





















SAFETY, EMERGENCY, & ENTERPRISE RISK MANAGEMENT TRIENNIAL REPORT: FY2020-2022



TABLE OF CONTENTS

Letter from the AVP, SEERM	4
SEERM Internal Updates	6
COVID Emergency Management	
SEERM Emergency Management	
Employee Health & Well-Being	
Environmental Health & Safety (EHS)	
EHS-Fire Safety	
EHS-Laboratory Safety	
EHS-Occupational Health & Safety	
Enterprise Risk Management	
Operational Risk Management	
Training	

LETTER FROM THE AVP, SEERM

Dear Patriot,

I am pleased to write to you today from a place we have collectively yearned for the last couple of years: a return to a new sort of normal as we continue to learn to live around the ongoing COVID pandemic. As we settle into this new normal, I am excited to take time to reflect and share with you the incredible work Safety, Emergency, & Enterprise Risk Management (SEERM) has accomplished over the last three fiscal years, FY20 - FY22.

I am tremendously proud of the accomplishments made by SEERM over the last few years. Not only have we navigated through a pandemic, but we have come out on the other side stronger, more resilient, and better prepared for whatever challenges may face us in the future.

What started with humble beginnings at the Ángel Cabrera Global Center parking garage has blossomed into a robust, state of the art COVID testing program that has

allowed not only us great vision into the incidence and prevalence of disease on our campuses, guiding critical decisions on the proper precautions needed to maintain operations and allow our students, faculty, and staff to thrive but has also provided a great sense of safety and comfort to our community.

Perhaps my proudest accomplishment during this period has been SEERM's effort to provide COVID vaccine to the community. To date, Mason has administered over 120,000 doses of COVID vaccine. In addition to providing lifesaving vaccine to Mason students, faculty, and staff, our clinics have served the public and targeted underserved members of our community through our mobile vaccine clinics.

The response to COVID made it clear that a new functional unit within SEERM, Employee Health & Well-Being (EHW), would fill a critical need for Mason's faculty and staff. While continuing to provide COVID testing and vaccines, EHW will soon offer many other medical, occupational health, and elective services to help faculty and staff in their occupational role and personal health goals. I am so excited for the future of this new unit and look forward to sharing our accomplishments in the years to come.

While COVID has been a top and highly visible priority for the last several years, SEERM has continued to maintain steady operations in all our functional areas. As you will see in this report, our commitment to maintaining a safe, healthful, and risk-appropriate environment at Mason is as steadfast as ever. I am proud of our team for their dedication and continuing to deliver outstanding service during this difficult time.

Colleague, I am so grateful for your partnership and support. Thank you for all you have done to assist me and my team's success and for taking the time to review this report. I encourage you to reach out to me with any questions.

Sincerely,

Julie Zobel, PhD Associate Vice President Safety, Emergency, & Enterprise Risk Management

SEERM INTERNAL UPDATES

PROFESSIONAL DEVELOPMENT

Throughout the last three years, despite logistical challenges, SEERM staff maintained their commitment to professional development, earning degrees and certifications that elevated our teams' knowledge and skills to meet the growing demands of their roles.

David Algert, Occupational Safety Officer (Environmental Health & Safety), completed Occupational Safety and Health Administration (OSHA) 10 and 30-Hour General Industry Trainer Certification in March 2020.

Gregg Black, Director, Emergency Management & Fire Safety, completed Stop the Bleed Instructor Certification in September 2021 and Basic Life Support Instructor Certification in June 2022.

Dr. Angela Chezem, Medical Director (Employee Health & Well-Being), completed Stop the Bleed Instructor Certification in September 2021. Dr. Chezem also completed Professional Supervisor Certification through the Council for Accreditation in Occupational Hearing Conservation (CAOHC) in June 2022.

Danielle Fritz, Risk Management Assistant (Operational Risk Management), obtained a Digital Risk Management certificate in January 2022 (FY21).

Jamie Klepek, Clinic On-Site Manager (Employee Health & Well-Being), completed Stop the Bleed Instructor Certification in September 2021 and Basic Life Support Instructor Certification in June 2022.

Meredith Muckerman, Assistant Director, Technology & Information Systems (SEERM Support) completed her Masters in Health Communication in May 2020 (FY20).

Amy Springfloat, Finance and Administration Manager (SEERM Support) completed her Masters in Public Administration in December 2019 (FY20). Amy also completed Mason's Legacy Leadership program in April 2021.

