. In addition to identifying the IACUC-approved exceptions, this summary must include a brief explanation of the exceptions, as well as the species and number of animals affected. The report is to also list the animals held by a facility but not used in any research that year; animals used in research; no pain involved; no pain drugs administered; animals used in research; pain involved; pain drugs administered; and animals used in research; pain involved; no pain drugs administered.

The animals may be listed under the different pain and distress categories retrospectively or prospectively. Retrospective reporting involves collecting data on individual animals and placing each study animal into the most appropriate category based on clinical signs of pain and distress. While more labor intensive, this method generally produces more accurate reporting. For prospective reporting, all animals used for a particular activity may be categorized in the highest applicable pain category. This method is less labor-intensive but may result in over-reporting. If animals experience pain or distress during the study due to research procedures that are in a higher pain category than originally designated, the animal(s) are to be reported on the annual report in the higher pain category. The reporting will be retrospective to indicate the pain or distress level the animal actually experienced.

14. Standard Operating Procedures: Key Findings		Standard Operating Procedures: Working Group Analysis and Agency
٠	Recommend that federal agencies collaborate with research	Decisions
	institutions as well as organizations representing investigators and	NIH OLAW, in coordination with USDA, will continue to support the
	institutions to identify and disseminate model programs and best	efforts of the FDP members to create the CUSP as a repository of best

practices for standard procedures used for research involving animals. IACUCs have the option to integrate CUSP into their institutional processes to reduce burden on investigators. Use of CUSP would be optional and open-access. The agencies' role is cooperative in the efforts of the FDP to encourage best practices to reduce burden and allow improvements in procedures to be readily accessible.	
Standard Protocol: Working Group Analysis and Agency Decisions	
NIH OLAW and USDA support a flexible approach to foster good science while ensuring animal welfare. NIH OLAW will support FDP in the development of a sample animal study protocol form and pilot the revised protocol form through FDP. The updated version will focus on required protocol elements to ensure animal welfare and assist in IACUC review. The use of the sample form will be optional and will be provided for the convenience of IACUCs.	
Training: Working Group Analysis and Agency Decisions	
 NIH OLAW, in coordination with USDA, will continue to support the development of industry-led training and resources to assist institutional leadership, IACUC members, and IACUC administrators in reducing the burden on investigators. 9 C.F.R. § 2.32(a) states that it is the responsibility of the research facility to ensure that all scientists, research technicians, animal technicians, and other personnel involved in animal care, treatment, and use are qualified to perform their duties. 	
Burden: Working Group Analysis and Agency Decisions	
NIH OLAW, in coordination with USDA, will continue to support the development of industry-led training and resources to assist institutional	
-	

leadership, IACUC members, and IACUC administrators in reducing burden on investigators.

18. NIH Grants Policy: Key Findings

- NIH Grants Policy should be modified to factor in risk to animals concerning the change of scope of an award.
- Adopt a streamlined approach in which one IACUC approval satisfies all institutions funded by the same grant.
- Delineate responsibilities between scientific review groups and IACUCs regarding the review of the vertebrate animal section of grants and the animal use protocol to avoid duplication of effort.

NIH Grants Policy: Working Group Analysis and Agency Decisions

- NIH Grants Policy allows the PI to make changes to many aspects of a funded-project's objectives without prior approval from NIH.
 Exceptions that require prior approval from the NIH grants management officer include substitution of one animal model for another or change from the approved use of live animals. If in doubt about whether prior approval is required, the PI should contact the grants management officer for the award.
- NIH and USDA agree that review of a research project or evaluation of a program or facility by more than one recognized IACUC is not a federal requirement. IACUCs may choose which IACUC will review protocols for the animal activities being conducted. NIH Grants Policy Statement on Written Agreements (NIH GPS, chapter 15.2.1) requires that awardees have a formal written agreement with consortium participants that addresses the negotiated scientific, administrative, financial, and reporting requirements of the grant. This written agreement must incorporate applicable public policy requirements, including agreement for meeting the PHS Policy (IV.B.2.) requirement for review and approval of proposed animal activities, significant changes to animal activities, and semiannual facilities review by an IACUC.
- Review of proposed activities by a Scientific Review Group (SRG), also known as a study section, is required by the NIH Grants Policy Statement (Part I., 2.4 The Peer Review Process) and federal law (Sections 406 and 492 of the PHS Act, as amended by the NIH Reform Act of 2006). If the proposed research includes the use of animal subjects, review of the Vertebrate Animals Section (VAS) and proposed animal experiments is conducted by the SRG. After determination of an award, but before release of funds, IACUC review and approval ensure compliance with the PHS Policy and the institution's Assurance. Compliance with PHS Policy is a term and condition of the NIH Grants Policy Statement (Part II, Subpart A 4.1.1 Animal Welfare Requirements) to obtain PHS funds. In 2016 NIH

19. PHS Assurance: Key Findings	revised the grant application to remove redundancy with IACUC review while meeting the requirements of the PHS Policy. The changes simplify the VAS criteria and reduce burden on applicants and reviewers. The justification for the number of animals is no longer required in the VAS and is instead an element of rigor in the experimental design, described in the Research Strategy section of the application, and considered during SRG review. Because the IACUC review does not coincide with an awarded grant application, the review must consider the rationale for the approximate number of animals to be used and that the number proposed is necessary to obtain valid results as required by PHS Policy.
Streamline the NIH Assurance to a short online form similar to that for human subjects.	The conditions for protection of human subjects used in research differs from the conditions of animals, and therefore, different oversight and regulation are required. PHS Policy is explicit about the required elements in the Assurance to provide oversight of animal welfare for PHS-funded activities.
20. AWA Regulations: Key Findings	AWA Regulations: Working Group Analysis and Agency Decisions
Regulations should state what is required to ensure uniform implementation and reduce confusion caused by ambiguity.	The AWA is a statute (Public Law 89-544, U.S.C. 7 §§ 2131-2159) enacted by Congress in 1966 that established the expectation that humane care and treatment will be provided for certain animals that are used for research, exhibited to the public, sold commercially as pets, and transported in commerce. The provisions in the AWA are implemented through the Animal Welfare Regulations (Code of Federal Regulations [C.F.R.] Title 9, Chapter 1, Subchapter A—Animal Welfare). The regulations are developed with public input and contain performance- based approaches to animal welfare that allow flexibility. USDA is revising its guidance documents to reduce ambiguity and confusion.

Appendix 2. Analysis of Responses to the Request for Information

Working Group Analysis of the Responses to the Request for Information (RFI) Concerning Proposed Agency Actions

This table presents a summary of the public responses received to RFI topics A1 to A5 and B1 to B6, the Working Group's analysis and recommendations, and agency decisions. Due to the volume of responses received, similar comments were combined for brevity and efficiency and edited for clarity. Comments that were not responsive to topics presented in the RFI are not included.

Public input was sought on:

- A. Proposed actions that the agencies are considering (Topics A1 to A5)
- B. Whether certain tools and resources are or would be helpful for reducing burden on investigators (Topics B1 to B6)

A1: Allow investigators to submit protocols for continuing review using a risk-based methodology

Agree	Disagree	Working Group Analysis and Agency Decisions
Public comments on why agencies should adopt A1.	Public comments on why agencies should not adopt A1.	 USDA will propose, through notice and comment rulemaking, a regulatory change
Adoption of risk-based methodologies would:	Animal welfare reasons:	to CFR Title 9, Chapter 1, Subchapter A— Animal Welfare, Section 2.31(d)(5), to
 result in decreased burden for researchers and IACUCs without degrading protections for the animals allow more time for high-risk research review allow more time for science Public comments on how agencies should adopt A1. 	 proposed action would further loosen protocol review rules and expedite the approval of animal use that is not unavoidable for the conduct of scientifically valuable research (9 C.F.R. § 2.31(e)(4)) protocols that do not involve invasive procedures may still cause harm to animals; animals are injured or die during routine laboratory practices 	remove the requirement that IACUCs conduct "continuing reviews of activities covered by [the Animal Welfare Act] at appropriate intervalsbut not less than annually," and, instead, insert a requirement that IACUCs conduct a three- year complete review of activities. IACUCs would continue to review, approve, require modification to, or withhold approval of
 include streamlined paths for review and approval of low-risk, non-invasive, or minimally invasive animal activities allow single member review (without approval by committee as in DMR) allow administrative review for low-risk procedures 	 animal welfare violations can occur in low- risk activities without review, new methods and the 3Rs may not be applied 	significant changes regarding the care and use of animals in ongoing activities, as required by 9 C.F.R. § 2.31(d)(7) and (e). The regulatory change aligns USDA and NIH requirements and reduces the time and effort dedicated to reviewing protocols annually, while retaining the benefits of a

- define low-risk as non- or minimally invasive, humane euthanasia, USDA pain category B or C research, genotyping, low pain or distress
- use standard protocols for breeding, euthanasia, and tissue harvest
- procedures in standard use should be considered low-risk and could be presented in a check-box format on the protocol form
- risk-based process amendment could be modeled on NIH significant changes NOT-OD-14-126 with administrators conducting low-risk approvals
- extend PHS Policy footnote eight to include letting IACUC determine the best method for overseeing approved animal use activities (IACUC determines risk-based approach)
- couple with post-approval monitoring program
- if a researcher reports unexpected injuries or mortalities, full review is warranted

Risk assessment reasons:

- risk assessments vary widely and are too subjective
- implementation of risk-based methods weakens monitoring, puts animals at risk, and undermines animal protection
- Pls misjudge pain categories, indicating they are not the best choice to determine risk
- determination of risk should be made by or in consultation with experts (e.g., roundtables, consensus literature review by experts), not by oversight agencies

Policy or legal reasons:

- circumvention of the review process contradicts the intent of the 1985 AWA amendments: *A quorum shall be required for all formal actions of the [IACUC]*
- existing policies permitting DMR and DMR subsequent to FCR are effective for low-risk research; change is not needed

Administrative burden reason:

	 the rule change will increase institutional drive to additional self-imposed burden 	
Apply human subjects regulatory framework to research animals / Common Rule.	Application of the Common Rule is inappropriate because protections of human and animal subjects are different with respect to voluntary consent and choice. Animals are vulnerable populations that require additional protections.	The conditions for protection of human subjects used in research differ from the conditions of animals, and therefore, different oversight and regulation are required. Some work with animals is exempt from IACUC oversight, including observational wildlife studies, use of materials (e.g., blood, tissues) that are collected for another purpose (e.g., clinical needs, organs from slaughterhouse).

complete review every three years and ongoing review of any significant changes. The IACUC may choose to review a protocol at an interval shorter than three years as part of conducting a program review.

 NIH OLAW and FDA support USDA's proposed change.

Permit repeated surgeries and procedures after a specified time period to reduce the number of animals, at the discretion of IACUC. The agencies will review existing guidance, clarify activities that are exempt from review and seek public comment on updated guidance.

