A Longitudinal Examination of Mental and Physical Health among Police Associated with COVID-19 Supporting Statement Section B

New

Request for Office of Management and Budget (OMB) Review and Approval for a Federally Sponsored Data Collection

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Supporting Statement B

1. Respondent Universe and Sampling Methods

This aim of this project is to evaluate the longitudinal mental and physical health effects of COVID-19 in police officers.

The target population for "A Longitudinal Examination of Mental and Physical Health among Police Associated with COVID-19" questionnaires and clinic exam are police officers. The officers that will be eligible for this study are officers who worked during COVID-19 and who previously participated in a Buffalo Cardio-Metabolic Occupational Police Stress (BCOPS) study. For safety reasons, women officers who are pregnant at the time of examination will be excluded. The BCOPS studies were conducted by the University of Buffalo at New York (UB) in collaboration with NIOSH to evaluate the psychological, physiological, and subclinical measures of mental and physical health in Buffalo, NY police officers. For this study, NIOSH has contracted with the UB to collect mental and physical health data on approximately 200 police officers. Recruitment for this study will initially focus on recruiting the police officers who participated in the last BCOPS study (n=240). Based on previous participation, the police officers who participate in this study will be mostly male, Caucasian, and approximately 49 years old.

The funding for this study fixes the sample size at 200 police officers. NIOSH expects to get at least 85% participation rate. Because this study will utilize the BCOPS participant pool, it is likely that the response rate for the current study will be similar to the participation rate observed in BCOPS. The participation rate in the first BCOPS study was 62%. However, since then the average participation rate has been approximately 85%. The lowest participation rate was the first visit (62%), while the highest was visit 5 at 100%. UB will focus on recruiting officers who participated in the last visit, which showed a 100% participation rate, 240/240 officers participated. It is possible that at least 40 of the officers will decline to participate or have retired. In that case, UB will recruit any officer who has previously participated in BCOPS, but who also worked during COVID. This recruitment strategy should increase the chance that 200 officers can be recruited.

2. Procedures for the Collection of Information

The sample for this study will consist of 200 police officers who previously participated in the BCOPS study. Although we expect, based on previous participation rates to have at least 90% participation (n=180), sample size calculations indicate that we will have the power to show an effect if at least 162 officers participate. If 10% of the eligible officers choose not to participate in the first round then again in the second round, we will have a sample size of 162 officers. Based on this assumption, we can estimate effect sizes using the given sample size, an alpha level of 0.05, and power level of at least 0.8. Minimum detectable effects are given below for each type of analysis that will be used in this study.

- 1) In a multiple regression model relating a continuous dependent variable to a continuous exposure variable, we will be able to detect statistically significant partial correlations as low as 0.23, adjusting for six potential confounders each with single degrees of freedom (power = 83%). Thus, we can detect significant association with any exposure variable that explains as little as 5.3% of the variation in the outcome, after covariate adjustment.
- 2) For ANCOVA, given that all relevant covariates have been adjusted for in the model, we can detect an effect size of 0.22 or larger, with up to three levels of the main effect with 81% power. For example, this translates as having statistical power to detect differences between two groups, among three, when the group difference is 0.22 standard deviations or greater.
- 3) Cumulative incidence ratios (IRs), often-called risk ratios (RRs), for dichotomous health outcome variables (Y=0/1), in relation to either continuous or categorical exposure variables (X), will be estimated using log binomial regression. The IR is the ratio of cumulative incidence of the outcome (Y) at two different levels of the continuous exposure variable (IR=(Pr(Y=1/X=a)/(Pr(Y=1/X=b)). For example, Table 1 presents the required power

to detect a minimum detectable risk ratio at various levels of the incidence of the outcome (ranging from 5% incidence to 50% incidence) based on sample of n = 162; the estimates represent the risk ratio associated with 1SD increase in standardized continuous exposure variable with normal distribution. For example, for outcome with incidence proportion of 10%, we can detect a risk ratio of 2.2 with 85% power; this calculation assumes that there are no prevalent cases to be excluded at baseline. We have presented minimum effect sizes that can be detected with 0.8 power for different analytical approaches. Using the most powerful analytical approach presented here we can detect a correlation coefficient of 0.23 or higher.

Table 1. Effect size for continuous exposure and dichotomous outcome, given n=162, α =0.05 and power=0.8.

	Minimum detectable risk ratio				
Outcome incidence proportion (probability of outcome)	2.5	2.2	2.0	1.75	
0.05	0.77	0.62	0.50	0.34	
0.10	0.94	0.85	0.74	0.54	
0.15	0.98	0.93	0.86	0.68	
0.20	0.99	0.96	0.91	0.76	
0.25	0.99	0.98	0.94	0.82	
0.30	0.99	0.99	0.96	0.85	
0.35	0.99	0.99	0.97	0.87	
0.40	0.99	0.99	0.97	0.89	
0.45	0.99	0.99	0.97	0.89	
0.50	0.99	0.99	0.98	0.90	

These results indicate that we will have the power to address the aims of this project even if all the officers do not participate.

UB has conducted numerous epidemiologic studies. The staff are well trained in health data collection procedures. Quality control of data includes use of a detailed manual-of-operation for all procedures, systemic training of the staff, monitoring of the lab internal control with internal standards, and periodic testing and maintenance of instruments.

Round One

This study will consist of two rounds. During the first round the officers will be asked to come to clinic where they will complete the demographic, medical history, work stress, mental health, and COVID questionnaires, physical exam and blood draw. As previously mentioned, the funding for this study fixes the sample size at 200 officers. UB will initially focus on recruiting all of the police officers who participated in the last BCOPS study. The study protocol is outlined below.

Participants will be sent a letter explaining the study and requesting participation (Appendix A). If the
participant agrees to participate in this research, a letter of introduction will then be mailed (Appendix
B). Participants will then call the UB clinic and verify that she/he can participate. Participants will be
informed that they must fast for a minimum of 10 hours prior to coming into clinic at UB in order to take

a blood test. Scheduling will be flexible and will be coordinated with the police department. If two letters have been sent without a response, UB will phone the officer and invite them to participate in the study. If they decline, they will no longer be contacted. If they agree, the letter of introduction will be sent.

- Participants will be scheduled by clinic staff over the phone. All procedures will be in the same room. Rooms will be sanitized before and after each participant. Procedures will be face-to-face with clinic staff at a six foot distance. Staff and participants must wear face masks throughout the study. The entire visit is estimated to take two hours.
- When participants arrive at the clinic, the COVID-19 screening form will be reviewed. Participant's temperature will be taken and they will be advised that they must maintain a six foot distance between them and clinic staff and wear a mask.
- Participants will have already received the consent form via mail (Appendix C). They will review it again and sign the consent form if desired and asked if they have any questions.
- A blood sample will be drawn by a trained phlebotomist after consent a small amount of blood (approximately 4 tablespoons) will be drawn as part of this study. An additional amount of blood (approximately 1½ tablespoons) to check the accuracy (quality control) of our measurements may be taken randomly. To meet the aims of this study, blood will be analyzed for selected inflammatory, hemostasis, and metabolic markers that have been associated with stress, obesity, CVD, or metabolic syndrome will be measured. These biomarkers include C-reactive protein (CRP), interleukin 6 (IL-6), fibrinogen, D-dimer, adiponectin, insulin, leptine and telomere length analysis.
- Participants will be provided a light breakfast consisting of cereal, orange juice and coffee if desired.
- After breakfast, participants will have blood pressure taken while comfortably seated. The technician
 will place a cuff that is appropriate for the size of the right arm and will measure blood pressure three
 times. With the forearm resting comfortably on the table, staff will count radial pulse for 30 seconds.
 This procedure will take approximately 15 minutes.
- Participants' height, weight, abdominal height, waist circumference and neck circumference will be measured and recorded. This procedure will take approximately 10 minutes to complete.
- Participants will be asked to complete several surveys including a survey about how COVID-19 has
 affected their feelings and well-being, and the effects of the civil unrest (Appendix D). Nothing in the
 surveys is designed to diagnose or treat any health condition. They will be informed that they may skip
 any questions that they do not want to answer or feel uncomfortable with at any time without any
 consequence.
- Cortisol saliva testing will be done outside of the clinic at the participant's residence by the participant. Participants will be provided with Salivettes (Sarstedt, USA), a commercially available collection device consisting of dental rolls and centrifuge tubes, to take with them when the leave the clinic for the collection of saliva samples. Participants will be given instructions on how to collect the samples to be taken the day after they leave the clinic- four samples in the morning when they awaken, one at lunchtime, one at dinner, and one when the go to sleep. UB will ask the participant to return the saliva samples to the clinic when completed either in person or via paid postage.
- This ends the clinic visit. UB will advise the participant upon departing that they would like to
 contact them again in about 6-8 months to complete the same surveys they did in the clinic. If
 agreed, UB will mail the surveys at that time with a return stamped envelope for participants to
 return the surveys.