Kati Woodson, Lead Registered Nurse (Employee Health & Well-Being), completed Stop the Bleed Instructor Certification (September 2021), Ergonomics Assessment Specialist Certification (March 2022), and Basic Life Support Instructor Certification (June 2022).

PROFESSIONAL ASSOCIATIONS & COMMITTEES

SEERM participates in several local, state, and national organizations to stay connected with other industry professionals and to share Mason's successes in health, safety, emergency, and risk management program administration. SEERM is proud to have association with the following organizations:

American Biological Safety Association (ABSA)

American Camp Association (ACA)

Alliance of Hazardous Materials Professionals (AHMP)

Chesapeake Area Biological Safety Association (ChABSA)

Campus Safety, Health, and Environmental Management Association (CSHEMA)

Higher Education Protection Network (HEPNET)

International Association of Emergency Managers (IAEM)

National Association of College and University Business Officers (NACUBO)

Public Risk Management Association (PRIMA)

Society of Chartered Property and Casualty Underwriters (CPCU Society)

University Risk Management and Insurance Association (URMIA)

Virginia Emergency Management Association (VEMA)

National Fire Protection Association (NFPA)

International Code Council (ICC)

Virginia Building Code Officials Association (VBCOA)

Institute of Hazardous Materials Management (IHMM)

Board of Certified Safety Professionals (BCSP)

American College of Occupational and Environmental Medicine (ACOEM)

COVID EMERGENCY MANAGEMENT

Mason's Senior Leadership have been emphatic since the beginning of the pandemic that the health and safety of the Mason community must always be the University's guiding principle in its response to COVID. This was not always the easiest principle to follow, especially when the financial and mental health implications of shutdowns were realized; however, Mason's leadership has remained steadfast in its commitment to health and safety and as a result the university sits among the top tier of universities nationally regarding management of the pandemic.

Mason's response to the pandemic has been successful, in the sense that the university maintained oncampus operations with no major outbreaks of disease while continuing to deliver quality instruction and research.

or-BioNTech CO rtion, vial contra uscular use Can uscular use Can

0.1 0.2 0.3

0.4

ni

nder Emergens in BEFORE USE Die BEFORE not and state Muthon date and Sme

-

(Internet

COVID EMERGENCY MANAGEMENT

GOVERNANCE

Mason's COVID governance structure (Figure 1), headed by Senior Leadership and the Executive Council, proved to have a significant impact on Mason's successful response to the pandemic. Leadership appointed Dr. Julie Zobel, AVP for Safety, Emergency, & Enterprise Risk Management (AVP, SEERM), who has expertise in health, safety, risk management, infectious disease and emergency management, as Mason's COVID Director responsible for leading the university's response to the pandemic. The AVP, SEERM drew upon the knowledge and skills of the entire SEERM team as described in the following pages of this report.

The Emergency Management Executive Committee (EMEC) and the Emergency Operations Group (EOG) are pre-existing high-functioning, multi-disciplinary teams that have been in place at Mason for nearly two decades. Due to the complexity of Mason's pandemic response, the EOG was augmented to create a more expansive and inclusive Mason Continuity and Coordination Team (MCCT).

At the height of the pandemic, the MCCT was comprised of 21 Working Groups (Figure 1) with over 200 members from the university community which included administrators, faculty, and operational-level staff. COVID-Specific Working Groups were chartered and assigned specific deliverables on critical timelines. Chartered individual working groups met routinely and reported on their progress during weekly MCCT meetings. MCCT Working Groups tackled complex issues that included but were not limited to:

- Drafting University Policy (e.g., vaccination, masking requirements, and accommodations)
- Resourcing the campus community with safety supplies, a health screening application (Mason COVID Health Check), and training necessary for the safe return to campus
- Identifying high risk populations to implement precautions to protect the most vulnerable members of the university community
- Recommending and implementing space modifications to ensure effective instruction in Mason's classrooms
- Promoting instructional continuity during mass shifts to online/ hybrid learning formats
- Balancing the need for students to socialize through events and activities while maintaining COVID safety precautions.

EMERGENCY MANAGEMENT FOUNDATION

Mason's emergency plans developed before the pandemic provided the framework for SEERM's COVID response strategy. Specifically, Mason's Emergency Operations Plan (EOP), Continuity of Operations Plan (COOP), and the Communicable Disease Plan were referenced to guide Mason during the initial months of the pandemic to suspend on campus operations and later to resume on campus activities when conditions improved.