- Under 9 C.F.R. § 2.31(d), the IACUC shall • determine that the proposed activities or significant changes in ongoing activities meet the following requirements, that no animal will be used in more than one major operative procedure from which it is allowed to recover, unless: justified for scientific reasons by the principal investigator, in writing; required as a routine veterinary procedure or to protect the health and well-being of the animal as determined by the attending veterinarian; or in other special circumstances as determined by the Administrator on an individual basis.
- The Animal Care policy manual was established in 1997 and revised in 2011 to provide guidance for USDA Animal Care field inspectors and owners and handlers of animals subject to the AWA on interpreting certain provisions of the Animal Welfare Regulations. Policy #14 provided guidance to investigators on the use of surgicallyaltered animals received from a dealer and subsequently used in a major operative procedure. It also provided clarification of the exemptions due to special circumstances provided in the AWA and Animal Welfare Regulations. The policy manual was removed from the USDA website in July 2018, and the policies are inoperative while USDA conducts a review to ensure conformity with the AWA and

		Animal Welfare Regulations, harmonize with NIH OLAW guidance, and reduce investigator burden where possible. USDA will make significant policies and significant revisions to policies involving the use of animals in research, teaching, testing, experiments, or surgery available for public comment using regulations.gov or a similar service.
 Reduce frequency of review and approval of some research: three-year period for review of low-risk research five-year period for review of all research (new, continuing, complete, annual) 	 Continuing review provides opportunity for PI, IACUC, and staff training Benefit of continuing review would be lost: updates the IACUC of project status ensures continuing compliance with standards re-evaluation of animal activities at appropriate intervals 	 DMR offers an expeditious turnaround for three-year complete review. DMR may be considered for review of research activities determined by the IACUC to be of low risk. The agencies plan to issue updated resources to encourage the use of DMR for low-risk activities. PHS Policy requires that a complete review be conducted; it does not require that the protocol be rewritten. IACUCs may review the initial protocol and all modifications to reduce administrative burden on investigators. Extending the period of approval poses a risk to animal welfare, as investigators are not able to sufficiently predict and describe their proposed animal experiments with the level of detail required for adequate IACUC review and approval for the entire five years of a grant. Protocols are frequently amended during the three-year approval period to accommodate changes in experimental design. Performing work not described in a protocol is the most frequent noncompliance reported to NIH

OLAW, comprising 23% of cases in 2018.

Extending the period to five years would increase the risk of noncompliance.

 Science is fluid and protocols can be rewritten and amended as needed throughout the approval period. Grants have different award periods (not all are five years) and there are no requirements for a one-to-one match of protocol to grant. Analysis of NIH-awarded research grants from 2015-2018 found that less than 41% are five-year awards. Matching protocol approval to a grant approval decreases the flexibility that institutions currently have with a single protocol covering multiple grants or vice versa.

A2: Allow annual reporting to OLAW and USDA on the same reporting schedule and as a single report through a shared portal

Agree	Disagree	Working Group Analysis and Agency Decisions
 Public comments on why agencies should adopt A2. A single portal and reporting schedule would: reduce confusion and errors ensure reports to both agencies are congruent 	 Public comments on why agencies should not adopt A2. A single portal and reporting schedule would: not improve animal welfare not reduce burden on the investigator instead, reduce the requirements for 	 Working Group Analysis and Agency Decisions The intent of this proposed change is to improve coordination of regulations and policies concerning annual reporting. Syncing the reporting period and due date for USDA and NIH OLAW reports will minimize time devoted to the collection of reporting data. IACUCs and investigators will be less burdened with administrative actions and able to attend to their animal welfare and research responsibilities. 9 C.F.R. § 2.36 states that the annual report shall: (1) Assure that professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching,
 encourage accuracy maximize transparency, accountability, and animal welfare 	 noncompliance reporting to OLAW to only when animal welfare is impacted a single report would enable intentional violations to be unreported and human error uncorrected instead, convene agencies and researchers to assess feasibility of a single oversight agency AAALAC report should also be included 	

testing, surgery, or experimentation were followed by the research facility; (2) Assure that each PI has considered alternatives to painful procedures; (3) Assure that the facility is adhering to the standards and regulations under the Act, and that it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the IACUC. A summary of all such exceptions must be attached to the facility's annual report. In addition to identifying the IACUC-approved exceptions, this summary must include a brief explanation of the exceptions, as well as the species and number of animals affected. The report must also list the animals held by a facility but not used in any research that year; animals used in research, no pain involved, no pain drugs administered; animals used in research, pain involved, pain drugs administered; and animals used in research, pain involved, no pain drugs administered.

 The animals may be listed under the different pain and distress categories retrospectively or prospectively.
 Retrospective reporting involves collecting data on individual animals, placing each study animal into the most appropriate category based on clinical signs of pain and distress. While more labor intensive, this method generally produces more accurate reporting. For prospective reporting, all animals used for a particular activity may be categorized in the highest applicable Public comments on how agencies should adopt A2.

- streamline data required for submission
- establish a single template
- information submitted through a single portal should generate separate reports, providing only information relevant to that agency's requirements
- information should be made publicly available by e-posting and FOIA
- information should not be made publicly available; USDA should harmonize to OLAW policy of not e-posting
- harmonize so USDA includes all vertebrates
- add checkboxes to OLAW's report
- generalized information should be used so the report could be compiled, without seeking input from investigators, using only information on-file in the IACUC office
- eliminate USDA animal numbers reporting
- eliminate average daily census report

pain category. This method is less laborintensive but may result in over-reporting. If animals experience pain or distress during the study due to research procedures that are in a higher pain category than originally designated, the animal(s) are to be reported on the annual report in the higher pain category. The reporting will be retrospective to indicate the pain or distress level the animal actually experienced.

- USDA and NIH OLAW plan to review the reporting elements and simplify where possible, but keep the reports separate and explore the development of a single reporting portal.
- USDA recently developed an online portal for submitting annual reports. USDA included the research community in the planning and development of the system. Based on user feedback, USDA is upgrading the online annual reporting system to further streamline data submission.
- USDA intends to pursue a regulatory change to 9 C.F.R. § 2.30(a)(1) to eliminate the need to renew registration every three years. The annual report will be updated to contain sufficient information to update USDA records; no further information regarding registration would be required.

A3: Harmonize the guidance from NIH and USDA to reduce duplicative considerations of alternatives to painful and distressful procedures

Agree	Disagree	Working Group Analysis and Agency Decisions
 Public comments on why agencies should adopt A3. it would enable consistent assessment of research animal welfare investigators need clear, concise guidelines Public comments on how agencies should adopt A3. harmonizing without reducing any requirements by defaulting to the highest standard blending duplicative considerations harmonizing NAS <i>Guide</i> and USDA regulations conforming existing federal requirements for species currently covered by USDA and those by the PHS Policy to the least burdensome standard eliminating database and keyword searches; instead, have researchers verify the consideration of alternatives and provide a written description of the methods and sources used to determine that alternatives were not available developing forms to validate the implementation of 3Rs requiring submissions be evidence-based and providing updated guidance on a regular basis to ensure best practices 	 Public comments on why agencies should not adopt A3. researchers should spend more time conducting searches for and implementing less painful and distressful procedures alternatives are still progressing alternatives are more relevant and predictive of human health protecting animal welfare is never a burden federal agencies should promote development of alternatives Eliminate consideration of alternatives because: 3Rs should be validated in protocols rather than by literature searches it is difficult to design a search that seeks the absence of results literature searches rarely yield usable alternatives pro-forma literature search does not minimize pain and distress; permit investigators to concentrate on making the research justification clear and reviewed by IACUC 	 The agencies plan to review and enhance current resources to support IACUCs' use of existing options for streamlining protocol review and review of significant changes to approved protocols, including the use of the Vertebrate Animal Section in the grant proposal. Under § 2143 of the Animal Welfare Act (AWA), the Secretary shall promulgate standards to govern the humane handling, care, treatment, and transportation of animals by dealers, research facilities, and exhibitors. With respect to animals in research facilities, the standards include requirements that the principal investigator considers alternatives to any procedure likely to produce pain to or distress in an experimental animal. According to 9 C.F.R. § 2.31(d), the IACUC shall determine that the proposed activities or significant changes in ongoing activities meet the requirement that the principal investigator has considered alternatives to procedures that may cause more than momentary or slight pain or distress to the animals, and has provided a written narrative description of the methods and sources, e.g., the Animal Welfare Information Center, used to determine that alternatives were not available.

established in 1997 and revised in 2011 to

Other comments regarding alternatives to painful and distressful procedures.

- revise Policy #12 to be consistent with and limited to the requirement in 9 C.F.R. § 2.31(d)(1)(ii)
- establish a consolidated resource for training, research, education, and outreach, like the National Centre for the Replacement, Refinement & Reduction of Animals in Research

provide guidance for USDA Animal Care field inspectors and owners and handlers of animals subject to the AWA on interpreting certain provisions of the Animal Welfare Regulations. Policy #12 provided guidance to investigators on the consideration of alternatives to painful and distressful procedures and information about the narrative of methods used and sources consulted to determine the availability of alternatives, including refinements, reductions, and replacements. The policy manual was removed from the USDA website in July 2018, and the policies are inoperative while USDA conducts a review to ensure conformity with the AWA and Animal Welfare Regulations, harmonize with NIH OLAW guidance, and reduce investigator burden where possible. USDA will make significant policies and significant revisions to policies involving the use of animals in research, teaching, testing, experiments, or surgery available for public comment using regulations.gov or a similar service.

A4: Provide a minimum 60-day comment period for new OLAW policy guidance

Agree	Disagree	Working Group Analysis and Agency Decisions
 Public comments supporting a public comment period for new OLAW policy guidance. publicize the policy for comments and publicize why the final decision was made before implementation 		 NIH OLAW will provide a minimum of 60 days for comments to significant policy guidance. This will include but is not limited to any new interpretations of PHS Policy, the NAS <i>Guide</i>, or the AVMA Guidelines for the Euthanasia of Animals.

- use a standard means to publicize guidance; do not publicize policy guidance through other means (e.g., Lab Animal, Q&A)
- seek comments on previous guidance that was provided without a comment period
- guidance documents should clearly state that they do not carry legal or regulatory force
- guidance documents should not be accompanied by a requirement to obtain agency approval for alternative methods or processes
- suggested duration of public comment period ranged from 3 days to 365 days

- Such guidance will focus on high-risk animal welfare concerns affecting institutions, IACUC functions, and updates to guidance as an outcome of the 21CCA reviews.
- NIH OLAW issues guidance as needed to:
 - clarify the meaning or language of policy, guidance, or regulation, as deemed necessary by NIH OLAW or in response to requests from the research community;
 - reduce regulatory burden, especially to harmonize with other federal regulations and guidance; and
 - ensure compliance with federal laws, regulations, guidance, and Congressional and Executive directives.
- NIH OLAW plans to review its disclaimer concerning current guidance to emphasize that "unless specific statutory or regulatory requirements are cited, the guidance should be viewed as recommendations in that an institution may use an alternative approach if the approach satisfies the requirements of the PHS Policy."

Based on NIH OLAW's past success with RFIs concerning adoption of the 8th edition of the NAS *Guide*, implementation of the 2013 edition of the AVMA Guidelines for the Euthanasia of Animals, and the guidance regarding significant changes to ongoing animal activities, this method of receiving broad input from interested stakeholders is cost-effective and efficient.

Public comments about how to enact a public comment period for new OLAW guidance.