UB will conduct a follow-up survey approximately 6-8 months after the clinic visit. Each officer who participated in the first round will be sent the same set of psychological surveys, the medical history questionnaire, and a follow-up COVID questionnaire (Appendix D). The psychological surveys will be the same surveys they did during the first round, while the COVID questionnaire asks additional questions related to their experience with COVID since the clinic visit. They will not be asked to complete the personal history questionnaire the second time. This second set of questionnaires allows us to meet the study aims.

3. Methods to Maximize Response Rates and Deal with No Response

If officers do not respond after two letters inviting them to participate in the study have been sent, UB staff will contact the officers by phone to invite them to participate in the study. If they say they are not interested in participating they will not be contacted further. Recruitment will continue until either 200 police officers have been recruited or there are no more eligible officers to recruit (i.e. they did not work during COVID-19 and did not participate in one of the BCOPS studies).

As described in Section A9, respondents will receive \$150 for participating in the first round of the study and \$50 for completing round two of the study. Previous experience indicates that this is an extremely difficult population to recruit and that without this incentive the participation rate will likely be very low.

4. Test of Procedures or Methods to be Undertaken

With the exception of the COVID questionnaire the surveys being used in this study have all been previously validated and are extensively used to evaluate psychosocial outcomes in both the clinical or research environment [1-10]. Furthermore, these surveys have been used as part of the BCOPS study since 2000. To meet the aims of this study it is imperative that we use the exact same surveys that were administered as part of the BCOPS study. The overarching aim of this study is to longitudinally measure changes in psychological stress and physical health markers of police officers during COVID-19 and mental health measures approximately one year later. This can only be accomplished if NIOSH can compare the officers' responses on the surveys obtained when they participated in at least one BCOPS study to the responses obtained during COVID and one year later as part of the current study.

5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data

NIOSH will contract with the UB to collect the data for this study. Specifically, UB will recruit the police officers, collect the biological and psychological markers of disease during round one and the psychological surveys and follow-up COVID survey during round two. UB will clean and enter the data into a database. They will then send NIOSH de-linked and de-identified data for statistical analysis.

NIOSH and contractor contacts are listed below.

NIOSH:

Erin McCanlies, PhD Project Officer CDC/NIOSH/BB 1095 Willowdale Rd Morgantown, WV 26505 Phone: 304.285.6132 Fax: 304.285.6112

Eim4@cdc.gov

Contractor:

University at Buffalo, New York
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Dept of Epidemiology and Environmental health
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Buffalo, NY 14214
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List of Appendices

Appendix A: Letter of Invitation
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Appendix C: Consent Form Appendix D: Study Surveys

References

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Appendix A: Letter of Invitation

Date
Dear Officer:
As a previous participating member of the Buffalo police stress and health study, we would once again like to welcome you to come to the University at Buffalo. We will be conducting a study on the effects of COVID-19 on your stress and health.
During our previous study, we appreciated the help and cooperation you provided. It spoke well to the professionalism and graciousness of all Buffalo police officers. We learned some valuable scientific information about the effects of police stress on health. Our hope is that your participation in this study will contribute ever more to the health and well being of all police officers.
To schedule your visit, you can call:
At UB: Rosa Bordonaro 716-829-5603
We are looking forward to your next visit!
Sincerely,
John M. Violanti, Ph.D.
NYSP. Retired

Appendix B: Letter of Introduction

Dear Officer:

Thank you for agreeing to participate in the Center for Health Research's nationally based study of the health of police officers. As a former police officer, I understand many of the experiences that you have at work, and thus appreciate the time you have committed to this study. Both the Buffalo Police PBA and administration have approved the study, and I anticipate the findings will benefit police officers now and in the future.

Enclosed you will find preliminary information/forms to prepare you for the clinic visit. Below, the relevance and importance of each set of enclosures is explained. Please read the comments below carefully as you prepare for your visit.

Enclosures:

In order to adhere to high standards of safety we have enclosed a form that must be filled out and sent back to us immediately. This form is titled "Eligibility Screening Form." The form provides us with information regarding your current health status and helps us determine your eligibility for participation in various components of the study. Again, it is important that you immediately complete and send this form back. We have provided a self-addressed, stamped envelope.

A study consent form is enclosed. This form provides you with information on health procedures you will undergo as part of the study. <u>Please read the form, but do not sign it</u>. This form will be reviewed with you and we will sign it together on the day of your visit.

The final set of enclosures includes specific instructions to prepare you for your visit to the clinic. Please read these instructions <u>at least the day before</u> your visit. There are several things you must do/abstain from doing the evening before your visit.

Do not hesitate to contact the Police Health Study (Rosa or Mary) at 829-5603 if you have questions regarding the enclosures or the Police Health Study. Thanks again for your help. I am certain that your experience at the UB clinic will be a positive and friendly one.

Sincerely,

John M. Violanti, Ph.D.

NYSP Retired

Appendix C: Consent Form



University at Buffalo Institutional Review Board (UBIRB)

Office of Research Compliance | Clinical and Translational Research Center Room 5018 875 Ellicott St. | Buffalo, NY 14203 UB Federalwide Assurance ID#: FWA00008824

Title of research study: A Longitudinal Examination of Mental and Physical Health among Police Associated with COVID-19

Version 1 Date: June 26, 2020

Investigator: John M. Violanti, Ph.D (SUNY at Buffalo)

Key Information: The following is a short summary of this study to help you decide whether or not to be a part of this study. More detailed information is listed later on in this form.

Why am I being invited to take part in a research study?

You are being invited to take part in this research study because you are a Buffalo, NY police officer and a participant in our previous studies on the Buffalo Police department. We are interested in learning about your experience with COVID-19 as a law enforcement officer, and your health and well-being. We will use coded de-identified health information that you gave to us in the previous study.

What should I know about a research study?

Someone will explain this research study to you.

Whether or not you take part is up to you.

You can choose not to take part.

You can agree to take part and later change your mind.

Your decision will not be held against you.

You can ask all the questions you want before you decide.

Why is this research being done?

This proposed research seeks to address changes in psychological stress and physical health of police officers prior to and after the continuing onset of the COVID-19 pandemic.

How long will the research last and what will I need to do?

We expect that you will be in this research study for approximately two hours. You will be asked to give a blood sample only during your first visit and fill out questionnaires asking about how you feel about the COVID-19 virus and how it has affected you. We will ask you to repeat part of the study in 8-12 months, but for a shorter period of time (approximately one hour) just to answer questionnaires.

More detailed information about the study procedures can be found under "What happens if I say yes, I want to be in this research?"

Is there any way being in this study could be bad for me?

The anticipated risks associated with your participation in this study are no greater than those ordinarily encountered in daily life or the performance of routine questions. Questions on the survey concern how you feel about your well-being and health. You are under no obligation to answer any questions you do not want to answer. Your decision to participate in the survey or not will have no effect on your position in your agency, as your identity will be completely secured.

More detailed information about the risks of this study can be found under "Is there any way being in this study could be bad for me? (Detailed Risks)"

Will being in this study help me in any way?

We cannot promise any benefits to you for taking part in this research, other than it will help other officers in the future. We hope that your participation in this survey and testing along with that of the other officers will clarify how today's law enforcement officers deal with stress and how it may affect your health with the hope that we can continue to help inform officers and agencies about how to best address health and stress problems, especially concerning disaster situations like COVID-19.

What happens if I do not want to be in this research?

Participation in research is completely voluntary. You may choose not to enroll in this study. Your alternative to participating in this research study is to not participate.

Detailed Information: The following is more detailed information about this study in addition to the information listed above.

Who can I talk to?

If you have questions, concerns, or complaints, or think the research has hurt you, talk to the research team at

Dr. John M. Violanti, Ph.D. University at Buffalo, SUNY 271 Farber Hall Buffalo, NY 14214

violanti@buffalo.edu

716-829-5481

You may also contact the research participant advocate at 716-888-4845 or researchadvocate@buffalo.edu.

This research will be reviewed and approved by an Institutional Review Board ("IRB"). An IRB is a committee that provides ethical and regulatory oversight of research that involves human subjects. You may talk to them at (716) 888-4888 or email ub-irb@buffalo.edu if:

You have questions about your rights as a participant in this research

Your questions, concerns, or complaints are not being answered by the research team.

You cannot reach the research team.

You want to talk to someone besides the research team.

You want to get information or provide input about this research.

How many people will be studied?

We expect that about 200 officers from your department who have participated at UB before will be asked to participate.

What happens if I say yes, I want to be in this research?

If you agree to participate in this research, we will ask you to come into our clinic at the University at Buffalo. We will ask you to fast the evening before your visit, and we will draw a blood sample the morning you arrive at the clinic. You will be asked to give a small amount of blood (approximately 4 tablespoons) as part of this study. We may ask you if we can draw an additional amount of blood (approximately 1½ tablespoons) to check the accuracy (quality control) of our measurements. The blood draw will be done by a trained phlebotomist. There are minimal risks during the process of drawing blood including: minor discomfort, bruising at the site of the blood draw, occasionally lightheadedness or fainting, and very rarely infection. Blood analysis will be used only for science. The blood samples are stored and tested with an identifying number only and your name or any other identifying information will not appear on the samples. This sample is for *research purposes only*. We will provide you with a light breakfast if you desire. We will also use information and frozen blood samples you provided us in the previous study you participated in here at UB. The frozen blood samples will be tested for various levels in your blood (cholesterol for example) both from your previous visit blood and the new blood sample we will be taking. We will retain what is left of those samples once again and freeze them for future research.

