

# ODP Portfolio Review: Data Snapshot

## NIH Pathways to Prevention Workshop: Identifying Risks and Interventions to Optimize Postpartum Health

### Introduction

Maternal health research efforts have generally focused on pregnancy. However, the first year after pregnancy, also referred to as the postpartum period, is an especially vulnerable time for people who give birth. Most maternal deaths (from all causes, including health conditions and violence) and severe pregnancy-related complications occur during this period. In November 2022, the National Institutes of Health (NIH) convened the Pathways to Prevention (P2P) Workshop: [Identifying Risks and Interventions to Optimize Postpartum Health](#) to assess the available scientific evidence on predicting and preventing poor postpartum health outcomes.

The workshop was co-sponsored by the NIH Office of Disease Prevention (ODP), Office of Research on Women's Health (ORWH); National Heart, Lung, and Blood Institute (NHLBI); *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD); and National Institute on Minority Health and Health Disparities (NIMHD). The goals of the workshop were to synthesize available evidence, identify research gaps, shape a research agenda, and develop an action plan to advance the field. Published products from the workshop include the Independent Panel Report, Systematic Evidence Review, and Federal Partners Meeting Report, which are available on the [workshop webpage](#).

### Purpose

A portfolio review was conducted during fall 2021 as part of the NIH assessment of current federal agency support in the workshop topic area and informed by NIH subject matter experts. Aims of the review were to quantify and characterize current research activities, inform the identification of potential research and funding gaps, and provide a baseline to measure future progress.

### Methods

NIH research projects (Types 1, 2, 3, and 9) funded from fiscal years 2018–2022 (FY18–22) were searched using the NIH RePORTER database based on the Research, Condition, and Disease Categories classification for both “Maternal Morbidity and Mortality” and “Maternal Health.”

Project titles and abstracts were screened for relevance and included in the final dataset if they focused on pregnant persons, pregnant persons receiving prenatal care, birthing persons before or immediately after delivery and before the end of birthing-related care, and postpartum period up to one year after delivery. Research projects were excluded if they included basic research (i.e., animal models), international/non-U.S. participants, focused only on persons during the pre-pregnancy period, and pregnancy and birth risk factors linked to infant health outcomes only. Relevant projects were manually screened and validated internally by ODP staff and their

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data analysis contract staff, and NIH subject matter experts to ensure relevance to the research topic.

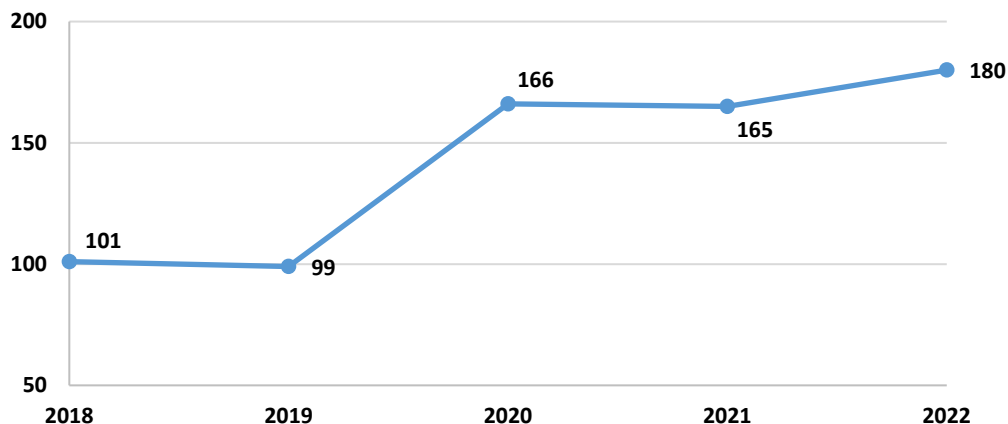
The funding and number of projects were broadly summarized across NIH Institutes and Centers and years to assess and develop a baseline of relevant research.