- disperse information regarding proposed policy changes and how to submit comments widely among stakeholders; note that all taxpayers are stakeholders in federally funded research
- circumventing rulemaking by issuing guidance is unacceptable

- have near-final documents reviewed by an external advisory committee of experts from the regulated animal research community before they are disseminated for public comment or final agency review
- establish a Research Policy Board to review new policy guidance

A5: Other approaches not previously mentioned*

*Because of the open-ended nature of this topic, the RFI responses have been grouped by broad topic areas or agency-specific topics where applicable

Government-wide Topics	Working Group Analysis and Agency Decisions
The policy on non-pharmaceutical grade compounds should be rewritten to reduce regulatory burden since most compounds in research are not available as pharmaceutical grade.	 NIH OLAW will review and update the guidance on non-pharmaceutical-grade substances to further clarify the options for IACUC review. The agency will enlist the expertise of the FDA in the effort and seek public comment on the updated guidance. The USDA Animal Care policy manual was established in 1997 and revised in 2011. The purpose of the manual was to provide guidance for USDA Animal Care field inspectors and members of the AWA-regulated community on interpreting certain provisions of the Animal Welfare Regulations. Policy #3 provided guidance to investigators on the use of non-pharmaceutical grade substances. The policy manual was removed from the USDA website in July 2018, and the policies are inoperative while USDA conducts a review to ensure conformity with the AWA and Animal Welfare Regulations, harmonize with NIH OLAW guidance, and reduce investigator burden where possible. USDA will make significant policies and significant revisions to policies involving the use of animals in research, teaching, testing, experiments, or surgery available for public comment using regulations.gov or a similar service.
Agencies should form external advisory groups of experts involved in federally funded research to serve as advisors. The advisory group should include those involved with oversight responsibility at the institutional level, such as institutional administrators, IACUC members,	The agencies do not support this approach as it is less transparent, would minimize the impact of input from the broader community, and would slow the process for stakeholder engagement. In addition, the rulemaking process under the Administrative Procedures Act already

allows public and stakeholder input on proposed regulations before becoming a final rule.
The Working Group reviewed this request and determined that it is beyond the assigned charge to reduce administrative burden for investigators. Representatives from all agencies (e.g., FDA, EPA, NIH, and USDA) work collaboratively in the interest of animal welfare. The MOU between EPA and FDA (EPA MOU 224-78-8006) is now expired and has been replaced with MOU 225-14-022. MOU 225-16-010 encompasses procedures for effective and efficient information sharing.
The Working Group reviewed this request and determined that it is beyond the assigned charge to reduce administrative burden for investigators.
Working Group Analysis and Agency Decisions
The Working Group reviewed this request and determined that it is

Make the IACUCs a regular part of the institution's committee system institutions and elect its members from active researchers.	The Working Group reviewed this request and determined that it is beyond the assigned charge to reduce administrative burden for investigators.
Mandate use of the institutional legal system and state laws to deal with AWA allegations.	The Working Group reviewed this request and determined that it is beyond the assigned charge to reduce administrative burden for investigators. However, AWA § 2145(b) mandates that the Secretary of the USDA is authorized to cooperate with the officials of the various states or political subdivisions in carrying out the purposes of ensuring animal welfare, which includes any state, local, or municipal legislation or ordinance on the same subject.
Allow multiple survival surgeries to reduce the number of animals used.	Multiple survival surgeries are already allowed under 9 C.F.R. § 2.31(d)(1)(x)(A). This regulation states an animal is to undergo only one major operative procedure from which it is allowed to recover, unless scientifically justified in writing, or as authorized by the attending veterinarian, or as determined as a special circumstance by USDA.
USDA should review regulations and policies of other federal agencies for areas where their requirements are in conflict. Institutions should not be cited by USDA for complying with Centers for Disease Control and Prevention (CDC) regulations (e.g., requirements for the importation of nonhuman primates transported from the port of entry to a CDC- approved quarantine facility).	Under the AWA Section 2145(a) the Secretary of Agriculture is to consult and cooperate with other federal agencies regarding the welfare of animals. USDA will consider restraints from other federal regulations when evaluating any enforcement situation.
USDA to revise § 2.31(c)(3) of the Animal Welfare Regulations (AWR) as follows: The IACUC may, at its discretion, determine the best means of conducting an evaluation of the institution's programs and facilities that includes all members wishing to participate in the process. The IACUC may invite ad hoc consultants to assist in conducting the evaluation. However, the IACUC remains responsible for the evaluation and report.	Under 9 C.F.R. § 2.31(c)(3), an IACUC can use subcommittees that consist of a minimum of two IACUC members and may invite ad hoc consultants to assist in conducting evaluations. USDA will not propose a regulatory change; however, USDA will consider providing clarification on how an IACUC may use subcommittees comprising of two members.
USDA to require program reviews annually rather than semiannually. Section 2143(b)(3) of the AWA requires only a semiannual inspection of animal study areas and facilities, but § 2.31(c)(1-3) of the AWR requires both semiannual inspections and program reviews.	Section 2143(b)(3) of the AWA requires a semiannual inspection of animal study areas and facilities, and the AWR at 9 C.F.R. § 2.31(c)(1-3) require both semiannual inspections and program reviews. Lengthening the period of time between program reviews conducted by the IACUC from every six months to every 12 months could impact animal health monitoring and overall welfare.

IACUC decisions should not be second-guessed by AC Inspectors. There is no statutory or regulatory basis for this review. Under the statute, this authority is assigned to the IACUCs. Inspectors do not have the expertise needed to determine if the IACUC made a correct decision.	USDA inspectors do not second guess the IACUC; inspectors apply the AWA and regulatory requirements. If a research facility is unable to resolve its concerns with the inspector during the inspection process and the issue results in a finding of noncompliance on an inspection report, the research facility can appeal the finding in the inspection report.
Amend 7 U.S.C. § 2137 and § 2138 of the AWA to prohibit the use of random source dogs and cats in research.	 Section 753 of the Omnibus Appropriations Bill of 2016 states that none of the funds made available by this Act may be used to carry out any activities or incur any expense related to the issuance of licenses under section of the AWA (7 U.S.C. § 2133), or the renewal of such licenses, to class B dealers who sell dogs and cats for use in research, experiments, teaching, or testing. This language carried forward to USDA's fiscal year 2017, 2018, and 2019 appropriations and remains in effect. USDA interprets the legislation to prohibit a class B dealer from using his or her licenses to sell live dogs and cats for use in research, experiments, teaching, or surgery.
Remove DMR because it is in violation of the AWA.	 Section 2143 of the AWA gives the Secretary the authority to promulgate standards to govern the humane handling, care, treatment, and transportation of animals by research facilities. The standards for research facilities include requirements for animal care, treatment, and practices in experimental procedures to ensure that animal pain and distress are minimized, including adequate veterinary care with the appropriate use of anesthetic, analgesic, tranquilizing drugs, or euthanasia. The Secretary shall require a research facility to establish at least one committee. A quorum is required for all formal actions of the IACUC. The Secretary has promulgated the regulation with respect to IACUC review of research activities involving animals. Under 9 C.F.R. § 2.31(d)(2), prior to IACUC review, each member of the Committee shall be provided with a list of proposed activities to be reviewed. Written descriptions of all proposed activities that involve the care and use of animals shall be available to all IACUC members, and any member of the IACUC may obtain, upon request, Full Committee Review (FCR) of those activities. If FCR is not requested, at least one member of the IACUC, designated by the chairman and qualified to

	conduct the review, shall review those activities and shall have the authority to approve, require modifications to (to secure approval), or request FCR of any of those activities.
NIH-specific Topics	Working Group Analysis and Agency Decisions
Determine the length of protocol review by duration of the funding mechanism (e.g., R01 for five years, R03 and R21 for three years).	Extending the period of approval poses a risk to animal welfare, as investigators are not able to sufficiently predict and describe their proposed animal experiments with the level of detail required for adequate IACUC review and approval for the entire five years of a grant. Protocols are frequently amended during the three-year approval period to accommodate changes in experimental design. Performing work not described in a protocol is the most frequent noncompliance reported to NIH OLAW, comprising 23% of cases in 2018. Extending the period to five years would increase the risk of noncompliance. In addition, grants have different award periods (not all are five years), and there are no requirements for a one-to-one match of protocol to grant. Analysis of NIH-awarded research grants from 2015-2018 found that less than 41% are five-year awards. Matching protocol approval to a grant approval decreases the flexibility that institutions currently have with a single protocol covering multiple grants or vice versa.
Stop requiring grant congruency reviews. Grant progress reports would catch substantive discrepancies between the work funded and the work performed, without adding to burden. Harmonize grant congruency more with financial compliance requirements and less on IACUC review and animal procedures, especially in later years of grant.	PHS Policy and the NIH Grants Policy Statement (NIH GPS, chapter 4.1.1.2) require the institution to verify, before award, that the IACUC has reviewed and approved those components of grant applications and contract proposals related to the care and use of animals. This is not an explicit requirement for the IACUC to do a side-by-side comparison of an application or proposal and the IACUC protocol. However, institutions are responsible for ensuring that the information the IACUC reviews and approves is congruent with what is in the application or proposal. Grant- to-protocol congruency is required by NIH only at the first time of competitive award. Institutions are free to devise a workable mechanism to accomplish this end. One method to prevent inconsistencies between the information submitted to PHS and that on the IACUC protocol is to implement a procedure for direct comparison. Some institutions have delegated this responsibility to a particular office or position (e.g., sponsored programs or compliance office).

Have a study section, not IACUC, approve the justification of animal numbers.	Review of proposed activities by a Scientific Review Group (SRG), also known as a study section, is required by the NIH Grants Policy Statement (Part I., 2.4 The Peer Review Process) and federal law (§§ 406 and 492 of the PHS Act, as amended by the NIH Reform Act of 2006). If the proposed research includes the use of animal subjects, review of the VAS and proposed animal experiments is conducted by the SRG. After determination of an award, but before release of funds, IACUC review and approval ensures compliance with PHS Policy and the institution's Assurance. Compliance with PHS Policy is a term and condition of the NIH Grants Policy Statement (Part II, Subpart A 4.1.1 Animal Welfare Requirements) to obtain PHS funds. In 2016, NIH revised the grant application to eliminate redundancy with IACUC review while meeting the PHS Policy requirements. The changes simplify the VAS criteria and reduce the burden on applicants and reviewers. The justification for the number of animals is no longer required in the VAS and is instead an element of rigor in the experimental design, described in the Research Strategy section of the application and considered during SRG review. Because the IACUC review does not coincide with an awarded grant application, the reviewer must consider the rationale for the approximate number of animals to be used and whether the number
OLAW should not view IACUC-approved strategies that are alternatives to "should" statements in the NAS <i>Guide</i> as departures or deviations. OLAW should not use the NAS <i>Guide</i> as a regulatory document.	 proposed is necessary to obtain valid results as required by PHS Policy. NIH OLAW does not support this approach, as it would negatively impact animal welfare. Since the adoption of the PHS Policy in 1985, the NIH has required that Assured institutions base their programs of animal care and use on the NAS <i>Guide</i>, a respected resource of best practices for the humane care and use of laboratory animals prepared by leading international subject matter experts. PHS Policy IV.B.3. requires that "The IACUC shall prepare reports of their semiannual program reviews and animal facility inspections and submit the reports to the Institutional Official (IO). The reports must contain a description of the nature and extent of the institution's adherence to the <i>Guide</i> and the PHS Policy, must identify specifically any departures from the provisions of the <i>Guide</i> and the PHS Policy, and must state the reasons for each departure." "Should" statements in the NAS <i>Guide</i> are standards for animal care and use practiced universally by the biomedical research community to ensure animal welfare. Deviation from a "should"

	statement that is not described as an exception in the NAS <i>Guide</i> or as a result of a performance standard must be reported to the IO. OLAW's current guidance is flexible, allowing for professional judgment in the use of performance standards a as alternatives to "should" statements in the NAS <i>Guide</i> .
Harmonize OLAW's requirement for noncompliance reporting with the USDA's reporting requirement.	 PHS Policy, section IV.F.3., requires that: "The IACUC, through the Institutional Official, shall promptly provide OLAW with a full explanation of the circumstances and actions taken with respect to: any serious or continuing noncompliance with this Policy; 2) any serious deviation from the provisions of the <i>Guide</i>; or 3) any suspension of an activity by the IACUC." All institutions with Animal Welfare Assurances (Assurance) are required to comply with the PHS Policy. OLAW will review the guidance in NIH Guide Notice NOT-OD-05-034 on reporting requirements to refine and update examples of reportable situations, examples of situations not normally reported, the timeframe for reporting, and the information to be reported. Current accountability and transparency in the reporting process will not be negatively impacted by updates. The agency will seek public comment on the updated guidance. Under 9 C.F.R. § 2.31(d)(7), the only noncompliance reporting requirement is that if the IACUC suspends an activity involving animals, the Institutional Official, in consultation with the IACUC, shall review the reasons for suspension, take appropriate corrective action, and report that action with a full explanation to APHIS and any federal agency funding that activity. In addition, USDA has instituted a voluntary process to incentivize registrants to self-identify, self-correct, and voluntarily report serious noncompliance. This will affect how and when facilities are cited for serious noncompliance. The incentives encourage facilities to proactively self-identify areas of noncompliance on its own and immediately takes appropriate corrective action including establishment of measures to prevent reoccurrence. Critical noncompliance will not be cited on inspection reports if the facility discovers the noncompliance on its own in a timely manner, takes immediate