Mason's emergency plans are designed and implemented by SEERM-Emergency Management team. The team proved to be highly adaptable and capable of addressing problems and concerns at all levels. The emergency management team not only participated in development of policies and procedures, but also worked at a logistical level to ensure that those policies and procedures were able to be executed on campus. The team's ability to envision a holistic picture and solve complex problems at all levels made them an integral part of Mason's COVID response.

In addition to the administrative and technical plans in place, SEERM's emergency management capabilities, and strong relationships with public health entities (e.g., Virginia Department of Health, Fairfax County Health Department, etc.) further formed the foundation for a successful, well-informed response to COVID.

PROJECT MANAGEMENT

Mason's response to the pandemic could not have been possible without a robust project management process in place. While SEERM led Mason's COVID response strategy, the team was supported by a dedicated University Business Consulting project management team (UBC). UBC orchestrated routine meetings with key stakeholders and groups, developed project management plans, helped charter COVID-specific working groups, developing lists of action items, and kept response efforts organized and documented.

PANDEMIC STAFFING

Significant additional temporary and permanent staffing was needed for SEERM to meet volume of work and in subject matter expertise needed to manage unique demands of the pandemic. Between the summer of 2020 through December 2022, SEERM hired approximately 250 individuals in roles such as screening navigators to support Mason COVID Health Check, licensed medical professionals to conduct testing and vaccine administration, test site operations staff, data management specialists, vaccine clinic staff, and emergency management specialists. SEERM's Finance and Administration Manager, Amy Springfloat, worked closely with Human Resources and Payroll to expedite the hiring process to ensure timely placement of staff in critical roles.

PUBLIC HEALTH STRATEGY

Mason's public health experts employed the "Box-it-in" strategy (Figure 2) to mitigate and manage outbreaks on campus. This strategy uses testing, isolation, contact tracing in partnership with local public health officials, and quarantine in order to prevent major outbreaks and reduce transmission on campus.

COVID-SPECIFIC WORKING GROUPS

Several of the 21 working groups (Figure 1) were led by members of the SEERM Leadership Team. The efforts of these working groups are described in the following sections.

COMPLIANCE

The Compliance working group was created to help monitor and enforce the university community's compliance with COVID-related policies and procedures, such as testing, vaccine, face coverings, and social distancing requirements. The group met frequently to provide feedback on policy enforcement, respond to non-compliance concerns from the community, and determine best practices for encouraging stronger compliance where necessary.

COVID POLICY ASSESSMENT

The COVID Policy Assessment working group was created during the pandemic as a MCCT Working Group to assist in the review and revision or creation of university policies needed to convey the university's behavior expectation and commitment to safety for the Mason community. The committee reviewed current Mason policies (1406, 1116, 2208) as well as DHRM 1.60 and 2.35 to assess their applicability and develop an operational framework for accountability and enforcement of the policies already in place. The committee also created University Policy 1415, Public Health and Safety Precautions - Face Coverings and Vaccine Policy 1416 which was suspended in spring 2022.

BUILDING & ACADEMIC SPACE MODIFICATION

The Building & Academic Space Modification working group identified, planned, and implemented modifications to campus buildings (e.g., student centers, academic buildings, etc.) in preparation for students, faculty, and staff return, and in support of COVID Operations (testing and vaccination sites).

DATA MANAGEMENT

The Data Management working group was responsible for overseeing the university's many COVID data streams. These data streams included but were not limited to testing participation, case positivity rates, vaccination distribution and compliance rates. In addition, this group was also responsible for keeping track of regional data to compare to activity at Mason. The Data Management working group was also responsible for seeing that Mason's public-facing COVID dashboard was reflective of accurate and timely data.

DEPARTMENT PLANS REVIEW

The Department Plans working group coordinated the submission and review of more than 240 departmental safety plans. In addition, this working group helped coordinate the distribution of supplies (e.g., plastic barriers and cleaning supplies) as requested in these plans.

TESTING PLAN & IMPLEMENTATION

The Testing Plan & Implementation working group was tasked with setting, implementing, and evaluating the effectiveness of Mason's COVID testing plan. This included who was required to test and at what frequency based on risk assessments. Testing plans were frequently updated and adapted to meet the ever-changing landscape of the pandemic.