## Results and Summary of the Data

- The initial search yielded approximately 1,608 projects, of which 711 (44%) were determined to be directly relevant to the focus of this P2P workshop.
- From 2018–2022, there was an overall growth in the number of relevant NIH-funded projects. There was a slight dip between 2018–2019 and 2020–2021, and then an increase again between 2021–2022.

This summary of NIH’s FY18–22 portfolio represents a baseline that will be used to measure future progress as the [Independent Panel Report recommendations](#) are implemented to address this critical research need.

## Relevant NIH-Funded Projects by Fiscal Year (FY18–22)



The details of the relevant NIH-funded projects (n=711) between FY18–22 can be found on the [NIH RePORTER website](#).

## Workshop Co-Sponsor Activities

NIH’s signature maternal health initiative, Implementing a Maternal health and PRenancy Outcomes Vision for Everyone (IMPROVE) was initiated in 2019 in response to high rates of pregnancy-related complications and deaths in the United States. Below is each P2P participating institute’s role and how they contribute to the IMPROVE initiative and other special initiatives in postpartum health.

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**ORWH** co-leads the IMPROVE initiative, with a special interest in promoting intersectional research across the life course.

**OBSSR** participates in the IMPROVE initiative, with a special interest in promoting research on the intersection between intimate partner violence and maternal morbidity and mortality. In FY24, OBSSR led the development of two IMPROVE Requests for Applications (RFAs) to develop research capacity in this area; a K18 Career Enhancement Award program and an R25 Short Course Award initiative.

**NIMHD** participates in the IMPROVE initiative, with a special interest in promoting multidisciplinary, multilevel, and innovative research on the intersection of race and ethnicity, and/or socioeconomic status, to understand and address maternal morbidity and mortality in the United States. In FY20, NIMHD led an RFA and funded five grants focused on supporting multidisciplinary research by examining mechanisms underlying racial and ethnic disparities in maternal mortality and morbidity and testing the efficacy and/or effectiveness of multilevel interventions to reduce these disparities, particularly among racial and ethnic minority, socioeconomically disadvantaged, and underserved rural populations. In FY24, NIMHD led the development of an IMPROVE RFA to support intervention research to understand and address maternal morbidity and mortality in the United States, among racial and ethnic minority, socioeconomically disadvantaged, and underserved rural populations, with a focus on understudied health care factors.

**NICHD** co-leads the NIH-wide IMPROVE initiative, including the Rapid Acceleration of Diagnostics Technology (RADx® Tech) for Maternal Health Challenge, which is awarding prizes for the development of remote and point-of-care technologies for assessment and care delivery that may improve access to and delivery of postpartum care. Additionally, the NICHD supports a wide range of research projects to address both maternal and infant health in the postpartum period. Examples include assessment of an integrated pediatric-maternal health care model to reduce postpartum risks ([R21HD112104](#)), interventions for postpartum mental health ([R01HD101483](#)), efforts to prevent and treat postpartum hemorrhage to reduce the risk of maternal morbidity and mortality ([R01HD107451](#), [R01HD110109](#)), and many others. The NICHD's maternal health research networks and centers ([Maternal-Fetal Medicine Units](#); [IMPROVE Centers](#); [Global Network](#)) also include research on postpartum health. As part of the portfolio review, NICHD supported 283 (40%) of the 711 relevant research projects with funding totaling \$137,794,804.

**NHLBI** leads multiple initiatives on maternal health, including the Maternal Health Community Implementation Program and ENRICH (Early Intervention to Promote Cardiovascular Health of Mothers and Children), and funds multicenter clinical studies such as the nuMoM2b Heart Health Study and REBIRTH (Randomized Evaluation of Bromocriptine in Myocardial Recovery Therapy for Peripartum Cardiomyopathy). NHLBI is also a part of the NIH-wide IMPROVE initiative and leads the IMPROVE-Community Implementation Program.

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## **Additional Information**

Please contact Usha Singh at [prevention@mail.nih.gov](mailto:prevention@mail.nih.gov).