Do not require a grant number on a noncompliance report.	 and appropriate corrective action including establishment of measures to prevent recurrence, has no repeat or critical noncompliance at that site in the last 12 months, and has no critical noncompliance involving the same section and subsection of the regulations at that site in the last 24 months. Since provision of the grant number in a report of noncompliance is a requirement of NIH Guide Notice NOT-OD-05-034, this requirement will be reevaluated during review of this notice.
 OLAW website suggestions. Have examples of lay language for different kinds of studies. Many Pls have no idea how to write this part, especially if they are not native English speakers. Statistics: Have a page on the OLAW website that explains how to do statistics properly and has a user-friendly calculator (similar to the one at <u>http://hedwig.mgh.harvard.edu/sample_size/size.html</u>) Literature search: Some Pls just plug a bunch of unrelated search terms into PubMed, get no results, and think they are done. A section on the OLAW website on how to do proper literature searches (with examples) would help. 	 NIH OLAW plans to consider these suggestions for website aids in coordination with USDA. Under AWA § 2143(d), the research facility is to provide training to scientists in experimentation and testing methods that eliminate the use of animals or limit the animals' pain and distress. AWA § 2143(e) establishes that the National Library of Medicine (NLM) and the National Agricultural Library (NAL) will provide information on improved methods that reduce or replace animal use or minimize pain and distress. 9 C.F.R. § 2.32(d)(5) requires training in the utilization of the NLM and NAL services. In addition, to assist the regulated community in this effort, the USDA, through the Animal Welfare Information Center (https://www.nal.usda.gov/awic), will continue to: (1) be a resource to identify alternatives to the use of live animals in research (9 C.F.R. § 2.32(c)(5)) or alternatives to procedures that may cause more than momentary or slight pain or distress to the animals in accordance with 9 C.F.R. § 2.31(d)(1); (2) provide instruction on identifying alternatives; and (3) provide information on methods that reduce or replace animal use in research or refine techniques to minimize pain and distress.
FDA-specific Topics	Working Group Analysis and Agency Decisions
The RFI does not address the issue of FDA's proposed Good Laboratory Practice (GLP) regulations because of the ongoing regulatory process surrounding Docket No. FDA-2010-N-0548 GLP for Nonclinical Laboratory Studies. As such, previous comments made in response to that docket are reiterated: The proposed rules are redundant, confusing, and inconsistent with existing language in the AWA or PHS Policy. Rather	As noted by the commenters, FDA's rulemaking with respect to part 58, GLP for Nonclinical Laboratory Studies (GLP rulemaking) (Docket No. FDA-2010-N-0542), is still ongoing. Any comments made in response to the RFI regarding the subject of the GLP rulemaking may be taken under advisement as finalization of the proposed rule is considered.

than create new requirements, FDA should continue to work closely with USDA and NIH under the existing MOU and focus on assuring that proper documentation is in place to allow the federal regulatory agency responsible for the applicable statute or standard to determine compliance.

Many FDA regulations currently require that drug sponsors submit data derived from animal studies hampering companies' ability to use and submit non-animal methods. Yet those non-animal methods, including organs-on-a-chip, are becoming increasingly available and robust. FDA should remove its requirements for animal data to reduce burden and ensure the longevity of the regulations in the face of rapidly advancing human-based science.

The FDA is continually working to reaffirm and strengthen its commitment to replacing, reducing, and refining animal studies and supports the development and use of alternative methods (such as assays and technologies like organs-on-a-chip). As part of that commitment, the FDA had previously formed the Modeling and Simulation Working Group to accelerate the adoption of modeling and simulation tools in product development and evaluation and initiated the Toxicology Working Group, which has developed a Roadmap for integrating emerging predictive toxicology methods and new technologies into regulatory safety and risk assessments. The FDA also participates in and chairs the Interagency Coordinating Committee on the Validation of Alternative Methods. The agency is optimistic that cultivating these types of new technologies can continue to reduce the need for animal testing. However, it is important to recognize that there are still many areas where animal research is important and necessary to evaluate the safety and efficacy of potential products under FDA's regulatory jurisdiction; for example, when non-animal testing for a particular endpoint is not yet a scientifically valid or available option.

Animal-related Topics	Working Group Analysis and Agency Decisions
Apply PHS Policy to all animals used for experiments.	The Working Group reviewed this request and determined that it is beyond the assigned charge to reduce administrative burden for investigators.
Extend AWA protection to birds, rats, mice, horses, other farm animals, and all animals.	The Working Group reviewed this request and determined that it is beyond the assigned charge to reduce administrative burden for investigators.
NIH, FDA, and USDA should encourage the use of non-animal methods and development of alternatives.	• PHS Policy, the U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training the NAS <i>Guide</i> , and the VAS of the NIH grant application direct IACUCs and investigators to consider reduction, refinement, and

replacement where appropriate. For example, the PHS Policy, in Section IV.C.1., instructs IACUCs to confirm that research with animals is consistent with the NAS *Guide* and the *Guide*'s endorsement of the 3Rs; U.S. Government Principle III is about reduction and replacement of animals; U.S. Government Principle IV describes refinements to minimize pain and distress; and the VAS requires the use of alternatives unless the research goals cannot be accomplished using an alternative model.

- Under AWA § 2143(d), the research facility is to provide training to scientists in experimentation and testing methods that eliminate the use of animals or limit pain and distress. AWA § 2143(e) establishes an information service at the NAL. The service, in cooperation with the NLM, provides information on improved methods that reduce or replace animal use or minimize pain and distress. Under 9 C.F.R. § 2.32(c)(5), training must include guidance in the utilization of the services (e.g., NLM and NAL) available to provide information: on appropriate methods of animal care and use, on alternatives to the use of live animals in research, that could prevent unintended and unnecessary duplication of research involving animals, and regarding the intent and requirements of the AWA. In addition, to assist the regulated community in this effort, USDA, through the Animal Welfare Information Center (https://www.nal.usda.gov/awic), will continue to: (1) be a resource to identify alternatives to the use of live animals in research (9 C.F.R. § 2.32(c)(5)) or alternatives to procedures that may cause more than momentary or slight pain or distress to the animals (9 C.F.R. § 2.31(d)(1)); (2) provide instruction on identifying alternatives; and (3) provide information on methods that reduce or replace animal use in research or refine techniques to minimize pain/distress.
- FDA is committed to animal welfare and supports the development and use of alternative methods (such as assays and technologies like organs-on-a-chip) that reduce, replace, and refine animal use in research. Therefore, the use of nonclinical models as alternatives to animal use is not discouraged when they are predictive of processes verifying the assessment of safety and efficacy in humans. Although these alternative methods to animal use are highly encouraged,

there are instances when they do not provide scientifically valid data predictive of safety and efficacy. Also, these methods proposed may not have been validated to predict safety risks. When the safety and efficacy of potential products under FDA's regulatory jurisdiction are questionable due to limitations with alternative methods, or there are no alternative methods for safety and efficacy studies, animal research is necessary. For this reason, limitations of alternative methods for assessing safety and efficacy must be taken into consideration to maintain the health and safety of the public.

Database-related Topics

- Create a national database of standard acceptable practices with broad ranges of variances (for instance, range of doses, types of adjuvants [immunization/vaccination models]), and a broad definition of *de minimus* that will not and should not concern OLAW. Mandate that IACUCs accept a simple mention of a procedure that is within the parameters identified in the database.
- Use an algorithmic-based, computerized system. Generate animal protocols for the most commonly encountered procedures (e.g., transgenic breeding, blood sampling, euthanasia, tissue sampling), as well as more specialized procedures. Require more advanced training to ensure that those who use the database understand the principles of animal treatment, breeding, and handling.

Working Group Analysis and Agency Decisions

- NIH does not mandate procedures, but rather, supports the use of evidence-based performance standards to foster good science while ensuring animal welfare.
- NIH OLAW, in coordination with USDA, will continue to support the efforts of FDP members to create the CUSP repository. After the CUSP repository is piloted by FDP institutions, NIH OLAW, in coordination with USDA, will offer resources to IACUCs to integrate CUSP into their institutional processes to reduce burden on investigators. Use of the CUSP would be optional and open-access. The agencies' role is cooperative in the efforts of the FDP to encourage best practices to reduce burden and allow improvements in procedures to be readily accessible.
- NIH OLAW, in coordination with USDA, will continue to support the
 efforts of the IAA to create a repository of IACUC best practices.
 After the repository is piloted by IAA, NIH OLAW, in coordination
 with USDA, will offer resources to IACUCs to integrate the best
 practices into their institutional processes to reduce burden on
 investigators. Use of the IAA repository would be optional and openaccess. The agencies' role is cooperative in the efforts of the IAA to
 encourage best practices that allow flexibility to meet the size and
 complexity of institutional animal care and use programs.

IACUC-related Topics	Working Group Analysis and Agency Decisions
Changes which may not affect animal health (drug dose, change in sampling time) should be considered minor changes and should not require IACUC review.	 NIH, in coordination with USDA, plan to review and enhance resources to support IACUC use of existing options for streamlining protocol review and review of significant changes to approved protocols. The regulations at 9 C.F.R. § 2.31(d)(1-5) do not address minor changes to research activities. It is therefore up to the IACUC to determine how to address minor changes.
Scientific review should be conducted by a study section, not IACUC.	Peer review of the scientific and technical merit of an application is the purview of the NIH SRGs. SRGs have authority to raise specific animal welfare concerns that require resolution prior to grant award. Although not intended to conduct peer review of research proposals, the IACUC is expected to include consideration of the U.S. Government Principles in its review of protocols. U.S. Government Principle II calls for consideration of the relevance of a procedure to human or animal health, the advancement of knowledge, or the good of society. Other PHS Policy review criteria refer to sound research design, rationale for involving animals, and scientifically valuable research. A study that could not meet these basic criteria is inherently unnecessary and wasteful and, therefore, not justifiable. The primary focus of the SRG is scientific merit, and the primary focus of the IACUC is animal welfare. The two bodies have differing constitutions, mandates, and functions. However, it is not possible to separate scientific value from animal welfare. Some overlap is inevitable and fosters accountability in the oversight system. SRGs may raise concerns about animal welfare and IACUCs may question the scientific rationale or necessity for a procedure.
Mandate a uniform animal protocol form so investigators moving between institutions do not waste time converting between institution- specific forms.	NIH OLAW supports a flexible approach to foster good science while ensuring animal welfare. NIH OLAW will support FDP in the development of a sample animal study protocol form and pilot the revised protocol form through FDP. The updated version will focus on required protocol elements to ensure animal welfare and assist in IACUC review. The use of the sample form will be optional and will be provided for the convenience of IACUCs.

Occupational Health and Safety Program (OHSP) Topics

There is no statutory authority for the requirements in the PHS Policy for a health and occupational risk program. Of course, institutions have such programs and may choose to implement them through the IACUC. An IACUC should not reject a protocol on the basis of occupational safety and health concerns. By doing so, it is using the AWA and/or HREA to enforce requirements that are not provided for in those statutory authorities.

Working Group Analysis and Agency Decisions

NIH OLAW does not support this approach. Under the PHS Act, NIH OLAW has statutory authority to require an OHSP. PHS Policy (Section IV.A.1.f.) requires a "health program for personnel who work in laboratory animal facilities or have frequent contact with animals." The NAS Guide states that, "Each institution must establish and maintain an occupational health and safety program as an essential part of the overall Program of animal care and use... The nature of the OHSP will depend on the facility, research activities, hazards, and animal species involved" (Guide pages 17-23). "A comprehensive OHSP should include a hierarchy of control and prevention strategies that begins with the identification of hazards and the assessment of risk associated with those hazards" (Guide page 18). An effective OHSP must encompass all personnel who have contact with animals. Depending on the species of animal they are exposed to or their amount of animal exposure, personnel may not be affected by the program equally. Minimally, the program must include: 1) pre-placement medical evaluation; 2) identification of hazards to personnel and safeguards appropriate to the risks associated with the hazards; 3) appropriate testing and vaccinations; 4) training of personnel regarding their duties, any hazards, and necessary safeguards; 5) policies and facilities that promote cleanliness; 6) provisions for treating and documenting job-related injuries and illnesses; 7) facilities, equipment, and procedures designed, selected, and developed to reduce the possibility of physical injury or health risk to personnel; 8) good personal hygiene practices, prohibiting eating and drinking, use of tobacco products, and application of cosmetics and/or contact lenses in animal rooms and laboratories; and 8) personal protective equipment.

