Dear TEPHINET Community,

We are pleased to announce the opportunity to submit mini-grant proposals for non-communicable disease (NCD) field epidemiology investigations. Mini-Grants will be awarded for non-research investigations focused on surveillance, program evaluation, and public health activities. More information on non-research activities can be found in the Non-Research Proposal Reminder document provided on the application website. National and Regional Field Epidemiology Training Programs (FETPs) are welcome to submit multiple proposals. The implementation period for all investigations will be from January 2019–August 2019.

Who can apply?

- Current Field Epidemiology Training Program (FETP) residents. Residents who graduate during the implementation period are eligible, with the support of their FETP program.
- Applicant must be the principal investigator.

Priority will be given to:

- 2-year trainees in advanced FETP programs with U.S. Centers for Disease Control and Prevention (CDC) Resident Advisors (RAs).
- Countries with NCD Units within their Ministry of Health (MOH).
- Evidence of NCD mentorship within the MOH or within the university affiliated with their FETP.
- Applications related to one of the subject matters listed below.

Specific areas of interest for these proposals include non-research projects in the following areas:

- Injury
- Tobacco
- Cancer
- Birth Defects
• Heart disease & Stroke Prevention (e.g. hypertension prevention and control)
• Maternal & Perinatal Health
• Nutrition
• Physical Activity & Obesity
• Air Pollution
• Environmental Health
• Emergency response

Investigations should focus on a non-communicable disease or condition, using applied field epidemiology. This may include (but are not limited to):

• Piloting a surveillance system
• Evaluating a surveillance system
• Analyzing surveillance data
• Analyzing other related data
• Implementing and evaluating prevention efforts

Previous mini-grant investigations include:

• Establishing and Piloting a Population-based Cancer Registry in Gazipur District, Bangladesh, 2015
• Effects of Increasing Daily Walking in Adult Patients with Type 2 Diabetes Mellitus Attending Debre Tabor General Hospital, Northwest Ethiopia, 2015
• Farmers' Knowledge, Practices and Injuries Associated with Pesticide Exposure in Rural Bindura District, Zimbabwe, 2015
• The effect of airborne fine particulate matter on daily outpatient visits in Shenzhen, China, 2015
• The incidence and the causes of unintentional non-fatal injuries at a commune in the Central Highlands - Vietnam, 2013
• Development and Piloting of National Injury Surveillance System of Sri Lanka – NISSSL
• Global Youth Tobacco Survey (GYTS) - evaluation of an electronic instrument on students in public and private schools through the use of mobile devices form created by Epi Info 7, Asuncion, Paraguay
• Perceived barriers, knowledge and attitude in relation to access to institutional delivery among community members in a rural district, Tanzania, 2011

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Guidance for Respective Topic Areas

INJURY
For injury prevention projects, priority will be given to proposals that involve analysis of road traffic injury surveillance systems or surveillance data. Projects that demonstrate cross-collaboration with institutions such as the Ministry of Health, Department of Transportation, Academic institution, and medical facilities will also be given priority (Letters of Support will be needed to demonstrate cross-collaboration if a full proposal is requested). The sources of road traffic injury surveillance data can include hospitals, emergency departments, mortuaries, and police departments. If possible, projects should include relevant risk factor information such as drunk-driving, and helmet or seat belt use. Fellows may also consider secondary data analysis of survey data such as WHO STEPS or Demographic Health Surveys. Other potential topics include the evaluation of traffic laws (e.g. motorcycle helmet and safety belt mandates or Blood Alcohol Concentration limits). Priority will be given to projects that demonstrate sustainability and the potential to be expanded in the future.

TOBACCO
In regards to tobacco control projects, priority will be given to proposals that involve analyses of GTSS (Global Tobacco Surveillance System) indicators or evaluation of a GTSS survey, if present in their country.

GTSS indicators correlate with the MPOWER measures, six evidence-based tobacco control measures that are the most effective in reducing tobacco use and correspond to one or more of the demand reduction measures included in the WHO Framework Convention on Tobacco Control (WHO FCTC). The six proven strategies are:

1. Monitor tobacco use and prevention policies
2. Protect people from tobacco smoke
3. Offer help to quit tobacco use
4. Warn about the dangers of tobacco
5. Enforce bans on tobacco advertising, promotion and sponsorship, and
6. Raise taxes on tobacco.