You will have your blood pressure taken while you are comfortably seated. The technician will place a cuff that is appropriate for your size on your right arm and will measure your blood pressure three times. With your forearm resting comfortably on the table, he/she will count your radial pulse for 30 seconds. There are no risks associated with measuring the blood pressure or heart rate. This procedure will take approximately 15 minutes. These measurements are for *research purposes only*. Your height, weight, abdominal height, waist circumference and neck circumference will be measured and recorded. This procedure will take approximately 10 minutes to complete. These measurements are for *research purposes only*.

You will asked to complete several surveys about how COVID-19 has affected your feelings and well-being. Nothing in the surveys is designed to diagnose or treat any health condition. You may skip any questions that you do not want to answer at any time, without any consequence. The entire visit is estimated to take two hours or less.

Cortisol is a hormone in your body that is released throughout the day and during stressful situations. A standard procedure has been developed to test cortisol levels. This procedure consists of <u>saliva testing</u>. This test is for <u>research purposes only</u>.

To test this, we will ask you to take saliva samples the day after you leave the clinic- *four in the morning when you awaken, one at lunchtime, one at dinner, and one when you go to sleep.* We will provide you with small cotton rolls to place in your mouth (similar to dental rolls) to take these samples along with instructions on how to take the samples.

After this first visit we would like to contact you again in about 6-8 months to have you fill out the same surveys you filled out during the first visit. You will not have to come into the clinic or give a blood or saliva samples for this-we will mail the surveys to you with a return stamped envelope for you to return the surveys. After completion your visits, we will provide you \$150.00 for the first visit and \$50.00 for the second time you participate.

Note: Female Participants:

Prior to undergoing any of the following tests, you will be given a pregnancy test. The test we are currently using is a one step hCG Test for the qualitative detection of hCG in urine. This test is to ensure

that you are not pregnant and are therefore not exposed to potential harm. If you are pregnant, you will not be able to participate in any tests.

Procedure: We will give you a cup to provide a urine sample. The interviewer or nurse will fill a dropper (provided) with a small sample of the urine. Four drops of the urine are added to the sample well on the tester. Results are read within 5 minutes. There are no known risks associated with this procedure. This test will not be used in any other analysis.

What are my responsibilities if I take part in this research?

If you take part in this research, you will be responsible to appear at the clinic at the appointed time. If you cannot come in, please advise the clinic staff one day ahead if possible. You will be responsible for fasting after 10 pm the night before your morning appointment at the clinic to provide a blood sample. You will be responsible for reading the survey questions carefully and answering the questions as honestly as possible, to the best of your ability.

What happens if I say yes, but I change my mind later?

You can leave the research at any time and it will not be held against you. However, we will only provide the incentive for the portion of the study you have completed. Please advise the researchers a reasonable time ahead if you decide to leave the research. Any data that has been collected up to the point of your withdrawal will still be used by the researchers in their analysis.

Is there any way being in this study could be bad for me? (Detailed Risks)

There are no known risks associated with these procedures other than a slight pain from a blood draw. There are many safeguards to protect your confidentiality and information and identity. Some of the questions about stress and anxiety may make you feel uncomfortable. At any time you are not comfortable answering any questions, you may skip those questions. If you feel you need help, we will refer you to a mental health professional or peer support person familiar with police work.

What happens to the information collected for the research?

We will limit your information to only those persons working on the study. You will be assigned an ID number to protect your identity. Any reports or study publications resulting from this study will only provide statistics and no identifying information. In addition, we also do not ask any personally identifying questions in the survey. The survey data collected will be stored electronically utilizing a Box cloud "sensitive storage" area, which is an encrypted platform. Access to the data will be restricted to members of the research team only. Once the data has been analyzed and the study has been completed, the data will be retained for use after your second visit and a possible follow-up study over time. Blood samples will be stored in a university biological storing laboratory freezer and are identified only by coding. Your identifying information is not labeled on the samples. Efforts will be made to limit the use and disclosure of your personal information, including research study and medical or education records, to people who have a need to review this information. Organizations that may inspect and copy your information include the University of Buffalo Institutional Review Board (IRB) and representatives of this organization. This may be done to ensure that your data is secure. Private, identifiable information will be kept confidential and will only be used for research and statistical purposes. In the *unlikely* event the identity your identity cannot be

maintained, we will explicitly notify you. We will explicitly inform you what information will be disclosed under what circumstances, and to whom; and any risks that might result from this disclosure will explicitly provide written consent prior to participating in the research.

Your frozen blood samples collected from a past study for which you gave consent will be utilized as part of this study. These samples are in a university biological storing laboratory freezer and are identified only by coding. Your identifying information is not labeled on the samples.

Can I be removed from the research without my OK?

Not applicable/No

What else do I need to know?

N/A

Who is paying for this research?

The National Institute for Occupational Safety and Health (NIOSH).

What medical costs am I responsible for paying?

You and your private or public health insurance company will not be charged for any of the tests or procedures done for this study.

Who will pay for my medical care if participating in this research harms me?

It is important that you tell your study doctor if you feel that taking part in this study has injured you or caused you to become ill. You will receive medical treatment if you are injured or become ill as a result of this study. Your doctor will explain the treatment options to you and tell you where you can get treatment. The University at Buffalo makes no commitment to provide free medical care or payment for any unfavorable outcomes that result from your participation in this research. Medical services will be billed at the usual charge and will be your responsibility or that of your third-party payer but you are not precluded from seeking to collect compensation for injury related to malpractice, fault, or blame on the part of those involved in the research. By accepting medical care or accepting payment for medical expenses, you are not waiving any of your legal rights.

Will I receive anything for my participation in this research?

We will provide you with \$150.00 for completion of the first visit in the clinic. We will provide you with \$50.00 for the second time you participate at a later date.

What are my alternatives to participating in this research study?

The alternative is not to participate.

What will I be told about clinically relevant research results?

Most tests done on samples in research studies are only for research and have no clear meaning for health care. If the researchers return test results to you, it may be because they think you could have a health risk and want to recommend that the test should be re-done by a certified clinical laboratory to check the results. If this happens, then you may want to get a second test from a certified clinical

laboratory, consult your own doctor, or get professional genetic counseling. You may have to pay for those additional services yourself.

F. What are your rights after signing this authorization?

All of the above has been explained to me and all of my current questions have been answered. I understand that I am encouraged to ask questions about any aspects of this research study, and that future questions will be answered by the researchers listed on the front page of this form. By signing this form, I understand that I do not waive any of my legal rights including the right to seek compensation for injury related to negligence or misconduct of those involved in the research. By signing this form, I agree to participate in this research study. A copy of this consent form will be given to me. I have read and understand what procedures are to be performed and what is expected of me as a result of my voluntary participation in this study.

I consent to participate in the following procedures for this research project as outlined: Procedure #1 Saliva Samples (Cortisol testing) Pt's Initials Procedure #2 **Blood Samples** Pt's Initials Procedure #3 **Blood Pressure and Heart Rate** Pt's Initials Procedure #4 **Body Measurements** Pt's Initials Procedure #5 Completion of Questionnaires Pt's Initials **Signature Block for Capable Adult** Your signature documents your permission to take part in this research. By signing this form you are not waiving any of your legal rights, including the right to seek compensation for injury related to negligence or misconduct of those involved in the research. Signature of subject Date Printed name of subject Signature of person obtaining consent Date Printed name of person obtaining consent

DNA samples

Researchers may look at inherited factors which are related to diseases by examining DNA from the stored samples. Be advised that the National Institute of Occupational Safety and Health who sponsors this study has a federal certificate of confidentiality in force and any data collected during this study cannot be used for any purpose other than for research. By signing this form, you are giving consent for any future studies of DNA. The blood samples will remain the property of the Department of Epidemiology and Environmental Health at the University at Buffalo, and may be shared with other researchers. Confidentiality will be strictly maintained. All names will be removed from samples. Results of studies may be reported only as statistics in medical journals or at meetings. Individuals in the study will not be identified in any way. By signing this form, you understand that at any point in the future and for any reason, you may choose to have your blood samples withdrawn from the Biological Specimen Bank and destroyed.