TRAINING DEVELOPMENT & IMPLEMENTATION

The Training Development & Implementation working group was responsible for the creation and distribution of the Safe Return to Campus training. This training was mandatory for all students, faculty, and staff and provided an effective means of communicating health and safety information vital to Mason's successful response to the pandemic.

VACCINATION OPERATIONS

The Vaccination Operations working group was responsible for the design of Mason's mass vaccination clinics to include clinic layout and traffic flow, recommended operating hours, staffing, supplies, and coordinating with local counties to identify and invite eligible community members to receive vaccine. This group met frequently to ensure that Mason's clinics (EagleBank Arena and mobile) operated smoothly and used staff and visitor feedback to improve clinic operations.

UNIVERSITY TRAVEL ADVISORY COMMITTEE WORKING GROUP

The University Travel Advisory Committee (UTAC) regularly assists the university in balancing the competing priorities of safety and risks necessary for research and university business. University Policy 1134: University Travel to International and/or Hazardous Locations restricts travel to areas that are deemed high-risk but allows for exceptions depending on the circumstances which may require higher degrees of risk tolerance. UTAC was designated as a Mason Continuity and Coordination Team (MCCT) Working Group to assist with the Safe Return to Campus plan during which time Mason's international travel policy was reviewed and revised. Mason's UTAC application was updated to include COVIDspecific questions and a new UTAC application for Domestic Travel was created for use by the Mason community due to state employee travel restrictions. Additional UTAC members representing the Travel Office and Student Health Services were added to the committee to assist during the pandemic. From FY20 to FY22 UTAC reviewed 505 applications for exceptions to international and domestic locations, the majority related to COVID restrictions implemented for state employee travel under Executive Orders issued by the Governor of the Commonwealth.

EVENTS EXCEPTION COMMITTEE WORKGROUP

The Events Exception Committee assisted in the review of on and off campus events. Joyce French was designated as committee chair and all administrative tasks were handled by Operational Risk Management (ORM). The committee established protocols for events including but not limited to attendance limits, cleaning, physical distancing, adhering to Mason's Face Coverings Policy, signage, Mason COVID health check requirements and food service limitations. The committee also created a COVID-19 specific addendum to be used in conjunction with Mason's existing Facilities Use Agreement. Between FY20 and FY22, the Events Exception Committee reviewed 169 event requests, 11 of which were denied due to the participant numbers being over the allowable limits or potential inability to maintain physical distancing in the event space.

PROGRAMS, EVENTS, AND CAMPS

The Programs, Events, and Camps (PEC) Executive Committee is tasked with conducting audits of PECs to provide structure, systematic oversight of programs with minors and their internal control practices. The COVID pandemic altered the charge of the committee after the in-person FY20 camp season was canceled; only virtual events were allowed to take place. In FY21, in-person camps and programs were permitted with restrictions established by the Events Exception Committee working group. Each camp was required to complete an Emergency Operations Plan (EOP) to be reviewed by ORM and EHS staff. The PEC Executive Committee completed audits of all camps requesting in-person activities during the summer of 2021. ORM reviewed 25 EOP during the summer of 2021 and 33 during the summer of 2022. The PEC Executive Committee has implemented a safety process for camps and events to submit their EOP for review before on campus activities takes place. The EOP provides programs working with minors with a framework and process for developing emergency protocols based on program activities.

RESPONSE

Mason's response to the pandemic began in January 2020, when Emergency Management convened the EOG to review the University's Communicable Disease Plan in response to the new and emerging SARS-CoV-2 virus. At that time, the virus (which would come to be named COVID-19) was not yet considered a public health threat in the United States. By March 2020, the World Health Organization (WHO) would declare COVID-19 a pandemic. A summary of Mason's response to the pandemic is divided into four points in time over the last two and a half years and is ongoing to this day as we continue to face variants of the original disease.

PHASE I: MARCH 2020 - MAY 2020

Early in the pandemic, a primary concern at Mason and elsewhere was identifying and tracking cases within our campus community. In response to this critical need for situational awareness, several key actions were taken.