0	versight Topics	Working Group Analysis and Agency Decisions
•	Have one agency that covers all species regardless of funding source. It should be USDA because they have legal authority to enforce	The U.S. government is organized with various agencies responsible for oversight of different functions. These agencies operate under various mandates, regulations, and guidelines, with overlapping areas of
٠	regulations. Harmonize all standards of both agencies to highest standard and cover all vertebrate species.	authority. NIH OLAW, USDA, and FDA cooperate to harmonize oversight of research animal subjects as described earlier in this report. NIH OLAW

 Duplicate research is necessary for rigor and reproducibility. 	operates by authority of the Public Health Service (PHS) Act; USDA operates under the authority of the AWA and Animal Welfare Regulations; and FDA operates principally under the authority of the Federal Food, Drug, and Cosmetic Act and the PHS Act.
IACUC Inspections Topics	Working Group Analysis and Agency Decisions
 Allow IACUC inspections to occur once per year instead of twice. Reduce semiannual inspection duration for investigators who maintain good inspection records with IACUC. Maintain semiannual inspections for those who do not. 	 The HREA requires the IACUC to review the care and treatment of animals in all animal study areas and facilities of the research entity, at least semiannually. A change in the frequency of IACUC inspections would require statutory changes to the law and has a strong likelihood of negatively impacting animal welfare. NIH OLAW analysis of self-reports of noncompliance from 2017-2019 showed that approximately 7% of these self-reported noncompliances were identified during semiannual inspections. Review of OLAW-approved Assurance agreements showed that approximately 41% of institutions identified the semiannual inspection as a critical component of post-approval monitoring of approved activities. Taken together, these findings indicate that potential risks to animal welfare of less frequent IACUC inspections outweigh the burden on the IACUC and the principal investigators (PIs). The PHS Policy affords flexibility in the designation of IACUC inspectors and the conduct of inspections. For example, NIH OLAW allows the substitution of the AAALAC site visit for the semiannual program evaluation and provides details on the criteria for this provision. See Frequently Asked Question E.3. at https://olaw.nih.gov/guidance/faqs#650 and NIH Guide Notice NOT-OD-00-007.html. NIH will develop guidance to address existing flexibilities while fulfilling the purposes of the Act. NIH will seek public comment on the updated guidance. Section 2143(b)(3) of the AWA requires the IACUC to inspect, at leas semiannually, all animal study areas and animal facilities of such research facility, and review as part of the inspection – (A) practices involving pain to animals, and (B) the condition of animals, to ensure compliance with the provisions of the AWA to minimize pain and distress to animals. Exceptions to the requirement of inspection of

such study areas may be made by the Secretary if animals are studied in their natural environment and the study area is prohibitive to easy access. According to 9 C.F.R. § 2.31(c)(3), "...the IACUC may determine the best means of conducting evaluations of the research facility's programs and facilities; and Provided, further, that no Committee member wishing to participate in any evaluation conducted under this subpart may be excluded. The IACUC may use subcommittees composed of at least two Committee members and may invite ad hoc consultants to assist in conducting the evaluations, however, the IACUC remains responsible for the evaluations and reports as required by the Act and regulations." USDA allows additional flexibility in how and by whom the semiannual inspections are conducted. For example, AAALAC site visits that are consistent with Section 2.31(c) of the Animal Welfare Regulations may be counted as one of the IACUC semiannual inspections.

B1: Encourage the use of sections of the AAALAC International program description in applicable parts of the OLAW Animal Welfare Assurance for institutions accredited by AAALAC International

Agree	Disagree	Working Group Analysis and Agency Decisions
Public comments on why agencies should adopt B1.	Public comments on why agencies should not adopt B1.	NIH OLAW plans to change the instructions to the domestic Animal Welfare Assurance to support the use of certain elements of the
 it would enable a more efficient path to consistency between the two documents it would save months of writing, rewriting, and reviewing proposals because of the descriptive language used institutions already do this it is okay to do this, but it will not reduce burden on investigators 	 Would not solve the problem: it would not apply to all Assured institutions OLAW shouldn't be using international guidelines not many applicable sections Not in the interest of animal welfare: 	Support the use of certain elements of the AAALAC program description (PD) to enable consistency and limit rewriting of responses relevant to both documents.
	 institutions should be encouraged to give more thought to the nature of their programs. Allowing them to copy and paste doesn't encourage thoughtful reflection on whether appropriate standards and 	

programs are being implemented to minimize the pain, discomfort, and distress endured by animals

Public comments on how agencies should adopt B1.

- harmonize the wording of the common sections
- develop abbreviated Assurance for AAALAC accredited programs to address areas specific to PHS Policy that are not included in the AAALAC program description
- use the same questions in the OLAW Assurance that are in the AAALAC PD
- allow AAALAC accreditation in lieu of OLAW Assurance to reduce burden, provide a single-source document, and streamline efforts
- allow institutions to use Assurance as part of their AAALAC PD so that AAALAC could take advantage of what many of their member facilities are already creating and providing to OLAW
- ensure that no information currently provided to OLAW is left off due to this change
- use best practices from both programs

Make domestic Assurance simpler by:

- overhauling domestic Assurance from prescriptive document to a simple acknowledgment that the institution is adhering to the spirit of NIH regulations
- abbreviating the Assurance document, which could be as simple as a statement from the IO describing the applicability of

- NIH OLAW plans to coordinate with AAALAC about options for harmonizing documents to meet both organizations requirements.
- Assurance of compliance with the PHS Policy is a requirement for award for all PHS supported activities involving animals. PHS Policy IV.A.1. stipulates the elements required in the Assurance program description for activities involving animals and provides no exemption based on accreditation status.

PHS Policy Section IV.A. defines the specific elements required in the domestic Animal Welfare Assurance, which include: 1) a description of the institution's program of animal care and use; 2) demonstration of institutional commitment to the humane care and use of animals; and 3) how compliance oversight will be provided. Changes to the

the Assurance in terms of the overall animal care program. This would be followed with a list of questions specific to the various subsections of IV.A. of the PHS Policy. These questions would affirm that the specific subsection is addressed in the institutional description or, if not, would require a description of the institution's method for meeting the requirements of the specific subsection.	required elements in the PHS Policy are not anticipated.
Adopt Office for Human Research Protections-	The condition of human subjects used in
style Assurance. The Office for Human Research	research differs from the condition of animals,
Protections has reduced the length of its	and therefore, different oversight and
Federal-wide Assurance document without	regulation are required. PHS Policy is explicit
endangering human research subjects. NIH	about the required elements in the Animal
OLAW may be able to do the same for animal	Welfare Assurance to provide oversight of
research.	animal welfare for PHS-funded activities.
Why do AAALAC International accredited programs in foreign countries have a three- page Assurance, while accredited programs in the U.S. are referred to a 13-page domestic Assurance sample document?	PHS Policy is explicit about the required elements in the domestic Animal Welfare Assurance. PHS Policy Section II allows institutions in foreign countries receiving PHS support for activities involving animals to either comply with the Policy or provide evidence to the NIH OLAW that acceptable standards for the humane care and use of the animals in PHS- conducted or supported activities will be met.
 Regarding the Freedom of Information Act: AAALAC may be required to obey the	NIH OLAW does not and will not obtain
Freedom of Information Act if it interacts	institutional information from AAALAC for the
with OLAW if OLAW obtains information about a	Animal Welfare Assurance document. The
research facility from AAALAC, then	Freedom of Information Act only applies to
AAALAC information should be and is	documents in a federal agency's possession at
subject to public inspection	the time of a request.

B2: Encourage the use of the FDP Compliance Unit Standard Procedures as a repository of best practices for standard procedures used for research with animals

Agree

Disagree

Public comments on why agencies should support B2.

 it would be a valuable resource for investigators, reduce administrative burden, and improve consistency in research with animals

Public comments on how agencies should support B2.

- it needs to be open-access, freely available to the public and all research institutions in the U.S.
- allow animal welfare experts and veterinarians to contribute best practice suggestions
- public comments should be encouraged and accepted
- there should be a way to explore further improvement and implementation of even better practices
- OLAW should clearly state that any best practices or standard procedures do not carry any legal or regulatory force
- committee and institutional diversity may result in resistance to accept procedures as a best practice. It may be feasible to develop procedures based on evidence (e.g., blood collection, euthanasia) that are commonly used by all institutions
- it has to be evidence-based and its content systematically reviewed; any deviations

Public comments on why agencies should not support B2.

- it would not reduce the burden due to the individualistic nature of all our research institutions; what is acceptable to one may not be acceptable to another, and they might have valid reasons for this
- do not support encouraging institutions to use the FDP CUSP; there is inadequate information to assess if the resource will reduce the burden
- the burden associated with contributing to, reviewing, managing, and using the CUSP database is unknown and not welldescribed
- because CUSP is in pilot testing, a decision should be made after testing is complete and impact is reviewed
- require mandatory use of CUSP as a repository of best practices for standard procedures
 - institutions involved in animal research should have to apply for licenses annually
 - institutions should have mandatory training and federal protocols in place to ensure the safety of the animals and assure the public

Working Group Analysis and Agency Decisions

NIH OLAW, in coordination with USDA, will continue to support the efforts of FDP members to create the CUSP repository. After the CUSP repository is piloted by FDP institutions, NIH OLAW, in coordination with USDA, will offer resources to IACUCs to integrate CUSP into their institutional processes to reduce burden on investigators. Use of the CUSP repository would be optional and openaccess. The agencies' role is cooperative in the efforts of the FDP to encourage best practices to reduce burden and allow improvements in procedures to be readily accessible. from the descriptions in the repository need to be justified and described in detail by the investigator

 the platform should be regularly maintained and operated by dedicated, knowledgeable personnel who are available to assist users in an efficient manner

B3: Encourage the use of the IACUC Administrators Association repository of Best Practices by IACUCs

Agree	Disagree	Working Group Analysis and Agency Decisions
 Agree Public comments on why agencies should support B3. to encourage consistency and regulatory compliance access to best practices proposed by a wide array of IACUC administrative professionals provides an excellent source of information about trends in the field, novel situations, implementation challenges, or solutions since all are trying to follow the same guidelines, it makes sense to try to standardize their approaches and policies 	 Public comments on why agencies should not support B3. they may come up with more rules and regulations rather than reducing them a repository is dependent on what is voluntarily posted, is not readily accessible to all, and has limited information available it should not be a member-only resource that blocks transparency and limits public participation best practices cannot replace clear guidance from regulatory agencies and 	NIH OLAW, in coordination with USDA, will continue to support the efforts of the IAA to create a repository of IACUC best practices. After the repository is piloted by IAA, NIH OLAW, in coordination with USDA, will offer resources to IACUCs to integrate the best practices into their institutional processes to reduce burden on investigators. Use of the IAA repository would be optional and open-access. The agencies' roles are cooperative with the efforts of the IAA to encourage best practices that allow flexibility to meet the size and
Public comments on how agencies should support B3.	should not be construed as mandates	complexity of institutional animal care and use programs.
 provide guidance / standard operating procedures to researchers 		

- standardize as much as possible
- it must be open-access if endorsed by OLAW
- OLAW must clearly state that use is not mandatory, and documents do not have legal or regulatory authority

- it should be kept up-to-date and be evidence-based and unbiased
- formal NIH support for this resource could increase its use and maintenance
- a standard operating procedure repository is useful, but do not call it best practices, as this will lead to additional self-imposed regulatory burden

B4: Encourage the use of new or existing tools to streamline protocol review through use of Designated Member Review (DMR), DMR subsequent to Full Committee Review (FCR), and/or Veterinary Verification and Consultation (VVC)