Signature Block for Capable Adult

Your signature documents your permission to take part in this research. By signing this form you are not waiving any of your legal rights, including the right to seek compensation for injury related to negligence or misconduct of those involved in the research.				
I consent that samples of my DNA will be indefinitely stored for future research of factors that may influence disease. <i>I will not be identified in any way and this data will not be used for any purposes other than research</i> .				
	D			
Signature of subject	Date			
Printed name of subject				
Timee name of subject				
Signature of person obtaining consent	Date			
Printed name of person obtaining consent				

Appendix D: Study Surveys

	I. Personal History
1.	Today's Date//
2.	Date of Birth Month Day Year
3.	Age
4.	Gender (1) Female (2) Male
5.	Ethnicity: (1) Hispanic or Latino (2) Not Hispanic or Latino
6.	Race (select all that apply): (1) American Indian or Alaska Native (2) Asian (3) Black or African-American (4) Native Hawaiian or other Pacific Islander (5) White
7.	Education (Check one) (1) Less than 12 years of school. Highest grade completed (2) High school diploma (3) GED (4) Vocational certificate without high school diploma (5) Vocational certificate and high school diploma (6) Some college (7) Associate degree (8) Bachelor's degree (9) Graduate degree (MS, PhD, MD, DDS, LLB)
8.	Current marital status (Check one) (1) Never married (2) Married (3) Widowed (4) Divorced/separated (6) Living with someone
8a.	If ever married, number of times married
9.	Were you ever in the military? \square (0) No \square (1) Yes If NO, go to Question 10.
	If YES: Years of military service: Branch: (1) Army (2) Navy (3) Marine Corps (4) Air Force

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(5) Coast Guard	
Involved in combat/war? If YES, which war? (1) Vietnam (2) Gulf War (3) Kosovo (4) Korea (5) Iraq (6) Other (Please specify)	
10. Number of years employed as a Buffalo police officer	
11. Month, day and year started police work with the Buffalo Police Department//	
12. Age started at the Buffalo Police Department	
13. What is your current status as a police officer? (1) Active (2) Retired - Date retired//	
NOTE: The following questions should be answered if active or retired. If retired, answer as of the time your last employment as a Buffalo police officer.	of
14. Present rank or rank at retirement (1) Police Officer (2) Sergeant (3) Lieutenant (4) Captain (5) Detective (6) Other (Specify)	
15. What is or was (if retired) your main police duty assignment? (Check one) (1) Patrol (2) Administration (3) Foot or bike patrol (4) Motorcycle duty (5) Traffic detail (6) Radar detail (7) Special crimes unit (8) Narcotics (9) Detective (10) Community policing (11) Other (Specify)	
16. What is or was the work activity level at your district? (1) High work load (very busy, complaints, high crime area) (2) Moderate work load (moderate complaint rate, average crime) (3) Low work load (precinct not busy, low crime area)	
17. Which district do or did you work in? (1) A (2) B (5) E (8) Traffic 1 (2) G (6) Traffic 1 (3) C (6) Traffic 1 (4) D (7) Traffic 2 (8) Traffic flex (9) HQ Other (Specify)	_
18. What is your smoking status? Cigarettes	

Personal History

Electronic	: Cigarettes (0) Never	(1) Former	(2) Current
19. Do you dr	ink alcoholic beverages?	(0) No	(1) Yes
If yes, nur Beer	mber of drinks per month		
Wine			
Hard liquo	or		

Personal History

II. Medical History

1. In gen <u>er</u> al, would you say your health is:	
(1) Excellent	
(2) Very good	
(3) Good	
(4) Fair	
(5) Poor	
2. Compared to your last visit to UB, how would you rate your health in general now?	
(1) Much better now than at last visit	
(2) Somewhat better now than at last visit	
(3) About the same	
(4) Somewhat worse now than at last visit	
(5) Much worse now than at last visit	
3. What was your weight one year ago? pounds	
4. How long has it been since you last saw a physician for any reason (approximately)?	
(1) Within the last 1 year	
(2) 1 to 3 years ago	
(3) 3 to 5 years ago	
(4) More than 5 years ago	
5. How often do you have a routine physical examination, that is, an exam by a doctor or health care	e professional.
not for a particular illness, but for a general checkup?	,
(1) Do not have routine physical examinations	
(2) Less than once every five years	
(3) At least once every five years	

Medical History

6. Have you been told by a doctor or health care professional that you have high blood pressure ? (0) No (1) Yes (3) Don't Know
If NO or Don't Know, go to Question 7
A. If YES , how old were you when you were first told by a medical professional that you had high blood pressure? years old.
B. For women only: If YES , did this condition exist only when you were pregnant? (0) No (1) Yes (3) Don't Know (8) Not Applicable
C. Are you currently being treated for high blood pressure? (0) No (1) Yes (3) Don't Know
D. If you are being treated for high blood pressure, do you currently take: (10) Maxzide (13) Zestril (13) Zestril (17) HCTZ (18) Atenolol (20) Accupril (21) Norvasc (21) Norvasc (24) Verapamil (27) Lisinopril (23) Diovan (24) Diovan HCT (36) Lotrel (37) Toprol, Toprol XL (47) Metoprolol (87) Other
7. Have you been told by a doctor or health care professional that you have high cholesterol ? (0) No (1) Yes (3) Don't Know If NO or Don't Know , go to Question 8
 A. If YES, how old were you when you were first told by a medical professional that you had high cholesterol? years old. years old.
B. Are you currently being treated with medication for high cholesterol? (0) No (1) Yes (3) Don't Know
C. If you are being treated for high cholesterol, do you currently take: (1) Lipitor (10) Lovastatin (20) Crestor (87) Other

Medical History

	ve you been told by a do ne?	ctor or health care profe	essional that you ha	ave high or elevated sugar	r in blood or
uii	(0) No	(1) Yes	(3) Don't Kn	ow	
	If NO or Don't Know,	go to Question 9			
A	. If YES , how old were y in blood or urine? years old.	ou when you were first	told by a medical p	rofessional that you had ele	vated sugar
9. Hav	ve you been told by a doo (0) No If NO or Don't Know , t	(1) Yes	essional that you ha		
A.	If YES , Was this		endent Diabetes (Ty Dependent Diabete		
B.	If YES , how old were y		told by a medical p	rofessional that you had dia	abetes?
С	. If YES , what type of tre (1) insulin injection (2) oral hypoglycer (3) by dietary contr	s nic agent (pill)	(4) by exer	cise g nothing	
D.	If you are taking an ora (1) Glucotrol (2) Diabinese (4) Glucophage (10) Avandia	ા hypoglycemic agent ((pill), for diabetes, d (13) Metfor (16) Glybui (17) Avand (87) Other	min ide amet	
E.	For women only: If YES (0) No	i, did this condition exis	t only when you we		ıble

10. If you have been told by a doctor or health care professional that you have or have had any of the listed conditions, please check "Yes" and fill in the other items. Check "No" if you have never been told that you have the condition.

	Condition	No (0)	Yes (1)	If Yes, Age First Diagnosed
1	Angina (chest pain related to your heart)	□No	□Yes	
	If yes, was the angina confirmed by angiogram?	□No □Don't Know	□Yes	
2	Heart attack (myocardial infarction, MI)	□No	□Yes	
	Number of times this occurred			
3	Atrial fibrillation (special type of irregular heart beat)	□No	□Yes	
4	Irregular heart beat (arrhythmia)	□No	□Yes	
5	Diseased heart valve	□No	□Yes	
6	Rheumatic heart disease	□No	□Yes	
7	Congestive heart failure	□No	□Yes	
8	Stroke	□No	□Yes	
	Number of times this occurred			
9	Transient ischemic attack (T.I.A., "mini-stroke")	□No	□Yes	
	Number of times this occurred			
10	Peripheral vascular disease (intermittent claudication or leg pain on exercise, but not varicose veins)	□No	□Yes	
11	Deep venous thrombosis (blood clots in your legs, but not varicose veins)	□No	□Yes	
12	Aortic aneurysm (thinning in the wall of the big artery going to the heart)	□No	□Yes	
13	Pulmonary embolus (blood clot in the lung)	□No	□Yes	
14	Childhood asthma	□No	□Yes	
15	Lung problems as a child (e.g. multiple cases of pneumonia or bronchitis) Please describe:	□No	□Yes	
16	Asthma as an adult	□No	□Yes	
18	Chronic bronchitis	□No	□Yes	
19	Emphysema	□No	□Yes	
20	Pneumonia	□No	□Yes	

	Condition	No (0)	Yes (1)	If Yes, Age First Diagnosed
21	Tuberculosis (TB)	□No	□Yes	
22	Pleurisy (inflammation of the lining of the lungs)	□No	□Yes	
23	Fibrotic lung disease (Fibrosis)	□No	□Yes	
24	COPD (Chronic Obstructive Pulmonary Disease)	□No	□Yes	
25	Other chronic lung disease: (Please describe)	□No	□Yes	
26	Gall bladder disease	□No	□Yes	——
27	Kidney or bladder stones	□No	□Yes	
28	Kidney disease (Specify)	□No	□Yes	
29	Jaundiced	□No	□Yes	
30	Hepatitis	□No	□Yes	
31	Liver cirrhosis	□No	□Yes	
32	Polyps in your colon or rectum	□No	□Yes	
33	Broken bones as an adult (includes stress fractures)	□No	□Yes	
	If yes, please specify which bone and age at time of fracture:			
	Bone: Age:			
	Bone: Age:			
	Bone:Age:			
	Bone: Age:			
34	Osteoporosis (thinning bones)	□No	□Yes	
35	Osteoarthritis (degenerative joint disease)	□No	□Yes	
36	Rheumatoid arthritis	□No	□Yes	
37	Systemic lupus erythematosus (Lupus)	□No	□Yes	
38	Polymyalgia	□No	□Yes	
39	Sarcoidosis	□No	□Yes	
40	Other immune disease	□No	□Yes	
41	Thyroid disease Hyperthyroidism □ Hypothyroidism □ Don't Know □	□No	□Yes	
42	Parathyroid disease	□No	□Yes	
43	Seizures	□No	□Yes	