The Outbreak Mitigation and Management Team (OMMT), led by Dr. David Farris, SEERM's Executive Director of Safety & Emergency Management, was established and convened to coordinate with local public health officials to manage individual cases and identify outbreaks. Meanwhile, the Mason COVID Health Check (MCHC) application was developed internally with Information Technology Services (ITS) in collaboration with public health experts, including Mason's Dr. Amira Roess (Global and Community Health). The MCHC application served as a symptom checker, collected data on close contacts and positive cases of COVID within the campus community, helping OMMT to identify potential clusters or outbreaks of disease. A dedicated team of five SEERM team members, the COVID Navigators, monitored responses to MCHC and issued notifications to work areas, classrooms, and other groups when positive cases were reported.

Interventions for known positive cases at this time included quarantine and isolation, recommended targeted testing for groups where an outbreak was suspected, or modification of events and activities to mitigate possible exposures.

The other major effort during this time was migrating all classes to on-line formats. MCCT working groups, like Instructional Continuity in partnership with the Stearns Center for Teaching and Learning, provided resources and support to instructors during this abrupt and challenging migration. As displayed in Figures 3 and 4, the transition to online instruction during COVID has had a lingering effect on the ratios of Mason's current instructional modalities.

Although COVID precipitated the expansion of asynchronous and synchronous virtual instruction, Mason has maintained virtual and hybrid instruction modalities as part of the pre-pandemic, long term academic strategy.

PHASE II: JUNE 2020 - AUGUST 2020

The bulk of Mason's pandemic planning and campus preparations took place during the summer of 2020. Two main health and safety challenges faced the university at this time. First, educating the Mason community on the public health and safety precautions Mason implemented on campus; and second, preparing campus for the return of students and employees by providing safety and cleaning supplies to departments to mitigate the spread of COVID and reconfigure classrooms and public areas to allow for social distancing.

To meet these challenges, Safe Return to Campus Training was developed and accompanied by the Safe Return to Campus website

that communicated all policies, procedures, information, resources, and trainings regarding Mason's COVID response. In addition, Unit Department Safety Plans were created to guide departments through COVID planning and request safety and cleaning supplies for work areas. Finally, procedures were developed to help members of our community at risk of severe illnesses from COVID return to campus, work remotely, and navigate numerous employment and health questions.

Information and public health guidance changed rapidly throughout the pandemic, which complicated Mason's response strategies and in some cases created confusion. In order to allay confusion, several

communications strategies were utilized to inform and educate the campus community on how Mason managed COVID, what to expect when returning to campus and the health and safety precautions that must be observed. Examples of these strategies included:

- Distribution of routine communications in a variety of mediums and platforms.
- Posted COVID safety signage throughout campus.
- Continuously promoting two primary sources of information (Safe Return to Campus website and Safe Return to Campus Training).

PHASE III: SEPTEMBER 2020 - AUGUST 2021

Thanks to Mason's extensive planning and implementation efforts over the summer, the return to campus in Fall 2020 was a success. In spring 2021 it appeared that COVID cases were beginning to subside; however, a resurgence of COVID in the summer of 2021 occurred throughout much of the world including the Northern Virginia region. At the same time, COVID vaccine became available, albeit in limited supply, to the specific populations based on age, health status, and living arrangements.

In response to these rapidly changing circumstances, Mason made the following significant changes to the institution's COVID response strategy:

- Mandated the use of face coverings, social distancing, and Mason COVID Health Check.
- Required Mason COVID Health Check to be completed daily to maintain awareness of close contacts and positive cases who were unable to report to work or class.
- Developed and implemented a COVID testing program which provided both surveillance testing (asymptomatic) and diagnostic testing (symptomatic) for students and later faculty and staff.
- To meet testing demand, Mason's College of Science Center for Applied Proteomics and Molecular Medicine built and staffed a COVID testing laboratory to process up to 13,000 tests per week.
- As soon as vaccine became available, SEERM orchestrated, staffed, and managed mass vaccination clinics capable of providing vaccine to 3,000 people per day.

TESTING

Mason's COVID surveillance testing strategy was based on a thorough risk assessment with input from public health officials. Mason's testing effort focused on those populations most likely to be exposed to COVID based on their activities on campus. These populations were organized under the category of "high contact groups," and included groups such as Intercollegiate Athletics, Police & Public Safety, Student Health Services, and COVID testing site staff.