Agree	Disagree	Working Group Analysis and Agency Decisions
 Public comments about why agencies should support B4. use of VVC should reduce unnecessary burden and also benefit animal welfare it would streamline review because they are faster, they could be implemented at any time the method has already been implemented by many institutions it is already encouraged by OLAW and USDA, and has reduced burden for institutions that choose to utilize it 	 Public comments about why agencies should not support B4. existing tools do not reduce the burden on investigators it makes review more burdensome for IACUC administrators protocols that go to FCR often have more thorough reviews; when AAALAC finds one of our protocols has problems, it is usually a protocol that went through DMR it may help in theory, but VVC is made excessively complex by institutions adding additional burden on the process 	 NIH OLAW, in coordination with USDA, plans to review and develop enhanced resources to support IACUC use of existing options for streamlined protocol review and review of significant changes to approved protocols without compromising animal welfare. The Secretary has promulgated the regulation with respect to IACUC review of
 VVC shows that PHS Policy can be used to facilitate processes without negatively impacting animal welfare Public comments on how agencies should support B4. explain specific circumstances where each option would be applied 		
 adopt risk-based assessment of protocol procedures and permit an administrative or 		chairman and qualified to conduct the

review, shall review those activities, and

VVC-like review process for new submissions utilizing only low-risk procedures (e.g., blood draw, euthanasia without manipulation for tissue collection, breeding colonies)

- expand VVC (e.g., rather than limit the veterinarian to confirming compliance with an IACUC policy, give the veterinarian the authority to approve modifications that the veterinarian has the authority to oversee such as treatments, anesthetics, analgesics, and euthanasia; this could be expanded, with the authority of the IACUC, to other procedures as well)
- support the creation of clear definitions and decision tools to aid risk-based reviews
- OLAW should simplify the VVC process and trust the professional judgment of veterinarians to determine what significant changes can be approved
- some IACUCs are hesitant to use VVC due to confusion over how it should be implemented
- the research community, IACUC members, vets, and PIs would be well-served if OLAW were more forthright about what is and is not required to use the VVC process. (e.g., institutions are not required to develop an IACUC-approved formulary of drugs for reference by the veterinarians during VVC of changes in anesthesia, analgesia, or sedation; or policies on duration of each procedure used at that institution; exactly how many extra blood draws can be approved; frequency of each procedure used at that institution; nor on a specific

shall have the authority to approve, require modifications in (to secure approval), or request FCR of any of those activities. number allowable when considering an increase in previously approved animal numbers)

B5: Expanded IACUC training activities that focus on reducing burden on investigators

Agree	Disagree	Working Group Analysis and Agency Decisions
Public comments about why agencies should support B5.	Public comments about why agencies should not support B5.	NIH OLAW, in coordination with USDA, will continue to support the development of
 support expanded IACUC trainings that focus on reducing investigator burden training to reduce burden may help an institution implement practices that could reduce burden on investigators expanding IACUC training that focuses on reducing the burden on investigators and on IACUC administrative offices would be helpful Public comments about how agencies should support B5. place appropriate focus on animal welfare while removing undue administrative burden, clarifying recommendations versus 	 expanded IACUC training may increase burdens if the institution makes it mandatory existing training requirements are already too burdensome there is more than enough training via OLAW, USDA, American Association for Laboratory Animal Sciences, published literature, and regional conferences it does not reduce the burden, because training is implemented on an institutional level; instead, USDA & OLAW should identify what is and is not legally required Public comments about how agencies should 	industry-led training and resources to assist institutional leadership, IACUC members, and IACUC administrators in reducing the administrative burden on investigators. Training and resources will focus on improving IACUC function to ensure animal welfare, enhancing IACUC communication with investigators, and recognizing pitfalls that increase burden. Training and resources will be tailored to IACUCs, institutional leadership, animal program and research staff.
 requirements, and offer resources to investigators offer such training to a randomly selected group of IACUCs and compare their posttraining implementation of PHS Policy and AC regulations to that of untrained IACUCs; if it is more efficient and less burdensome, then offer it to all; offer such training to the IO and compliance officers because the cautious approach emanates from those officials and not the IACUC 	 not support B5 but instead should: provide training activities that include meaningful, comprehensive instruction provide training that focuses on the 3Rs, not the reduction of burden provide more training of how to meet IACUC mandate, not on instructing members to reduce burden expand IACUC training that focuses on areas where IACUC failures have been documented 	

- alternatives to in-person training would be helpful given budgetary constraints
- include in a repository of other training materials for IACUC members
- support training that reinforces evidencebased interpretation and implementation of regulations and policies
- support training that uses best practices for pedagogy and includes formal assessment of mastery of concepts, facts, and learning objectives
- develop a checklist of best practices that IACUCs could use as a self-assessment tool to identify opportunities to remove burden from administrative offices
- support grants for developing and sharing materials that promote efficient practices
- consider highlighting existing efforts to reduce burden as a means of raising awareness
- provide more resources on effectively and efficiently training researchers about the regulations and practical aspects of their work

B6: Other tools or resources not previously mentioned*

*Because of the open-ended nature of this topic, the RFI responses have been grouped by broad topic areas or agency-specific topics where applicable

General Multi-agency Topics	Working Group Analysis and Agency Decisions
Encourage a similar dialog with the Department of Defense and the	Although outside the scope of the 21CCA § 2034(d), NIH OLAW, in
Department of Veterans Affairs concerning the use of animals in	coordination with USDA, will engage with the Department of Defense
research. Separate requirements increase the burden on investigators	and the Department of Veterans Affairs to develop options for
who receive funding from these sources.	harmonizing requirements to reduce administrative burden on

 highlight the non-binding nature of guidance and the flexibility provided in regulation and policy Clarify the distinction between regulation and policy. The regulatory tone in agency guidance and expectations that institutions follow guidance, as in the case of OLAW's FAQs and Notices and the USDA's Animal Care policies, can disproportionately influence decision-making by institutions seeking to mitigate compliance risks. Although the description of these guidance documents often includes terms like *advice, guidance, best practices,* and *recommendations,* the true meaning behind these terms is not conveyed in oversight and enforcement. Agencies should include a general statement underscoring the fact that their policies and guidelines do not establish legally enforceable responsibilities. Agencies should clarify that *guidance* describes the agency's current thinking on a topic and should be viewed only as recommendations of how institutions could meet the statutory requirements, with institutions retaining the flexibility to devise other ways to comply with the written regulations.

Instead of challenging investigators throughout their careers with this yearly paperwork, create a probationary period for training in effective and safe animal use methods for new PIs, wherein protocols are carefully assessed, and then remove the requirement thereafter for submitting any protocols, or only require a new protocol if a new procedure will be used. investigators who receive support from multiple federal agencies to conduct research with animals.

- NIH OLAW plans to review its disclaimer concerning current guidance to emphasize that "unless specific statutory or regulatory requirements are cited, the guidance should be viewed as recommendations in that an institution may use an alternative approach if the approach satisfies the requirements of the PHS Policy."
- The Animal Care policy manual was established in 1997 and revised in 2011. The purpose of the manual was to provide guidance for USDA Animal Care field inspectors and members of the AWAregulated community for interpreting certain provisions of the Animal Welfare Regulations. The policy manual was removed from the USDA website in July 2018, and the policies are inoperative while USDA conducts a review to ensure conformity with the AWA and Animal Welfare Regulations, harmonize with NIH OLAW guidance, and reduce investigator burden where possible. USDA will make significant policies and significant revisions to policies involving the use of animals in research, teaching, testing, experiments, or surgery available for public comment using regulations.gov or a similar service.
- According to 9 C.F.R. § 2.31(d), in order for the IACUC to approve proposed activities or proposed significant changes to ongoing activities, the IACUC shall conduct a review of those components of the activities related to the care and use of animals and determine that the proposed activities are in accordance with this subchapter unless acceptable justification for a departure is present in writing. Also, the IACUC shall conduct continuing reviews of activities covered by this subchapter at appropriate intervals as determined by the IACUC but not less than annually.
- USDA will propose, through notice and comment rulemaking, a regulatory change to 9 C.F.R. § 2.31(d)(5), to remove the requirement that IACUCs conduct "continuing reviews of activities covered by [the Animal Welfare Act] at appropriate intervals... but not less than annually," and, instead, insert a requirement that

	IACUCs conduct a three-year complete review of activities. IACUCs would continue to review, approve, require modification to, or withhold approval of significant changes regarding the care and use of animals in ongoing activities, as required by 9 C.F.R. § 2.31(d)(7) and (e). The regulatory change brings alignment between USDA and NIH requirements and reduces the time and effort dedicated to reviewing protocols on an annual basis, while retaining the benefits of a complete review every three years and ongoing review of any significant changes. The IACUC may choose to review a protocol at an interval shorter than three years as part of conducting a program review. In addition, under AWA § 2143(d), the facility is to provide training to scientists that includes humane practice of animal maintenance and experimentation; and under 9 C.F.R. § 2.32 the facility is to ensure that scientists are qualified to perform their duties. This responsibility shall be fulfilled in part through the provision of training and instruction.
USDA-specific Topics	Working Group Analysis and Agency Decisions
 Decrease the frequency of USDA inspections based on: risk-based assessments and previous assessments; consideration of AAALAC full accreditation (e.g., every three years vs annually); or institutions with no citations or inspection findings. 	Section 2146(a) of the AWA states that the Secretary shall inspect each research facility at least once each year, and in the case of deficiencies or deviations from the standards, shall conduct such follow up as deemed necessary. In addition, USDA uses a risk-based inspection system to determine the frequency of inspections based on history of findings. Facilities with inspection histories of no noncompliance are visited annually, while other facilities may be inspected more frequently, depending on the finding, with some undergoing a focused inspection to follow up on areas of prior noncompliance. Regarding AAALAC, USDA already allows a site visit conducted by AAALAC to substitute for an IACUC semiannual inspection as long as the requirements as set forth in 9 C.F.R. § 2.31(c) are met.
Incentives for Identifying, Reporting, Correcting, and Preventing Noncompliance with the Animal Welfare Act creates new policy for the documentation of AWA violations. It states that if a regulated facility violates the AWA, the violation (noncompliance) may be omitted from the facility's inspection report if a few requirements are met. This has	USDA has instituted a voluntary process to incentivize registrants to self- identify, self-correct, and voluntarily report serious noncompliance. This will affect how and when facilities are cited for serious noncompliance. The incentives encourage facilities to proactively self-identify areas of noncompliance and take swift action. Noncritical noncompliance will not be cited on inspection reports if the facility discovers the noncompliance

made it unclear how research facilities should understand compliance and how facilities might ensure compliance with the AWA.	on its own and immediately takes appropriate correct action including establishment of measures to prevent reoccurrence. Critical noncompliance will not be cited on the report if the facility discovers the noncompliance on its own in a timely manner, takes immediate and appropriate corrective action including establishment of measures to prevent recurrence, has no repeat or critical noncompliance at that site in the last 12 months, and has no critical noncompliance involving the same section and subsection of the regulations at the same site in the last 24 months.
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Appendix 3. Analysis of Responses to the Draft Report of the Working Group

Working Group Analysis of the Responses to the Draft Report

This table presents a summary of the public responses received to the draft report of the Working Group. The Working Group's analysis, and agency decisions. Due to the volume of responses received, similar comments were combined for brevity and efficiency and edited for clarity. Comments that were not responsive to topics presented in the draft report are not included. The agencies expect that implementation of the planned changes in policies, guidance, or regulations will begin within the next two years to accommodate time needed for public engagement processes, including notice and, where indicated, the opportunity for public comment.

Agree	Disagree	Working Group Analysis and Agency Decisions
 any changes to frequency or robustness of inspections will lead to a decrease in protection of animal welfare 	 disagree that changes to yearly inspection would negatively impact animal welfare; inspections rarely identify concerns that have not already been identified by animal care, veterinary staff, or post-approval monitoring no data to support contention that annual inspections have "a strong likelihood of negatively impacting animal welfare" 	NIH OLAW will develop guidance to further clarify the existing options for designating IACUC inspectors and conducting inspections. NIH will seek public comment on the updated guidance. NIH OLAW analysis of self-reports of noncompliance from 2017-2019 showed that approximately 7% of these self-reported noncompliances were identified during semiannual inspections. Review of approved domestic Assurances showed that 41% of institutions identified the semiannual inspection as a critical component of post- approval monitoring of approved activities. Taken together, these findings indicate that potential risks to animal welfare of less frequent IACUC inspections outweigh the burden on the IACUC and the PI.