	Condition	No (0)	Yes (1)	If Yes, Age First Diagnosed
44	Depression	□No	□Yes	
45	Any neurologic disease	□No	□Yes	
46	Benign breast disease (non-cancerous, includes fibrocystic breast disease, fibroids, cystic breast or mastitis)	□No	□Yes	
47	Cancer In-Situ (localized cancer that does not usually spread) Where:	□No	□Yes	
48	Skin cancer	□No	□Yes	
49	Any other type of cancer, not skin cancer (Please describe):	□No	□Yes	
50	Are you currently undergoing treatment for cancer? If YES, what type of treatment? Chemotherapy Radiation therapy Hormone therapy Other (Please specify)	□No □No □No □No □No	□Yes □Yes □Yes □Yes □Yes □Yes	
51	Have you had any other disease (Please describe):	□No	□Yes	

This next question deals with medical procedures which you may have had. For each item, check "Yes" if you have had the procedure, "No" if not. If you check "Yes", please write in the date of your most recent procedure.

,	Procedure	No (0)	Yes	Most Recent Year
1	EKG/ECG (electrical tracing of heart's activity)	□No	□Yes	
2	Echocardiogram (ultrasound of the heart and its chambers)	□No	□Yes	
3	Stress test (such as an exercise stress test)	□No	□Yes	
4	Doppler test (an ultrasound of blood vessels)	□No	□Yes	
5	Angiogram or cardiac catheterization (heart catheterization or coronary angiogram)	□No	□Yes	
6	Carotid endarterectomy (opening of blockage or narrowing of the arteries in your neck)	□No	□Yes	
7	Clot dissolving treatment to prevent or reduce heart attack (sometimes called TPA or streptokinase therapy)	□No	□Yes	
8	Atherectomy (sometimes referred to as "roto-rooter")	□No	□Yes	
9	Angioplasty of coronary arteries (opening arteries of the heart with a balloon- sometimes called PTCA)	□No	□Yes	
10	Stent inserted	□No	□Yes	
	If yes, location of stent: Coronary artery Carotid artery	□No □No	□Yes □Yes	
11	Heart bypass surgery or coronary bypass surgery for blocked or clogged arteries	□No	□Yes	
12	Heart valve repair/replacement	□No	□Yes	
13	Pacemaker	□No	□Yes	
14	Bronchoscopy (exam of your lungs with a small scope)	□No	□Yes	
15	Colonoscopy (exam of your colon with a small scope)	□No	□Yes	
16	Bone Density Test	□No	□Yes	
17	Chest x-ray	□No	□Yes	
	If yes, about how many chest x-rays have you had in your life:			
18	X-ray of the spine or back (to see curvature of the spine)	□No	□Yes	
	If yes, about how many back x-rays have you had in your life:			
19	Dental x-ray	□No	□Yes	
	If yes, about how many dental x-rays have you had in your life:			
20	Other x-ray/radiation treatment (not diagnostic) Reason	□No	□Yes	

ID Number	
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- I. This section contains a list of job-related items that have been identified by police officers as stressful. Please rate each item as follows:
 - 1. In the stress rating column below, please mark from 0-100 how stressful you think this event might be for a police officer. The higher the score, the more stressful the item. Please assign a stress rating, even if you have not experienced this event.
 - 2. Mark an "X" for the number of times that you have personally experienced the item within the past month <u>and</u> during the past year.

		Stress Rating (0-100)		Mark an "X" for the Number of Times this Event Occurred										
				ln 1	the P	ast M	onth			In the Past Year				
			0	1	2	3-5	6-9	10+	0	1	2-5	6-10	11-24	25+
1	Assignment of disagreeable duties													
2	Changing from day to night shift													
3	Assignment to new or unfamiliar duties													
4	Fellow officers not doing their job													
5	Court leniency with criminals													
6	Political pressure from within the department													
7	Political pressure from outside the department													
				In	the P	ast M	onth				In the	Past \	⁄ear	
			0	1	2	3-5	6-9	10+	0	1	2-5	6-10	11-24	25+
8	Incapacitating physical injury on the job													
9	Working a second job													
10	Strained relations with non-police friends													
11	Exposure to death of civilians													
12	Inadequate support by supervisor													
13	Inadequate support by department													
14	Court appearances on day off or day following night shift													

		Stress Rating (0-100)		Mark	an "	X" foi	the N	lumbe	er of	Time	s this	Event	Occurre	ed
				In t	the P	ast M	onth				In the	Past `	Year	
			0	1	2	3-5	6-9	10+	0	1	2-5	6-10	11-24	25+
15	Assignment of incompatible partner													
16	Delivering a death notification													
17	Periods of inactivity and boredom													
18	Dealing with family disputes and crisis situations													
19	High-speed chases													
20	Difficulty getting along with supervisors													
21	Responding to a felony in progress													
22	Experiencing negative attitudes toward police officers													
		Stress Rating (0-100)		ln t	the P	ast M	onth				In the	Past `	Year	
			0	1	2	3-5	6-9	10+	0	1	2-5	6-10	11-24	25+
23	Public criticism of police													
24	Disagreeable departmental regulations													
25	Confrontations with aggressive crowds													
26	Fellow officer killed in the line of duty													
27	Distorted or negative press accounts of police													
28	Making critical on-the-spot decisions													
29	Ineffectiveness of the judicial system													
30	Ineffectiveness of the correctional system													

		Stress Rating (0-100)		In	the Pa	ast Mo	onth				In the	Past \	Year	
			0	1	2	3-5	6-9	10+	0	1	2-5	6-10	11-24	25+
31	Personal insult from citizen													
32	Insufficient manpower to adequately handle a job													
33	Lack of recognition for good work													
34	Excessive or inappropriate discipline													
35	Performing non-police tasks													
36	Demands made by family for more time													
37	Promotion or commendation													
38	Inadequate or poor quality equipment													
		Stress Rating (0-100)		In	the Pa	ast Mo	onth				In the	Past `	Year	
			0	1	2	3-5	6-9	10+	0	1	2-5	6-10	11-24	25+
39	Assignment of increased responsibility													
40	Racial pressures or conflicts													
41	Lack of participation on policy- making decisions													
42	Inadequate salary													
43	Accident in a patrol car													
44	Physical attack on one's person													
45	Demands for high moral standards													
46	Situations requiring use of force													

		Stress Rating (0-100)		ln	the I	Past N	Month			In the Past Year				
			0	1	2	3-5	6-9	10+	0	1	2-5	6-10	11-24	25+
47	Job conflict (by-the-book vs. by-the-situation)													
48	Court decisions unduly restricting police													
49	Killing someone in the line of duty													
50	Making arrests while alone													
51	Public apathy toward police													
52	Competition for advancement													
53	Poor or inadequate supervision													
		Stress Rating (0-100)		In	the I	Past N	Month		In the Past Year					
			0	1	2	3-5	6-9	10+	0	1	2-5	6-10	11-24	25+
54	Exposure to battered or dead children													
55	Plea bargaining and technical rulings leading to case dismissal													
56	Frequent changes from boring to demanding activities													
57	Exposure to adults in pain													
58	Possibility of minor physical injury on the job													
59	Put-downs and mistreatment of police officers in court													
60	Excessive paperwork													

- II. Below is a list of the ways you might have felt or behaved. Please indicate how often you have felt this way for the **PAST WEEK** by marking an "X" in the appropriate box.
 - 1 = Rarely or none of the time (less than 1 day) 2 = Some or a little of the time (1-2 days)

 - 3 = Occasionally or a moderate amount of time (3-4 days)
 - 4 = Most or all of the time (5-7 days)

	During the PAST WEEK:	<1 day (1)	1-2 days (2)	3-4 days (3)	5-7 days (4)
1	I was bothered by things that usually don't bother me.				
2	I did not feel like eating; my appetite was poor.				
3	I felt that I could not shake off the blues even with help from my family or friends.				
4	I felt that I was just as good as other people.				
5	I had trouble keeping my mind on what I was doing.				
6	I felt depressed				
7	I felt that everything I did was an effort.				
8	I felt hopeful about the future.				
9	I thought my life had been a failure.				
10	I felt fearful.				
11	My sleep was restless				
12	I was happy				
13	I talked less than usual.				
14	I felt lonely				
15	People were unfriendly				
16	I enjoyed life.				
17	I had crying spells				
18	I felt sad.				
19	I felt that people dislike me.				
20	I could not get "going".				

Brief Cope

- III. Please read each item below and indicate by marking an "X" in the appropriate box, to what extent you used it to cope with stressful situations.