Initially, Mason conducted nasal swab tests outdoors at the Angel Cabrera Global Center parking garage. These COVID tests were processed externally by LabCorp. With time, the demand for testing and faster result times prompted the university to shift to a saliva-based test processed by Mason's Center for Applied Proteomics and Molecular Medicine (CAPMM) laboratory. As capacity increased, SEERM staffed and operated additional COVID surveillance test sites indoors on Mason's Fairfax, Arlington, and SciTech campuses. Testing was also made available for students and staff at special locations such as the Smithsonian-Mason School of Conservation and Eisenhower Hall.

Mason's COVID testing laboratory could handle up to 13,000 tests per week and results were typically returned within 24 hours. Testing volume and rapid turnaround were key success factors in Mason's COVID response. In addition to Mason's testing program, third-party testing services were utilized to conduct pre-arrival testing for students returning to campus in the fall, after Thanksgiving, and winter break. Since the start of the pandemic, Mason has provided over 265,000 tests (Figure 5).

Figure 5: Surveillance & Diagnostic COVID Tests

Surveillance Diagnostic

VACCINE

In the spring of 2021 SEERM stood up Mason's mass vaccination clinic with capacity to offer up to 3,000 doses a day; the second largest mass vaccination clinic in Northern Virginia. These clinics were typically staffed with 40-70 people including Mason employees, students, and volunteers from the community. Support came from the highest levels of the organization; members of Mason's Executive Council, faculty, and staff showed their support by working at Mason's vaccine clinics. In addition to the mass vaccine clinics, SEERM led and organized university support from Mason's Mason and Partners (MAP) Clinic and University Life to operate a mobile vaccine clinic that reached underserved communities in our region.

In fall 2021 with increased activity on campus, Mason mandated COVID vaccine for all students and employees (except those with religious and medical exemptions). This mandate would later be rescinded; however, the effort to collect this information contributed positively to Mason's testing strategy by allowing for increased targeted testing of unvaccinated individuals at higher risk for severe disease.

As of June 2022, Mason has administered approximately 120,000 vaccinations. Mason continues to offer COVID vaccine to the Mason and regional communities. Figure 6 displays the distribution of vaccine by Mason over time. Peak distribution of vaccine took place in April 2021 (30,173 total) when vaccine was no longer restricted to specific populations and widely available to the public.

Figure 6: Number of Vaccines Distributed, January 2021 to June 2022

PHASE IV: SEPTEMBER 2021 - JUNE 2022 (AND ONWARD)

Following the rollout of vaccinations, pandemic conditions again seemed to improve over the summer of 2021. As a result of declining case counts, many regions relaxed COVID precautions. Unfortunately, national resurgence of COVID due to the Omicron variant occurred just prior to the fall 2021semester necessitating an extension of precautions through the spring of 2022.

During this last phase of Mason's response, the main challenges were:

- Continuing to encourage vaccinations and boosters as recommended by the CDC;
- Contending with ongoing variants amidst growing "COVID fatigue" and complacency;
- Combating the mental and physical toll the pandemic took on students, faculty, and staff.

Mason slowly and cautiously repealed many COVID precautions, and the university continued to document low rates of disease on campus as voluntary at-will testing continues. SEERM continues to closely monitor COVID, both in the region and on campus and the university remains prepared to reinstate precautions as necessary.

IMPACT

The impacts of the COVID pandemic are far-reaching and touch nearly every part of our personal and professional lives. While the university and the world at-large are likely to continue to discover new impacts, we can see many of the outcomes of COVID influence on our organization now.

Mason was fortunate, thanks to its robust response, to not have experienced large case numbers and outbreaks (Figure 7). The university remained transparent and communicative about case rates and response strategies. This broad, purposeful community awareness of Mason's response to COVID instilled trust and helped foster cooperation and understanding when Mason needed to implement, strengthen, or ultimately suspend safety precautions.

STUDENT IMPACT

Mason's swift and agile response to the pandemic mitigated significant disruption to academics and a continuation of the in-person student experience – especially for freshman. Mason expanded its already robust experiential learning opportunities for students by offering opportunities to contribute meaningfully to the institution's response. For example, nursing students were able to administer vaccines; students registered for an internship program through the College of Health and Human Services assisted with several elements of our mass vaccination operation to include check in, way finding, observation, and supply preparation; biostatistics students assisted with the university's randomized testing selection process; computer science students assisted with pandemic modeling; and biological science majors were hired to work in Mason's CAPMM testing lab.