1A. Semiannual Inspections: maintain semiannual inspection frequency

Agree	Disagree	Working Group Analysis and Agency Decisions
No comments received.	No comments received.	No additional action required.
1C. Semiannual Inspections: flexibility for c	onducting inspection	
Agree	Disagree	Working Group Analysis and Agency Decisions
 difficult to comment on existing flexibilities without more information about the intent and context of these statements 	 would result in the IACUC simply signing off on a third-party accreditor's opinion 	 USDA allows flexibility in how and by whom the inspections are conducted. According to 9 C.F.R. § 2.31(c)(3), "the IACUC may determine the best means of conducting evaluations of the research facility's programs and facilities; and Provided, further, that no Committee member wishing to participate in any evaluation conducted under this subpart may be excluded. The IACUC may use subcommittees composed of at least two Committee members and may invite ad how consultants to assist in conducting the evaluations, however, the IACUC remains responsible for the evaluations and reports as required by the Act and regulations." NIH OLAW allows flexibility in the use of the AAALAC site visit as a substitution for the semiannual program evaluation and provides details on the criteria for its application. See Frequently Asked Question E.3. at https://grants.nih.gov/grants/guide/notice files/NOT-OD-00-007.html. NIH will review existing guidance, clarify flexibilities in the

conduct of inspections, and seek public comment on the updated guidance.

2A. Protocol Review: streamline protocol review and encourage DMR		
Agree	Disagree	Working Group Analysis and Agency Decisions
 support efforts to recognize, clarify and reduce areas of protocol review contributing to burden support streamlining protocol review and use of DMR for low-risk activities define types of studies involving low-risk, noninvasive, or minimally invasive procedures that would be eligible for expedited review 	 reliance on DMR may to lead to greater animal use encouraging use of DMR would negatively impact animal welfare review and approval should not be performed by one IACUC member using DMR can lead to inconsistencies 	DMR and FCR are equally acceptable for use by IACUCs when conducting protocol review. DMR and FCR must proceed as outlined in PHS Policy IV.C.2. and 9 C.F.R. § 2.31(d)(2).

2B. Protocol Review: resources on what is exempt from review

Agree	Disagree	Working Group Analysis and Agency Decisions
 support clarifying activities exempt from IACUC review 	 do not exempt any animal use from IACUC review do not believe that the review process for exempting human subjects research is translatable to animal research 	The agencies will review existing guidance, clarify activities that are exempt from review, and seek public comment on updated guidance.

2C. Protocol Review: review guidance on non-pharmaceutical grade substances

Agree	Disagree	Working Group Analysis and Agency Decisions
 support plan to update non-pharmaceutical grade guidance FDA should be included in review regarding non-pharmaceutical grade compounds to reduce potential inconsistencies between agencies, definitions, and regulations 		NIH OLAW will review and update the guidance on non-pharmaceutical grade substances to further clarify the options for IACUC review. The agency will enlist the expertise of the FDA in the effort and seek public comment on the updated guidance.

2D. Protocol Review: USDA changing to 3-year de novo review

Agree	Disagree	Working Group Analysis and Agency Decisions
 support USDA reducing annual review to be consistent with PHS policy at every 3 years but recommend replacing "three-year de novo" with "complete review every three years" to maintain consistent language OLAW should remind IACUCs that the triennial "complete review in accordance with IV.C.14." of an ongoing activity does not require a new protocol 	 do not support reduction in frequency of review. Animal welfare could be negatively impacted if a protocol does not receive an annual IACUC review because that review could reveal the availability of a new alternative method consider yearly "renewal" that does not entail another full review consider risk-based approach for continuing review reconsider extending approval period to five-year 	To harmonize with NIH, USDA will propose, through notice and comment rulemaking, a regulatory change to CFR Title 9 Chapter 1, Subchapter A—Animal Welfare, Section 2.31(d)(5), to remove the requirement that IACUCs conduct "continuing reviews of activities covered by [the Animal Welfare Act] at appropriate intervals but not less than annually," and, instead, insert a requirement that IACUCs conduct a three-year de novo review of activities. IACUCs would continue to review, approve, require modification to, or withhold approval of significant changes regarding the care and use of animals in ongoing activities, as required by 9 C.F.R. § 2.31(d)(7) and (e).

	3A. Reporting: same annual reporting schedule and portal			
A	gree	Disagree	Working Group Analysis and Agency Decisions	
•	aligning OLAW and USDA annual reporting could lead to improvements for all parties improvements in transparency could be achieved by a single portal for annual and	 OLAW and USDA annual reports are very different; no benefit to creation of a common portal for submission review content of the annual report to USDA, which differe significantly from the submission 	A shared portal will not merge the information in the two reports but will increase efficiency of the submission process. The timing for submission of the reports will be harmonized.	
•	compliance reporting; no concerns about reporting changes if publicly available and searchable portal should allow submission of only information pertinent to that agency	USDA, which differs significantly from the AWA language and exceeds that of other regulated industries		

3B. Reporting: use of AAALAC PD for Assurance

Agree		Dis	sagree	Working Group Analysis and Agency Decisions
 support harmo AAALAC PD 	nizing NIH Assurance with	•	detail required in AAALAC PD is beyond PHS requirements use of AAALAC activity to fulfill a federal policy or regulatory requirement would therefore be subject to FOIA	NIH OLAW will coordinate with AAALAC about options for harmonizing documents to meet both organizations' requirements. An institution's AAALAC PD would not be collected or viewed by NIH OLAW as part of this plan.

3C. Reporting: review reporting guidance in NOT-OD-05-034 and provision of grant number

Agree	Disagree	Working Group Analysis and Agency Decisions
 support OLAW's commitment to review the guidance on prompt reporting and grant number requirement prompt reporting should only include incidents that jeopardize the health or wellbeing of animals 	 noncompliance reports as it is an important aspect of transparency and accountability to the public components of PHS Policy (IV. F.) exceed 	Current accountability and transparency in the reporting process will not be negatively impacted by updates. The agency will seek public comment on the updated guidance.
	the statutory requirements	

3D. Reporting: USDA online annual reporting system			
Agree	Disagree	Working Group Analysis and Agency Decisions	
support development of report portal	online annual	No additional action required.	
 stress the importance of user-friendly online porta 	, , ,		

increase administrative burden

3E. Reporting: USDA eliminating 3-	-year registration renewal
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Guidance on Ecderal Standards: OLANN 60d comment period

Agree	Disagree	Working Group Analysis and Agency Decisions
 support USDA eliminating 3-year registration renewal 		USDA intends to pursue a regulatory change to 9 C.F.R. § 2.30(a)(1) to eliminate the need to renew the registration every three years. The annual report will be updated to contain sufficient information to update USDA records, and no further information regarding the registration would be required.

4A. Guidance on Federal Standards: OLAW 60d comment periods			
Agree	Disagree	Working Group Analysis and Agency Decisions	
 a minimum 60-day comm new OLAW guidance wou greater input into policy of it is critical that a commit consider and respond to a that of funded institution investigators disseminate guidance dire institutions rather than as Animal columns 	Id allow for development ment be made to all input, not only s and ectly to	Significant policy guidance will include but is not limited to any new interpretations of the PHS Policy, the NAS <i>Guide</i> , or the AVMA Guidelines for the Euthanasia of Animals. Such guidance will focus on high-risk animal welfare concerns affecting institutions, IACUC functions, and updates to guidance as an outcome of the 21CCA reviews.	

- define "significant" and "high-risk"
- suggest advance educational materials
- suggest it include any proposed policies, guidance documents, FAQs, or interpretive rules

REDUCING ADMINISTRATIVE BURDEN FOR RESEARCHERS

Animal Care and Use in Research

Agree	Disagree	Working Group Analysis and Agency Decisions
 support review of disclai clarification of best pract requirements 		NIH OLAW will seek public comment on the updated disclaimer.
4C. Guidance on Federal Agree	Standards: USDA public comment and policies Disagree	Working Group Analysis and Agency Decisions
 support making revised a 	and future policies ment using	No additional action required.
available for public comr regulations.gov or simila	r service	

5. Agency Coordination: harmonizing with Department of Defense and Department of Veterans Affairs

Agree	Disagree	Working Group Analysis and Agency Decisions
 support harmonizing with Department of Defense and Department of Veterans Affairs 		NIH OLAW, in coordination with USDA, will engage with the Department of Defense and the Department of Veterans Affairs to develop options for harmonizing requirements to reduce administrative burden on investigators who receive support for research with animals from multiple federal agencies.

6A. Training and Resources: development of training and resources

Agree	Disagree	Working Group Analysis and Agency Decisions
 support development of industry-led training and resources 	 IACUC training should focus on animal welfare considerations and not burden 	Training and resources will focus on improving IACUC function to ensure animal welfare,
 IACUCs need meaningful comprehensive instruction 		enhancing IACUC communication with investigators, and recognizing pitfalls that
 burden will be reduced by improving IACUC and investigator understanding of existing regulations and the flexibility that exists within those regulations; recommend increased funding for OLAW and USDA to expand education and training opportunities 		increase burden. Training and resources will be tailored to IACUCs, institutional leadership, animal program and research staff.
 develop training for researchers and their staff 		
 focus training for institutional leadership and IACUCs on reducing administrative burden on investigators 		

6B. Training and Resources: support of IAA repository of best practices		
Agree	Disagree	Working Group Analysis and Agency Decisions
 support repository of evidence practices that are publicly acce open-access urge agencies to take an active stimulating and facilitating the these resources IAA's efforts should be independencies' 	cessible and ve role in ne creation of	The agencies' roles are cooperative with the efforts of the IAA to encourage best practices that allow flexibility to meet the size and complexity of institutional animal care and use programs.

• repository of best practices should not constitute de facto policy

Agree	Disagree	Working Group Analysis and Agency Decisions
support of CUSP repository		The agencies' roles are cooperative with the efforts of the FDP to encourage best practices
		to reduce burden and allow improvements in
		procedures to be readily accessible.

Agree	Disagree	Working Group Analysis and Agency Decisions
 support simplifying protocol form limit addition of institution-centric elements and focus on minimum requirements 	 do not support simplifying protocol form 	An updated version developed with the cooperation of FDP institutions will focus on the required elements to ensure animal welfar and assist in IACUC review. The use of the sample animal study protocol form will be optional and will be provided for the convenience of IACUCs.

6E. Training and Resources: new website resources		
Agree	Disagree	Working Group Analysis and Agency Decisions
 support new resources suggest a website on non-animal approaches 		Website resources will focus on updated policy guidance stemming from the 21CCA review, improving IACUC function to ensure animal welfare, enhancing IACUC communication with investigators, and recognizing pitfalls that increase burden. Specific topics recommended by stakeholders that will be considered include departures reporting, non-animal alternatives, grant-to-protocol congruence, statistics, literature searches, and protocol writing for a lay audience.

7. Other Comments

OLAW: "should" statements

- clarify should vs must: "should" statements are not mandatory and are thus not departures from the NAS *Guide*; revise NOT-OD-12-148, FAQ C7, PHS Policy IV.B.3.c
- IACUC-approved alternatives to "should" statements should not be deemed departures or deviations
- conclusion that "should" statements are "standards of animal care and practiced universally" is inconsistent with the NAS *Guide* itself
- current guidance does not offer flexibility for professional judgment; implementing alternatives is consistent with the recommendations in the NAS *Guide*

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Assured institutions are required to base their programs of animal care and use on the NAS *Guide*, a respected resource of best practices for the humane care and use of laboratory animals prepared by leading international subject matter experts. OLAW considers "should" statements in the NAS *Guide* as established standards in animal care and use to ensure animal welfare. OLAW's current guidance affords flexible application of "should" statements in the NAS *Guide* by allowing alternative approaches based on performance standards to achieve the same results. Deviation from a "should" statement that is not described as an exception in the NAS *Guide* or is not the result of a performance standard must be reported to the IO. NIH OLAW will review existing guidance, clarify the requirements for reporting, and seek public comment on updated guidance.