 1 = I have not done this at all

 - 2 = I have done this a little bit
 - 3 = I have done this a medium amount
 - 4 = I have done this a lot

	T = Thave done and a for	Not At All	A Little Bit	A Medium Amount	A Lot
1	Turned to work or other activities to take my mind off things.				
2	Concentrated my efforts on doing something about the situation.				
3	Said to myself "this isn't real.".				
4	Used alcohol or other drugs to make myself feel better.				
5	Received emotional support from others.				
6	Gave up trying to deal with it.				
7	Took action to try to make the situation better.				
8	Refused to believe that it had happened.				
9	Said things to let my unpleasant feelings escape.				
10	Received help and advice from other people.				
11	Used alcohol or other drugs to help me get through it.				
12	Tried to see it in a different light, to make it seem more positive.				
13	Criticized myself.				
14	Tried to come up with a strategy about what to do.				
15	Received comfort and understanding from someone.				
16	Gave up the attempt to cope.				
17	Looked for something good in what was happening.				
18	Made jokes about it.				
19	Did something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.				
20	Accepted the reality of the fact that it had happened.				
21	Expressed my negative feelings.				
22	Tried to find comfort in my religion or spiritual beliefs.				
23	Tried to get advice or help from other people about what to do.				
24	Learned to live with it.				
25	Thought hard about what steps to take.				
26	Blamed myself for things that happened.				
27	Prayed or meditated.				
28	Made fun of the situation.				

Organizational Support

- IV. Using the scale below as a guide, check the box beside each statement to indicate how much you agree with it.

 - 1 = strongly disagree 2 = moderately disagree 3 = slightly disagree 4 = neutral, neither agree nor disagree

 - 5 = slightly agree 6 = moderately agree
 - 7 = strongly agree

		Strongly Disagree	Moderately Disagree	Slightly disagree	Neutral, neither agree nor disagree	Slightly agree	Moderately agree	Strongly agree
	The organization values my	(1)	(2)	(3)	(4)	(5	(6)	(7
1	contribution to its well-being							
2	The organization strongly considers my goals and values							
3	The organization really cares about my well-being							
4	The organization is willing to help me when I need a special favor							
5	The organization shows very little concern for me							
6	The organization takes pride in my accomplishments at work							
7	My supervisor values my contribution to its well-being							
8	My supervisor strongly considers my goals and values							
9	My supervisor really cares about my well-being							
10	My supervisor is willing to help me when I need a special favor							
11	My supervisor shows very little concern for me							
12	My supervisor takes pride in my accomplishments at work							

Maslach Burnout

V. Below are 16 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job. If you never had this feeling, circle the "0" (zero). If you have had this feeling, indicate how often you feel it by circling the number that best describes how frequently you feel that way. How often:

0 = Never

1 = A few times a year or less

2 = Once a month or less

3 = A few times a month

4 = Once a week

5 = A few times a week

6 = Every day

1	I feel emotionally drained from my work	0	1	2	3	4	5	6
2	I feel used up at the end of the work day	0	1	2	3	4	5	6
3	I feel tired when I get up in the morning and have to face another day on the job	0	1	2	3	4	5	6
4	Working all day is really a strain for me	0	1	2	3	4	5	6
5	I can effectively solve the problems that arise in my work	0	1	2	3	4	5	6
6	I feel burned out from my work	0	1	2	3	4	5	6
7	I feel I am making an effective contribution to what this organization does	0	1	2	3	4	5	6
8	I have become less interested in my work since I started this job	0	1	2	3	4	5	6
9	I have become less enthusiastic about my work	0	1	2	3	4	5	6
10	In my opinion, I am good at my job	0	1	2	3	4	5	6
11	I feel exhilarated when I accomplish something at work	0	1	2	3	4	5	6
12	I have accomplished many worthwhile things in this job	0	1	2	3	4	5	6
13	I just want to do my job and not be bothered	0	1	2	3	4	5	6
14	I have become more cynical about whether my work contributes anything	0	1	2	3	4	5	6
15	I doubt the significance of my work	0	1	2	3	4	5	6
16	At my work, I feel confident that I am effective at getting things done	0	1	2	3	4	5	6

VI. Many people experience a sense of extreme or excessive tiredness during and at the end of the work day. For each question, check the box that most accurately reflects how often you experience each aspect of fatigue.

		Everyday (1)	At least once a week	At least once a month	Less than once a month (4)	Never
inabilit	cal fatigue involves extreme physical tiredness and an y to engage in physical activity. the PAST 6 MONTHS, how often did you					,
1	Feel physically exhausted at the end of the workday?					
2	Have difficulty engaging in physical activity at the end of the workday?					
3	Feel physically worn out at the end of the workday?					
4	Want to physically shut down at the end of the workday?					
5	Feel physically drained at the end of the workday?					
6	Want to avoid anything that took too much physical energy at the end of the workday?					
to thin	I fatigue involves extreme mental tiredness and an inability k or concentrate. the PAST 6 MONTHS, how often did you					
7	Feel mentally exhausted at the end of the workday?					
8	Have difficulty thinking and concentrating at the end of the workday?					
9	Feel mentally worn out at the end of the workday?					
10	Want to mentally shut down at the end of the workday?					
11	Feel mentally drained at the end of the workday?					
12	Want to avoid anything that took too much mental energy at the end of the workday?					
inabilit	onal fatigue involves extreme emotional tiredness and an y to feel or show emotions. the PAST 6 MONTHS, how often did you					
13	Feel emotionally exhausted at the end of the workday?					
14	Have difficulty showing and dealing with emotions at the end of the workday?					
15	Feel emotionally worn out at the end of the workday?					
16	Want to emotionally shut down at the end of the workday?					
17	Feel emotionally drained at the end of the workday?					
18	Want to avoid anything that took too much emotional energy at the end of the workday?					

PTSD Checklist for DSM-5

VII. Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, then check one of the boxes on the right to indicate how much you have been bothered by that problem in the past month.

In th	e past month , how much were you bothered by:	Not at All	A Little Bit	Moderately (2)	Quite a Bit (3)	Extremely (4)
1	Repeated, disturbing, and unwanted memories of the stressful experience?					
2	Repeated, disturbing dreams of the stressful experience?					
3	Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?					
4	Feeling very upset when something reminded you of the stressful experience?					
5	Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?					
6	Avoiding memories, thoughts, or feelings related to the stressful experience?					
7	Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?					
8	Trouble remembering important parts of the stressful experience?					
9	Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?					
10	Blaming yourself or someone else for the stressful experience or what happened after it?					
11	Having strong negative feelings such as fear, horror, anger, guilt, or shame?					
12	Loss of interest in activities that you used to enjoy?					
13	Feeling distant or cut off from other people?					
14	Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?					
15	Irritable behavior, angry outbursts, or acting aggressively?					
16	Taking too many risks or doing things that could cause you harm?					
17	Being "super-alert" or watchful or on guard?					

PTSD Checklist for DSM-5

18	Feeling jumpy or easily startled?			
19	Having difficulty concentrating?			
20	Trouble falling or staying asleep?			

Interviewer _____

ID Number	ID Number	
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I. Please indicate how much you agree with the following statements as they apply to you over the last *month*. If a particular situation has not occurred recently, answer according to how you think you would have felt.

		Not true at all	Rarely true	Sometimes true	Often true	True nearly all
		(0)	(1)	(2)	(3)	the time (4)
1	I am able to adapt when changes occur.					
2	I can deal with whatever comes my way.					
3	I try to see the humorous side of things when I am faced with problems.					
4	Having to cope with stress can make me stronger.					
5	I tend to bounce back after illness, injury, or other hardships.					
6	I believe I can achieve my goals, even if there are obstacles.					
7	Under pressure, I stay focused and think clearly.					
8	I am not easily discouraged by failure.					
9	I think of myself as a strong person dealing with life's challenges and difficulties.					
10	I am able to handle unpleasant or painful feelings like sadness, fear and anger.					

II. Below is a list of common symptoms of anxiety. Please read each item in the list carefully. Indicate how much you have been bothered by each symptom during the **PAST WEEK** by marking an **"X"** in the appropriate box.

	During the PAST WEEK	Not at all	Did not bother me much (2)	Moderately	Severely
1	Numbness or tingling				
2	Feeling hot				
3	Wobbliness in legs				
4	Unable to relax				
5	Fear of the worst happening				
6	Dizzy or lightheaded				
7	Heart pounding or racing				
8	Unsteady				
9	Terrified				
10	Nervous				
11	Feelings of choking				
12	Hands trembling				
13	Shaky				
14	Fear of losing control				
15	Difficulty breathing				
16	Fear of dying				
17	Scared				
18	Indigestion or discomfort in abdomen				
19	Faint				
20	Face flushed				
21	Sweating (not due to heat)				

III.