Many institutions of higher education across the state experienced COVID as a major impediment to enrollment, but due to Mason's handling of this crisis, Mason experienced an increase in student enrollment, increasing by 111 students in Fall 2021 compared to Fall 2020. Anecdotal information indicates that Mason's clear and consistent communications resulted in a positive impact on enrollment. Limiting uncertainty through university communications helped Mason's students and families make informed decisions.

Figure 7: Comparison of Mason to Fairfax Co., 7-day average of daily new cases (per 100K)

Mason Fairfax County

REGIONAL IMPACT

Mason's COVID response had a significant impact on the region as it should. As the Commonwealth's largest public university, institutional leadership feels strongly that Mason has a responsibility to support the regional community during times of crisis. Because the Mason community could receive COVID testing on campus, Mason's testing efforts reduced the enormous strain on other regional testing sites and locations. Mason's mass and mobile vaccination clinics helped increase the availability of vaccine to the region, contributed to the vaccination rate of the region, and provided underserved communities with access to vaccine that they may not have been able to receive otherwise. Mason will continue to lead in pandemic management, and will work, as the largest public research university in Virginia, to do its part in restoring and addressing some of the national issues facing public health.

STRENGTHS, RISKS, & OPPORTUNITIES

KEY SUCCESS FACTORS

Mason's successful response to the COVID pandemic, managed and facilitated by SEERM, can be attributed to the unique set of characteristics the university cherishes – diversity, inclusivity, audacity, and grit. MCCT Working Groups and committees were established with a shared governance approach to ensure diversity of thought and shared ownership of Mason's COVID response. Staff at all levels of the organization dedicated extensive work hours, countless evenings, weekends, and holidays for over two years to meet the overwhelming demands of a rapidly evolving emergency, while also maintaining normal university operations.

Mason's faculty displayed their commitment to the institution's success by pivoting to virtual instructional modalities in an unprecedentedly short amount of time. Students, too, adapted and changed their behavior to help stop the spread of disease, forfeiting the social events and maskless interactions that for many define the traditional college experience.

Governance structure with diverse membership

Countless hours of work over weeks, evenings, weekends, and holidays for 2+ years

13,000 weekly testing

capacity

Faculty commitment to deliver courses in multiple modalities

Adherence to scientific principles and guidance

Among the first universities to require vaccinations

For over two years, Mason paused its established Enterprise Risk Management (ERM) program that is intended to mitigate the impact of documented or anticipated threats to university operations while the university practiced risk mitigation focused on the health and safety of the Mason community, instructional continuity, funding uncertainties, infrastructure challenges, and enrollment uncertainties.

SEERM has since resumed the ERM program with regard to refreshing and retooling the traditional elements of ERM while continuing to manage and mitigate the university's largest risks.

A handful of enterprise risks were identified throughout the university's pandemic response. These risks and others that may be identified during the COVID Management Assessment to be initiated in FY23 will be included in ERM efforts of the resumed ERM program in FY23.

SEERM EMERGENCY MANAGEMENT

TEMPORARY SHELTER FOR AFGHANI REFUGEES

In August 2021, Emergency Management supported Northern Virginia Community College (NVCC) in rapidly setting up a transfer point/temporary shelter for refugees entering the United States from Afghanistan at NVCC's Annandale campus. Within hours of the call for assistance, Emergency Management had assembled volunteers from Mason's EOG and across Mason to assist in the shelter setup and management. Mason assisted with setting up cots, distributing personal hygiene kits, helping to manage donations, coordinating volunteers, providing medical support, and augmenting law enforcement support. Mason's volunteers, led by Emergency Management, worked throughout the night and weekend alongside NVCC staff and community volunteers to support this important humanitarian operation.

EMERGENCY OPERATIONS CENTER (EOC) TECHNOLOGY UPGRADES

In FY20, Emergency Management made several upgrades to the university's Emergency Operations Center (EOC) to improve Mason's response coordination capabilities. The EOC was equipped with video teleconferencing and aging equipment was replaced. These upgrades have not only enhanced the EOC as a space for productive meetings, but has better prepared Mason to respond to future incidents with confidence in the technology that is relied upon for critical communications and to support virtual meetings of the EOG.

MASON ALERT

Mason was not immune to other emergency incidents during the COVID Pandemic. Between FY20 and FY22, Mason responded to utility failures, tornadoes, winter weather, suspicious packages, and hazardous material spills. Mason Alerts were also used to notify specific groups to convene to discuss university operations, notify the campus community of inclement weather and alternations to campus operations, and used to test the Mason Alert system. Table 1 and Figure 8 summarize the incidents that prompted a Mason Alert emergency notification in FY20, FY21, and FY22.