GTSS indicators examine the need/impact of country-relevant control policies. Outlined below are some examples of publications that align with MPOWER measures:

M: Current manufactured cigarette smoking and roll-your-own cigarette smoking in Thailand—findings from the 2009 Global Adult Tobacco Survey

P: Exposure to secondhand smoke among adults—Philippines, 2009

O: Relationship between frequency and intensity of cigarette smoking and TTFC/C among students of the GYTS in select countries, 2007-2009 (project could be
modified to examine one country instead of multiple)

**W:** Knowledge of health consequences of tobacco smoking: a cross-sectional survey of Vietnamese adults

**E:** Exposure to anti- and pro-tobacco advertising, promotions or sponsorships: Turkey 2008

**R:** Cigarette Prices and Smoking Prevalence after a Tobacco Tax Increase—Turkey, 2008 and 2012

**CANCER**

Among proposals for cancer prevention and control, priority will be given to projects that focus on analyzing and evaluating the quality of cancer surveillance and program data. Key sources of data for cancer surveillance and control include population-based cancer registries, cancer screening and vaccination programs and population-based surveys. Proposals related to the following are encouraged:

1. Evaluation of a population-based cancer registry and/or analysis of population-based cancer registry data. This could include indicators of data quality, measures of cancer burden, and policy implications.
2. Analysis and/or validation of cancer screening data produced by a population-based survey, such as the Demographic Health survey, WHO STEPS survey, the HIA survey, or a recent in-country survey.
3. Evaluation of cervical cancer screening facilities according to a standardized toolkit that CDC will share with you.
4. Evaluation of human papillomavirus vaccination program data.

**BIRTH DEFECTS**

For birth defects, priority will be given to projects focusing on external birth defects surveillance, estimates of birth defects prevalence or risk factors associated birth defects such as folate deficiency/insufficiency. Priority will also be given to projects that assess baseline infant measurements in order for countries to be able to capture Zika-related birth defects (i.e., microcephaly).

Examples of potential proposals include:

1. Utilizing an established quality control protocol to conduct an assessment of current birth defect surveillance capacity and prevention activities and providing recommendations for improvement
2. Utilizing a surveillance manual for NTD and other external birth defects to develop pilot surveillance programs in one or more hospitals
3. Conducting an assessment of current laboratory capacity for measuring blood folate
4. Conducting surveys with health care providers and women regarding birth defects awareness, intervention knowledge and prevention strategies
5. Assessing blood folate levels among women of childbearing age
6. Assessing folic acid intake among childbearing aged women.

Priority will be given to projects from low/middle income countries in the AFRO or SEARO regions, and given to projects that complement or expand on current MOH initiatives to move birth defects prevention and surveillance forward. Additional priority will be given to projects that can demonstrate a high quality data collection source and appropriate sampling frame for recruiting subjects/collecting data. Submission of multiple proposals is highly encouraged.

GLOBAL HEARTS INITIATIVE TO REDUCE HEART ATTACKS AND STROKES
For cardiovascular health proposals, priority will be given to projects that generate evidence to strengthen CVD management in primary health care facilities and align with the strategic approach outlined in the HEARTS Technical Package. (http://www.who.int/cardiovascular_diseases/heart/).

Heart disease and stroke are leading causes of death worldwide. High blood pressure (hypertension) is the major risk factor and key driver of cardiovascular diseases including heart attack and stroke, and it is responsible for about 10 million preventable deaths globally each year. The World Health Organization’s Non-communicable Disease Global Monitoring Framework proposes a 25% relative reduction in the prevalence of raised blood pressure by 2025.

FETP residents and graduates are invited to submit proposals on projects that provide further insight on four focus areas:

1. Evidence-based protocol
   a. Evaluate the effects of standardized hypertension treatment and care protocol in adults at general primary health facilities or special medical settings (e.g., patients with HIV or for influenza vaccination).
2. Team-based care
   a. Evaluate the effects of team-based care on hypertension control and continuity of care at primary health care facilities.
3. Systems for monitoring
   a. Determine the proportion of individuals with elevated blood pressure detected during a community-based screening that follow up at MoPH health facility. Assess the barriers for following up.
   b. Develop patient registry or cohort monitoring system for hypertension, monitor treatment outcomes (number of prescription of recommended antihypertensive medicines, hypertension control rates, etc.), and evaluate adherence or compliance to standardized hypertensive therapy at the primary health care facilities.
4. Access to medicines
   a. Evaluate treatment adherence and hypertension control among patients receiving a single pill (fixed drug combination pill) and those using multiple pills.
   b. Assess the patterns and barriers for medical treatment and adherence to the antihypertensive therapy among adults of the general population or among those with infectious diseases.
   c. Evaluate essential medicines and technology for the clinical measurement and treatment of hypertension at primary health care facilities. Evaluations may include the availability, affordability, quality, and accessibility of essential medicines, diagnostic and basic technology.

5. Healthy-lifestyle counselling
   a. Assess the effects of health education and counselling on lifestyle change, including reduction in the consumption of salt, trans-fatty acids, and sugar-sweetened beverages, tobacco cessation, increasing physical activity, and avoiding harmful alcohol use.