SHOUL	should indicate the most accurate reply for the majority of days and nights in the PAST MONTH .							
1. D	During the past month, when have you usually gone to bed? ————: ———————————————————————————————							
2. D	2. During the past month, how long, in minutes, has it usually taken you to fall asleep? minutes							
3. D	3. During the past month, when have you usually gotten up?: AM PM							
nı —	uring the past month, how many humber of hours you spend in bed.) ——— or the remaining questions, please)						
Durii	ng the PAST MONTH, how often I	have you had troubl	e sleeping because	you				
		Not during the past month	Less than once a week	Once or twice a week	Three or more times a week			
		(1)			(4)			
Α	Cannot get to sleep within 30		(2)	(3)				
A B	minutes Wake up in the middle of the night or early morning							
	minutes Wake up in the middle of the							
В	minutes Wake up in the middle of the night or early morning Have to get up and use the							
В	minutes Wake up in the middle of the night or early morning Have to get up and use the bathroom							
B C D	minutes Wake up in the middle of the night or early morning Have to get up and use the bathroom Cannot breathe comfortably							
B C D	minutes Wake up in the middle of the night or early morning Have to get up and use the bathroom Cannot breathe comfortably Cough or snore loudly							
B C D E	minutes Wake up in the middle of the night or early morning Have to get up and use the bathroom Cannot breathe comfortably Cough or snore loudly Feel too cold							
B C D E F	minutes Wake up in the middle of the night or early morning Have to get up and use the bathroom Cannot breathe comfortably Cough or snore loudly Feel too cold Feel too hot							
B C D E F G	minutes Wake up in the middle of the night or early morning Have to get up and use the bathroom Cannot breathe comfortably Cough or snore loudly Feel too cold Feel too hot Have bad dreams							

The following questions relate to your usual sleep habits during the **PAST MONTH ONLY**. Your answers

Pittsburgh Sleep Quality Index

6.	During the past month, how would you rate your sleep quality overall?
	☐ (1) Very good
	(2) Fairly good
	(3) Fairly bad
	(4) Very bad
7.	During the past month, how often have you taken medicine (prescribed or "over the counter) to help you sleep?
	\square (1) Not during the past month
	\square (2) Less than once a week
	☐ (3) Once or twice a week
	\square (4) Three or more times a week
8.	During the past month, how often have you had trouble staying awake while driving, eating meals, or engaging in social activity?
	\square (1) Not during the past month
	\square (2) Less than once a week
	☐ (3) Once or twice a week
	\square (4) Three or more times a week
9.	During the past month, how much of a problem has it been for you to keep up enough enthusiasm to get things done?
	☐ (1) No problem at all
	\square (2) Only a very slight problem
	\square (3) Somewhat of a problem
	☐ (4) A very big problem
10.	Do you have a bed partner or share a room?
	\square (1) No bed partner or do not share a room
	☐ (2) Partner/mate in other room
	\square (3) Partner in same room, but not in same bed
	\square (4) Partner in same bed

IV. This next section consists of 21 groups of statements. Please read each group of statements carefully, and then pick out the **one statement** in each group that best describes the way you have been feeling during the **past two weeks, including today**. Check the box with the number beside the statement you have picked. If several statements in the group seem to apply equally well, check the box with the highest number for that group. Be sure that you do not choose more than one statement for any group, including Item 16 (changes in sleeping pattern) and Item 18 (changes in appetite).

1.	Sadness (o) I do not feel sad (1) I feel sad much of the time (2) I am sad all the time (3) I am so sad or unhappy that I can't stand it
2.	Pessimism oo I am not discouraged about my future oo I am not discouraged about my future than I used to be oo I do not expect things to work out for me oo I feel my future is hopeless and will only get worse
3.	Past Failure (0) I do not feel like a failure (1) I have failed more than I should have (2) As I look back, I see a lot of failures (3) I feel I am a total failure as a person
4.	Loss of Pleasure
5.	Guilty Feelings o) I don't feel particularly guilty o) I feel guilty over many things I have done or should have done o) I feel quite guilty most of the time o) I feel guilty all of the time

6.	Punishment Feelings
7.	Self-Dislike o) I feel the same about myself as ever 1) I have lost confidence in myself 2) I am disappointed in myself 3) I dislike myself
8.	Self-Criticalness o) I don't criticize or blame myself more than usual o) I am more critical of myself than I used to be o) I criticize myself for all of my faults o) I blame myself for everything bad that happens
10.	Crying (o) I don't cry any more than I used to (1) I cry more than I used to (2) I cry over every little thing (3) I feel like crying, but I can't
11.	Agitation oo I am no more restless or wound up than usual oo I feel more restless or wound up than usual oo I am so restless or agitated that it's hard to stay still oo I am so restless or agitated that I have to keep moving or doing something

12.	Loss of Interest (o) I have not lost interest in other people or activities (1) I am less interested in other people or things than before (2) I have lost most of my interest in other people or things (3) It's hard to get interested in anything
13.	Indecisiveness
14.	Worthlessness onumber of the long of the
15.	Loss of Energy
16.	Changes in Sleeping Pattern <i>(Choose only one answer)</i> (a) I have not experienced any change in my sleeping pattern
	(1a) I sleep somewhat more than usual (1b) I sleep somewhat less than usual
	(2a) I sleep a lot more than usual (2b) I sleep a lot less than usual
	(3a) I sleep most of the day (3b) I wake up 1-2 hours early and can't get back to sleep

17.	Irritability (o) I am no more irritable than usual (1) I am more irritable than usual (2) I am much more irritable than usual (3) I am irritable all the time
18.	Changes in Appetite <i>(Choose only one answer)</i> One in May appetite
	(1a) My appetite is somewhat less than usual (1b) My appetite is somewhat greater than usual
	(2a) My appetite is much less than before (2b) My appetite is much greater than usual
	(3a) I have no appetite at all (3b) I crave food all the time
19.	Concentration Difficulty (o) I can concentrate as well as ever (1) I can't concentrate as well as usual (2) It's very hard to keep my mind on anything for very long (3) I find I can't concentrate on anything
20.	Tiredness or Fatigue (a) I am no more tired or fatigued than usual (b) I get more tired or fatigued more easily than usual (c) I am too tired or fatigued to do a lot of the things I used to do (c) I am too tired or fatigued to do most of the things I used to do
21.	Loss of Interest in Sex output outpu

Beck Hopelessness

V. This section consists of 20 statements. If the statement describes your attitude for the past week including today, put a circle around the "T" indicating TRUE in the column next to the statement. If the statement does not describe your attitude, put a circle around the "F" indicating FALSE in the column next to the statement. Please be sure to read each statement carefully.

		True	False
		(1)	(2)
1	I look forward to the future with hope and enthusiasm.	Т	F
2	I might as well give up because there is nothing I can do about making things better for myself.	Т	F
3	When things are going badly, I am helped by knowing that they cannot stay that way forever.	Т	F
4	I can't imagine what my life will be like in ten years.	Т	F
5	I have enough time to accomplish the things I want to do.	Т	F
6	In the future, I expect to succeed in what concerns me most.	Т	F
7	My future seems dark to me.	Т	F
8	I happen to be particularly lucky, and I expect to get more of the good things in life than the average person.	Т	F
9	I just can't get the breaks, and there's no reason I will in the future.	Т	F
10	My past experiences have prepared me well for the future.	Т	F
11	All I can see ahead of me is unpleasantness rather than pleasantness.	Т	F
12	I don't expect to get what I really want.	Т	F
13	When I look ahead to the future, I expect that I will be happier than I am now.	Т	F
14	Things just don't work out the way I want them to.	Т	F
15	I have great faith in the future.	Т	F
16	I never get what I want, so it's foolish to want anything.	Т	F
17	It's very unlikely that I will get any real satisfaction in the future.	Т	F
18	The future seems vague and uncertain to me.	Т	F
19	I can look forward to more good times than bad times.	Т	F
20	There's no use in really trying to get anything I want because I probably won't get it.	Т	F

COVID-19

VI.	 The following questions refer to the COVID-19 pandemic and how it has affected you in your work as a police officer. 				
1.	Mark the point on the line below as to how much COVID-19 h	as affected y	our stress		
	No stressat all			stress experienced	
2.	What is your level of exposure to COVID-19 in your work as a (1) Very low (2) Low (3) High	police office	r? ⑷ Very hių	gh	
3.	What sort of personal protection is provided for you by the BP Masks Face shields Tempera	D? Check a ture Checks		y.	
	Sanitizer Gloves Vehicle I	Disinfecting			
4.	Did you have any training on how to properly wear protection	(0) No	o [(1) Yes	
5.	Did you have any training to help you to deal with COVID-19?	(0) No		(1) Yes	
6.	Have you tested positive for COVID-19?	(0) No		(1) Yes	
7.	Have you tested negative for COVID-19?	(0) No		(1) Yes	
8.	Have you been tested for antibodies for COVID-19?	(0) No	o [(1) Yes	
	If yes, what were the results?	(0) Ne	egative	(1) Positive	
9.	Were you ever quarantined because of COVID-19?	(0) No		(1) Yes	
10.	Please answer the following questions about your experience following four point scale: 1 = Strongly Agree 2 = Agree 3 = Disagree 4 = Strongly Disagree	s during the	COVID-19 p	oandemic usir	ng the
		Strongly Agree	Agree (2)	Disagree (3)	Strongly Disagree (4)
	Exposure	(+)	(4)	(0)	(7)