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Grant-to-protocol congruence

OLAW: miscellaneous

- NIH urged to further analyze the merits of grant-to-protocol congruency reviews, whether it impacts animal welfare or grant spending (NIH GPS doesn't require IACUCs perform congruency review)
- requirements for congruency evaluation are only addressed in the Working Group's analysis; no mention of this change in the recommendations
- eliminate grant congruency review; grant application is often outdated by the time the research study is submitted to the IACUC, and communication between the funding agencies, the institutional officials and the PIs through proposal submission and grant progress reports would ensure that funding is used accordingly
- clarify to awardee institutions that grant congruency is only required at time of award
- grant congruency requirement needs refinement—limit to species and numbers

PHS Policy and the NIH Grants Policy Statement (NIH GPS, chapter 4.1.1.2) require the institution to verify, before award, that the IACUC has reviewed and approved those components of grant applications and contract proposals related to the care and use of animals. This is not an explicit requirement for the IACUC to do a side-by-side comparison of an application or proposal and the IACUC protocol. However, institutions are responsible for ensuring that the information the IACUC reviews and approves is congruent with what is in the application or proposal. Grantto-protocol congruency is required by NIH only at the time of the first competitive award. Institutions are free to devise a workable mechanism to accomplish this. NIH OLAW will review existing guidance, clarify the requirements, and seek public comment on updated guidance.

 Protocol approval period coordinate protocol approval period with grant award; amendment process handles changes in science want to know how changing protocol approval period from 3 to 5 years would pose a risk to animal welfare agree with not extending approval period from 3 to 5 years extending protocol review periods to every 5 years would reduce burden; most institutions have robust post-approval monitoring programs providing additional oversight and PIs can keep protocol current through amendments 	Extending the period of approval poses a risk to animal welfare, as investigators are not able to describe their proposed animal experiments in sufficient detail for adequate IACUC review and approval for the entire five years of a grant. Performing work not described in a protocol is the most frequent noncompliance reported to NIH OLAW, comprising 23% of cases in 2018. Extending the period to five years would increase the risk of noncompliance. In addition, grants have different award periods (not all are five years) and there are no requirements for one-to-one match of protocol to grant. Analysis of NIH-awarded research grants from 2015- 2018 found that less than 41% are five-year awards. Matching protocol approval to a grant approval decreases the flexibility that institutions currently have with a single protocol covering multiple grants or vice versa. NIH OLAW, in coordination with USDA, plans to review and develop resources to support IACUCs' use of existing options for streamlining protocol review and review of significant changes to approved protocols without compromising animal welfare.
 Survey on burden extent of self-imposed burden is unknown; suggest OLAW use the Assurance process to collect information 	Following the implementation of policy and regulatory changes in the next two years, the agencies plan to evaluate the outcome of the efforts to reduce administrative burden while maintaining scientific integrity and animal welfare.
 Occupational Health and Safety clarify which section of the PHS Service Act provides statutory authority for requiring an OHSP 	The PHS Policy is incorporated into the PHS Act (CFR Title 42, Chapter 1, Subchapter D, Part 52, § 52.8). Assurance of compliance with the Policy is a requirement for award for all PHS-supported activities involving animals. PHS Policy IV.A.1.f. requires in the institution's Assurance a description of the health program for personnel who work in laboratory animal facilities or have frequent contact with animals.
 Zebrafish larvae change applicability of the Policy to zebrafish to at least when embryos begin to free feed (5-7d) 	NIH OLAW will review existing guidance, clarify the requirements, and seek public comment on updated guidance.
 Vertebrate Animals Section streamline the VAS, which is redundant with IACUC protocol make all animal activity information part of Just in Time 	In 2016 NIH revised the grant application to remove redundancy with IACUC review while meeting the requirements of the PHS Policy IV.D. The changes simplified the VAS criteria and reduced burden on applicants and reviewers. NIH has no plans for further changes to the VAS.

 Grant code changes code 44 (bar to award) should be replaced with a code 48 (restricted award); once IACUC approval and OLAW assurances have been obtained, the granting agency should be able to lift the restrictions and not be dependent on OLAW to do so 	NIH OLAW is responsible under PHS Policy V.A. to ensure animal protections are in place for applications and proposals for research with animals.
 Assurance for accredited institutions AAALAC accreditation should be considered in lieu of providing details of a previously peer-reviewed program in Assurance 	Assurance of compliance with the PHS Policy is a requirement for award for all PHS supported activities involving animals. PHS Policy IV.A.1. stipulates the elements required in the Assurance program description for activities involving animals and provides no exemption based on accreditation status.
 Comparison with human subjects oversight disagree with around-the-clock care statement; the need for continuous care would make centralized oversight more effective, not less animals used in research require 24/7 care, which offers greater opportunity to monitor subjects' welfare; animal research studies should be permitted similar flexibility for exemptions and/or expedited review as human research 	The conditions for protection of human subjects used in research differ from the conditions for protection of animals, and therefore, different oversight and regulation are required.
 NAS Guide as federal standard PHS requirement to comply with the NAS Guide plays an important role in protecting the welfare of animals in supported research NIH urged to implement a mechanism by which "updates" to the NAS Guide, including references, can be vetted and posted on the OLAW website 	Following the implementation of policy and regulatory changes in the next two years, the agencies plan to evaluate the outcome of the efforts to reduce administrative burden while maintaining scientific integrity and animal welfare.
USDA: Policy 12 & 14	Working Group Analysis and Agency Decisions
 harmonize guidance that would reduce duplicative considerations of alternatives to pain and distress object strongly to USDA's decision to remove its Animal Care policy manual requirement for keyword and literature searches was intended to substantiate claims that alternatives had been considered eliminate requirement for literature searches amend AC Policy #12 to be consistent with AWR § 2.31(d)(1)(ii) 	The policy manual was removed from the USDA website in July 2018, and the policies are inoperative while USDA conducts a review to ensure conformity with the AWA and Animal Welfare Regulations, harmonize with NIH OLAW guidance, and reduce investigator burden where possible. USDA will make significant policies and significant revisions to policies involving the use of animals in research, teaching, testing, experiments, or surgery available for public comment using regulations.gov or a similar service.

٠	revise AC Policy #14 to reflect AWA § 2143 and 9 C.F.R. §
	2.31(d)(1)(x)(A-C) allowing approval of multiple survival operative
	procedures at the discretion of the IACUC and as justified for
	scientific and animal welfare reasons

• reinstate USDA AC policies 12 & 14

USDA: miscellaneous	Working Group Analysis and Agency Decisions
 Licenses restrict licensure to only those labs that perform research with a strong proof of benefit to humans 	The Working Group reviewed this request and determined that it is beyond the assigned charge to reduce administrative burden for investigators.
 Teaching remove teaching as a regulated activity 	The Working Group reviewed this request and determined that it is beyond the assigned charge to reduce administrative burden for investigators.
 Voluntary reporting strongly object to USDA's attempt to incentivize registrants to self- identify, self-correct, and voluntarily report serious noncompliance 	The Working Group reviewed this request and determined that it is beyond the assigned charge to reduce administrative burden for investigators.
 Definition of animal oppose amending definition of animal 	The Working Group reviewed this request and determined that it is beyond the assigned charge to reduce administrative burden for investigators.
Working Group: miscellaneous	Working Group Analysis and Agency Decisions
 Working Group: miscellaneous support the engagement of an external advisory group 	Working Group Analysis and Agency Decisions The agencies do not support this approach as it is less transparent, would minimize the impact of input from the broader community, and would slow the process for stakeholder engagement. In addition, the rulemaking process under the Administrative Procedures Act already allows public and stakeholder input on proposed regulations before becoming a final rule.
	The agencies do not support this approach as it is less transparent, would minimize the impact of input from the broader community, and would slow the process for stakeholder engagement. In addition, the rulemaking process under the Administrative Procedures Act already allows public and stakeholder input on proposed regulations before

•	amend the AWA to include all vertebrates	The Working Group reviewed this request and determined that it is beyond the assigned charge to reduce administrative burden for investigators.
•	consider consolidating animal research oversight under a single federal office or entity with one primary set of regulations and guidance documents	The U.S. government is organized with various agencies responsible for oversight of different functions based on various mandates, regulations, and guidelines, with overlapping areas of authority. NIH, USDA, and FDA cooperate to harmonize oversight of research animal subjects as described earlier in this report. NIH operates by authority of the Public Health Service (PHS) Act; USDA operates under the authority of the AWA; and FDA operates principally under the authority of the Federal Food, Drug, and Cosmetic Act and the PHS Act.
•	by proposing to overhaul policies, regulations, and guidance documents after submission of a final report to Congress, the agencies would bypass the legislative body's oversight authority; all proposed changes should be presented to Congress and the public before implementation	The 21CCA requires the Director of the NIH to "identify ways to ensure such regulations and policies are not inconsistent, overlapping, or unnecessarily duplicative, including with respect to inspection and review requirements by Federal agencies and accrediting associations; take steps to eliminate or reduce identified inconsistencies, overlap, or duplication among such regulations and policies; and take other actions, as appropriate, to improve the coordination of regulations and policies with respect to research with laboratory animals."

Appendix 4. Timeline of the Working Group Outreach Activities

Working Group Stakeholder Engagement Activities

This table presents a summary of the public outreach activities conducted by the Working Group. The Working Group held numerous listening sessions, gave presentations at conferences and workshops, and solicited public input through Requests for Information prior to publication of the final report on Reducing Administrative Burden for Researchers.

Date	Activity
September 22, 2017	Conference Session: New Jersey Association for Biomedical Research, IACUC 24 Conference
October 17, 2017	Conference Session: 68th American Association for Laboratory Animal Science National Meeting
December 4, 2017	Conference Session: Scientists Center for Animal Welfare, Winter Conference
January 9, 2018	Listening Session: Federal Demonstration Partnership Forum, Government-University-Industry Research Roundtable of the National Academies
January 29, 2018	Listening Session: AAALAC International Council Meeting
March 12, 2018	Question and Answer Session: Animal Welfare Institute, Humane Society Legislative Fund, Physicians Committee for Responsible Medicine, and Humane Society of the United States Meeting
March 14, 2018	Request for Information: Animal Care and Use in Research
March 21, 2018	Conference Session: Public Responsibility in Medicine and Research, 2018 IACUC Conference
September 22, 2018	Listening Session: AAALAC International Delegates Meeting
October 29, 2018	Conference Session: 69th American Association for Laboratory Animal Science National Meeting
December 3, 2018	Conference Session: Scientists Center for Animal Welfare, Winter Conference
December 7, 2018	Request for Information: Input on Draft Report from Working Group on Reducing Administrative Burden to Researchers for Animal Care and Use
January 24, 2019	Conference Session: Federal Demonstration Partnership Forum, Government-University-Industry Research Roundtable of the National Academies
February 28, 2019	Conference Session: Council on Government Relations Meeting
April 3, 2019	Conference Session: Public Responsibility in Medicine and Research, 2019 IACUC Conference

Appendix 5. Acronyms Used in the Report

IACUC Administrators Association
Institutional Animal Care and Use Committee
Institutional Official
Institutional Review Board
Memorandum of Understanding
National Association for Biomedical Research
National Agricultural Library
National Academy of Sciences
National Institutes of Health
National Library of Medicine
National Science Foundation
Occupational Health and Safety Program
Office of Laboratory Animal Welfare
Program Description
People for the Ethical Treatment of Animals
Public Health Service
Principal Investigator
Request for Information
Scientific Review Group
United States Code
U.S. Department of Agriculture
Vertebrate Animals Section
Veterinary Verification and Consultation