MATERNAL AND PERINATAL HEALTH (MCH)
For MCH proposals, examples of projects include,

1. Evaluation of maternal/perinatal related surveillance systems (facility-based, community-based, combined), Secondary analysis of existing data
2. Use of ANC as a platform for supporting reduction of perinatal deaths (could be related to congenital syphilis, malaria in pregnancy, etc.),
3. Assessment of current surveillance capacity or effectiveness of prevention activities and providing recommendations for improvement related to the reduction of maternal and/or perinatal mortality,
4. Conducting surveys or formative/qualitative research with health care providers and women regarding knowledge, attitudes, and practices around safe child birth or other MCH topics.
5. Piloting community based strategies for maternal death and/or pregnancy outcome surveillance
6. Utilizing immunization registries to improve birth registration and/or link with civil registration/vital statistics
7. Assessment of NCD’s contribution to poor pregnancy outcomes
9. Programmatic implications of adding new vaccines to country EPI programs.
10. Use of infant vaccination visits to provide family planning education.
NUTRITION, PHYSICAL ACTIVITY, AND OBESITY

For nutrition, physical activity, and obesity projects, priority will be given to proposals that involve analysis of:

1. Breastfeeding rates
2. Levels of physical activity
3. Consumption of sugar sweetened beverages and/or fruits and vegetables
4. Overweight and obesity rates
5. Sources of breastfeeding, nutrition, physical activity, and obesity surveillance data include governmental data and University, hospital or school data

Surveillance studies should be representative of a surrounding municipality, province, region, or country. The evaluation of site specific practices such as breastfeeding promotion in hospitals or the use of food or physical activity guidelines/incentives in worksites, communities or schools are also welcomed.

AIR POLLUTION

For Air Pollution, priority will be given to proposals that include;

1. Projects that characterize exposures to air pollution (e.g., indoor, traffic-related, agricultural, industrial, or other sources of air pollution). Characterization of exposures can include measuring air pollutants using air monitoring equipment, developing indicators of air pollution, or geographically mapping sources of air pollutants.
2. Projects that characterize populations potentially at high risk for negative health effects associated with air pollution exposure. This can include persons living in close proximity to air pollution sources (e.g., roadways, industrial sources, etc.), children, or older adults.
3. Projects that pilot or evaluate surveillance systems or health indicators for monitoring respiratory health.
4. Projects that pilot or evaluate surveillance systems or health indicators for assessing potential associations between air pollutants and respiratory health.

ENVIRONMENTAL HEALTH

For environmental health, priority will be given to proposals that fall into one of the following topic areas:

1. Projects that describe the incidence of illnesses caused by exposure to toxic agents (for example, initiating a surveillance system or going through historical medical records)
2. Projects that describe the extent of exposure to toxic agents (for example, measuring the levels of a toxic agent in environmental or
biologic samples)
3. Projects that identify risk factors for exposure to toxic agents (for example, determining if levels of a toxic agent are higher in a particular subgroup)
4. Projects that evaluate the effectiveness of interventions designed to reduce the incidence of illnesses caused by exposure to toxic agents

A toxic agent can include both naturally occurring substances (such as heavy metals or plant toxins) and man-made substances (such as pesticides). A high quality proposal would have the following characteristics:
- It would address a toxic agent that is a high-priority for the country, and would add to the general knowledge of the toxic agent in that country
- It would produce results that can be acted upon
- It would likely involve measuring levels of a toxic agent in biologic and/or environmental samples
- It could involve collecting new data, or utilizing data that already exists

EMERGENCY RESPONSE
The Emergency Response and Recovery Branch works to bring public health and epidemiologic principles to the aid of displaced populations affected by emergencies.

Areas of work involving FETP residents in the past have included conducting a nutrition and mortality survey among refugees from the Central African Republic (CAR) in Gado, Cameroon, May 2014; conducting nutrition survey in Nigeria, Summer 2017; supporting early warning disease surveillance following the 2013 floods in Gaza Province, Mozambique; expanding and strengthening the early warning disease surveillance system nationally following the Pakistan floods, 2010; conducting a cross-sectional study of health facilities suffering from post-election violence in Kenya, 2008 to assess communicable and non-communicable service access; and establishing injury surveillance in post-war Iraq.

Further non-communicable disease field research topics among displaced populations of particular interest could include:
1. Evaluation of emergency or injury surveillance systems, such as systems in Iraq,
2. Cross-sectional surveys in nutrition or water, sanitation and hygiene knowledge, attitudes and practices (KAPs),
3. Sustainability of hygiene interventions in DRC,
4. Rapid needs assessments following disasters,
5. Dental caries with use of lipid-based nutrient supplements among emergency-affected children.