		Strongly Agree	Agree	Disagree (3)	Strongly Disagree
	Exposure	,		(-)	()
1	I am concerned that I will get COVID-19				
2	I am usually able to maintain a 6 foot distance while responding to calls				
3	When responding to indoor calls, I try to get individuals to step outside and maintain a 6 foot distance				
4	When contacting a member of the public with respiratory symptoms (sneezing and coughing), I make sure to maintain a 6 foot distance				
5	When I am assisting Buffalo Fire, I can maintain a safe distance				

COVID-19

		Strongly Agree	Agree (2)	Disagree (3)	Strongly Disagree (4)
6	Someone or myself disinfects my equipment and car prior to my shift				
7	I have access to all the personal protective equipment I need for my shift				
8	I always use personal protective equipment on all my shifts				
9	I am not sure that I am wearing the 3M facemask correctly				
10	When I am wearing personal protective equipment, I still maintain a 6 foot distance				
11	I have been assaulted (physically or verbally) while trying to enforce COVID-19 mandates				
12	I have been assaulted, spat on, or coughed on by someone claiming to have COVID-19				
	Family				
13	I am worried about a family member getting sick				
14	I am worried that I may infect a family member due to my work				
15	My responsibilities at home have increased during stay at home orders for members of my family				
	Coworker Concerns				
16	My coworkers stay home when they are sick				
17	I am worried about coworkers becoming ill with COVID-19				
18	I am worried about coworkers who have already become ill with COVID-19				
	Work Environment				
19	I have been required to work extra shifts or overtime due to COVID-19				
20	My sleep and self-care have decreased due to stress related to COVID-19				
21	There have been no significant compromises or shortcuts taken by management when my safety was at stake				
22	Where I work, employees and management work together to ensure the safest possible working conditions during the COVID-19 pandemic				
23	The COVID-19 mandates are not clear, sometimes there are mixed messages and rumors				
24	I can usually follow the COVID-19 mandates				
25	COVID-19 has resulted in a surge of service demands				

Civil Unrest

VII. The following questions refer to the recent social and civil unrest and demonstrations and how it has affected you in your work as a police officer.

1.	Mark a point on the lines below as to how the recent civil unrest has <i>affected your stress</i> .				
	No stressat all	Most stress ever experienced			
2.	The recent attitudes of the public towards police during the civil unrest				
	No stressat all	Most stress ever experienced			

- 3. Please indicate the degree to which each experience has bothered you as a result of your police work during the civil unrest. Please check one box only.
 - 1 = Strongly Agree
 - 2 = Agree
 - 3 = Disagree
 - 4 = Strongly Disagree

		Strongly Agree	Agree	Disagree (3)	Strongly Disagree
	Public Perception				
1	Distorted or negative press accounts of police				
2	Public criticism of police, experiencing negative attitudes toward police officers; public apathy toward police				
3	Dealing with people who abuse the police (examples: riots, confrontations with aggressive crowds; physical attack on one's person; possibility of injury on the job; personal insults from citizens				
4	Unreasonable expectations during riots or demonstrations from those outside the department				
5	Political pressure from within the department				
6	Political pressure from outside the department				
7	Outside interference with police work during the unrest (e.g., government, public, citizens)				
	Work Environment				
8	After all that is going on these days, I am not sure that this job is worth it anymore				
9	It is frustrating to me that I cannot arrest someone who commits a "lower" crime				
10	I have no say in decisions that affect me				
11	It is difficult being responsible for others				
12	There is lack of clarity in operational guidelines				

Civil Unrest

		Strongly Agree	Agree	Disagree (3)	Strongly Disagree
13	There is interference in my decisions by others				
14	Too much red tape to get something done				
15	Too much responsibility without authority to make decisions				
16	Departmental handling of complaints against officers is not fair				
17	Lack of honesty about my work by superiors				
18	Inappropriate rules and regulations				
19	Doing things I don't agree with in bad situations				
20	Low morale				
21	Inconsistent application of rules and policy				
22	Difficulty staying objective (not expressing my emotions)				
23	Not receiving recognition for a job well done				
24	Feelings of not being able to do anything				

viewer	

COVID Round Two

Questionnaire that will be Administered During the Second Round

	I. The following questions refer to the COVID-19 pandemic and how it has affected you in your work as a police officer since you last completed this questionnaire a few months ago.				
1.	Mark the point on the line below as to how much COVID-19 h	as affected y	our stress		
	No stressat all			stress experienced	
2.	What was your level of exposure to COVID-19 in your work as (1) Very low (2) Low (3) High	s a police offi	cer? (4) Very hiç	gh	
3. What sort of personal protection is still provided for you by the BPD? Check all that apply. Masks Face shields Temperature Checks					
	Sanitizer Gloves Vehicle I	Disinfecting			
6.	Have you tested positive for COVID-19?	(0) No) [](1) Yes	
7.	Have you tested negative for COVID-19?	(0) No) [(1) Yes	
8.	Have you been tested for antibodies for COVID-19?	(0) No	D [(1) Yes	
	If yes, what were the results?	(0) Ne	egative	(1) Positive	
9.	Were you ever quarantined because of COVID-19?	(0) No	o [(1) Yes	
10.	Have you been vaccinated against COVID-19?	(0) N	lo 🗌	(1) Yes	
11. Please answer the following questions about your experiences during the COVID-19 pandemic using the following four-point scale: 1 = Strongly Agree 2 = Agree 3 = Disagree 4 = Strongly Disagree					
		Strongly Agree (1)	Agree (2)	Disagree (3)	Strongly Disagree (4)
	Exposure	(1)	(2)	(3)	(4)
1	I am still concerned that I will get COVID-19				
2	I still maintain a 6 foot distance while responding to calls				
3	When responding to indoor calls, I try to get individuals to step outside and maintain a 6 foot distance				
4	When contacting a member of the public with respiratory symptoms (sneezing and coughing), I make sure to maintain a 6 foot distance				

COVID Round Two

		Strongly Agree	Agree (2)	Disagree (3)	Strongly Disagree (4)
5	When I am assisting Buffalo Fire, I can maintain a safe distance				
6	When I am wearing personal protective equipment, I still maintain a 6 foot distance				
7	I have been assaulted (physically or verbally) while trying to enforce COVID-19 mandates				
8	I have been assaulted, spat on, or coughed on by someone claiming to have COVID-19				
	Family				
9	After a year I am worried about a family member getting sick				
10	I am worried that I may infect a family member due to my work				
11	My responsibilities at home have increased during stay at home orders for members of my family				
	Coworker Concerns				
12					
13	I am worried about working with coworkers who might have COVID-19				
14					
	Work Environment				
15	I have been required to work extra shifts or overtime due to COVID-19				
16	My sleep and self-care have decreased due to stress related to COVID-19				
17	There have been no significant compromises or shortcuts taken by management when my safety was at stake				
18	Where I work, employees and management work together to ensure the safest possible working conditions during the COVID-19 pandemic				
19	The COVID-19 mandates are still not clear, sometimes there are mixed messages and rumors				
20	I can usually follow the COVID-19 mandates				
21	COVID-19 still results in a surge of service demands				

1.	. Mark a point on the lines below as to how the civil unrest in the last year has <i>affected your stress</i> .				
	No stressat all		Most s	stress xperienced	
2.	The recent attitudes of the public towards police during the civ	il unrest			
	No stress Most stress at all ever experienced				
3.	Please indicate the degree to which each experience has both the civil unrest over the last year. Please check one box only. 1 = Strongly Agree 2 = Agree 3 = Disagree 4 = Strongly Disagree	nered you as	a result of y	our police wo	ork during
		Strongly Agree	Agree (2)	Disagree (3)	Strongly Disagree (4)
	Public Perception			,	
1	Distorted or negative press accounts of police				
2	Public criticism of police, experiencing negative attitudes toward police officers; public apathy toward police				
3	Dealing with people who abuse the police (examples: riots, confrontations with aggressive crowds; physical attack on one's person; possibility of injury on the job; personal insults from citizens				
4	Unreasonable expectations during riots or demonstrations from those outside the department				
5	Political pressure from within the department				
6	Political pressure from outside the department				
7	Outside interference with police work during the unrest (e.g., government, public, citizens)				
	Work Environment				
8	After all that is going on these days, I am not sure that this job is worth it anymore				
9	It is frustrating to me that I cannot arrest someone who commits a "lower" crime				
10	I have no say in decisions that affect me				
11	It is difficult being responsible for others				

There is lack of clarity in operational guidelines

12

VII. The following questions refer to the social and civil unrest and demonstrations that occurred earlier in the year and how it has affected you in your work as a police officer.

		Strongly Agree	Agree (2)	Disagree (3)	Strongly Disagree
13	There is interference in my decisions by others				
14	Too much red tape to get something done				
15	Too much responsibility without authority to make decisions				
16	Departmental handling of complaints against officers is not fair				
17	Lack of honesty about my work by superiors				
18	Inappropriate rules and regulations				
19	Doing things I don't agree with in bad situations				
20	Low morale				
21	Inconsistent application of rules and policy				
22	Difficulty staying objective (not expressing my emotions)				
23	Not receiving recognition for a job well done				
24	Feelings of not being able to do anything				

Interviewer	
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