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How to Apply

Letter of Intent

Individuals interested in submitting a proposal must first submit a Letter of Intent (LOI) for each mini grant application. Letters of Intent should include:

1. A descriptive title of the proposed project
2. Contact information for the FETP resident principal investigator (name, address, and e-mail address)
3. If a CDC Resident Advisor is present, contact information for the RA (name, address, and e-mail address)
4. Current year of FETP trainee (1st or 2nd)
5. A brief summary of the injury/tobacco/cancer/MCH or other NCD related issue and how you plan to address/study the issue
6. Anticipated outcomes and/or impact of the project
7. The names of participating institutions (e.g., Ministry of Health, University)
8. Contact information for in-country mentor(s) for proposed project (name, job title, physical address, and current working relationship with applicant)


Please note that we will only accept letters of intent and proposals in English. If you have any questions about how to submit the application online, please email Khurram Butt at kbutt@tephinet.org.

Note: You must create an account at [www.tephinet.org](http://www.tephinet.org) and be logged in to access the application form.

Authors selected to submit a full proposal will be notified by Friday November 23rd 2018 and will receive instructions on how to submit their full proposal. Full proposals will be due December 31st, 2018. Projects will last approximately 8 months and all work should be completed by August 31, 2019. About 20 projects will be funded and the average award amount is expected to be approximately $5,000 USD. Please note that all awards are contingent upon available funding and the number of awards or individual amount awarded are not guaranteed.

Full Proposal

If a full proposal is requested, the following materials will be required for submission:

- Your CV and a separate narrative description of your current position
- 100-250-word abstract
- NIH type biographical sketches, including other support with yearly
direct costs, for the significant participants

- The abstract page from all ongoing funded and pending research proposals
- Specific Aims
- Background and Significance
- Preliminary Studies (if applicable)
- Must indicate if Principle Investigator (PI) has received a prior mini-grant
- Study Design and Methods
- Literature Cited (not included in the 5-page limit)
- A detailed budget with budget justification
- Data use agreements (IMPORTANT: Prior to submitting a proposal, residents must verify that the data variables they plan to collect are actually being collected (e.g., road user type, injury outcome, etc.))
- Must include letters of support from any collaborating institution/agency (e.g., police if using police data, hospital if using hospital data or personnel, etc.)
- State whether or not project is scalable or has plans for expansion
- IRB applications for a non-research determination must be submitted at the same time as the Stage 2 submission, and should provide evidence of IRB (HRPP) pending review (e.g., HRPP # for the project).
- Paragraph on community relevance (maximum 175 words) that includes the project title. Paragraph should answer the following question "How important is funding this research to improving human health, either in the near or distant future, for that community?" Do not include your name, as this paragraph will get a blinded review.
- Please remember that TEPHINET only funds those mini grants that receive non-research determination from CDC. To receive a non-research determination, proposals must be able to demonstrate that the investigation is linked to a public health surveillance system, control program, or prevention program and provide concise documentation to that effect. Any program data or supplementary data collected by the proposed investigation should not be used to support generalizable research. While investigations may include human subjects, the primary objective should not be human subject research. Proposals that are determined to be research will not be considered for funding.
- Applications will be read by international reviewers, so describe any system, data source, etc. that may not be familiar to those outside your own country. (e.g., how a boda boda driver system is set up, structure of healthcare system, data sources, etc.)
Overall Evaluation Criteria
Applications should be well-written, precise, and succinct English. Applications will be subject to both scientific and programmatic review. The following criteria will be used in evaluating these proposals:

- Significance of the research and its translational relevance
- Scientific quality
- Feasibility to complete the project in 9 months
- Probability that the work will yield important new information and have lasting public health impact
- Qualifications of the Principal Investigator and collaborators
- Inclusion of a strong mentor in NCD or injury epidemiology; from either the Ministry of Health or your FETP’s school of public health.

Presentations and Publications
Awardees are expected to publish their findings in scholarly peer-reviewed journals and present their research at professional meetings. At the completion of the project a draft manuscript should be submitted. All publications, grants, and presentations resulting from research funded by the CDC or using CDC/FETP resources must cite the CDC (Relevant Divisions and Centers) as a contributing source of support and indicate the CDC FETP grant title and number: (for example Kampala University, CDC grant #5UL 1TR000100.)

Budget Guidelines
Please provide a detailed budget for how the funds will be used. All guidelines pertaining to allowable expenses on federal grants will be applicable for these awards. In addition, no funding will be provided for books and subscriptions, graduate student support and tuition remission, or stipends for principal investigators.