Figure 8: Mason Alerts by Category, FY20-22

Table 1: Mason Alert History, FY20-22

Incident	FY20	FY21	FY22
Emergency	11 (31%)	5 (13%)	12 (25%)
University Operations	10 (29%)	14 (36%)	18 (38%)
Weather Alert	2 (6%)	0	5 (10%)
Delayed Opening / Closing	9 (26%)	18 (46%)	11 (23%)
Test / Exercise	3 (9%)	2 (5%)	2 (4%)
Totals	35	39	48

EMPLOYEE HEALTH & WELL-BEING

Employee Health and Well-Being (EHW) began offering services under SEERM in spring 2022 with the goal of providing occupational and individual health services to Mason's employees in a convenient and affordable manner. EHW offers COVID surveillance and diagnostic testing services to the Mason community, as well as COVID and Monkeypox vaccines, which are also available to the public.

In FY22, EHW began to take ownership of programs previously administered by the EHS-Occupational Health team. These programs include ergonomics, hearing conservation testing, respiratory fit testing, and occupational allergy consultations. EHW also began partnering with Human Resources and Payroll in FY22 to conduct Family Medical Leave Act (FMLA) medical reviews.

It is anticipated that in FY23, EHW will offer additional occupational and elective services, well-being programming to the Mason community to include but not limited to in person clinical evaluations, expanded rapid tests for common illnesses (strep, flu), expanded vaccinations (Hepatitis B, Shingles, and those needed for travel or occupational hazards), temporary medication management and refills, administration of allergy injections, and fitness for duty evaluations.

ENVIRONMENTAL HEALTH & SAFETY (EHS)

EHS is a division of SEERM and is comprised of Fire Safety, Laboratory Safety, and Occupational Health & Safety programs. The next several sections of this report provide an overview of work completed under these programs between FY20 and FY22.

EHS-FIRE SAFETY

MAINTAINING FIRE SAFETY SERVICES DURING PANDEMIC

EHS-Fire Safety provides routine fire alarm and suppression systems testing and inspections throughout the year in accordance with the Virginia Statewide Fire Prevention Code. During the pandemic, when a majority of Mason's students, faculty, and staff conducted their activities virtually, EHS-Fire Safety staff continued working in-person to provide the routine on-campus services outlined in Table 2. In doing so, Mason's facilities stood ready to welcome back students, faculty, and staff when pandemic conditions allowed for a safe return to campus. EHS-Fire Safety also proactively inspects university buildings to identify and address fire safety issues. When issues are identified, EHS-Fire Safety inspectors recommend corrective actions to the occupant(s), Facilities Management, or an identified space manager. Examples of inspection issues include but are not limited to; improper use of extension cords, excessive storage of combustible materials, and obstructed egress routes. Lastly, EHS-Fire Safety conducts and oversees routine fire and building evacuation drills in accordance with the Statewide Fire Prevention Code. The frequency of fire drills is based on occupancy code; the number of drills and corresponding number of participants are provided in Table 3.

Table 2: Fire Safety Services Summary, FY20-22

Service Description	, , -		FY20		FY21		FY22	
Fire Alarm Systems Inspecte	d		78		79		71	
Back Flow Devices Inspected	1		62		66		67	
Fire Incident Investigations			0		0		0	
Fire Extinguishers Inspected			16,223	3	15,262		15,742	
Fire Extinguishers Certified			2,764		2,776		2,776	
Fire Extinguishers Replaced			517		406		372	
Fire Pumps Inspected			850		850		850	
Fire Sprinklers Inspected			316		319		318	
Smoke Detectors Inspected			163		165		165	
Valves Inspected			9,584		13,370		13,782	
Fire Safety Building Inspection	ons		96		137		122	
Building Inspection Discrepar	ncies Corrected		120 420		368			
Fire Alarm/Fire Suppression Systems Deficiencies Noted			132 96		119			
Pyrotechnic Displays Permitt	ed		0	0 0		0		
Hot Work Permits Issued			35	35 32		36		
Commercial Kitchen Hood Fi	re Alarms & Suppression Systems Insp	pected	78 78		78	78		
Special Event Assistance			0 0		4			
Gauges Replaced			184		190		221	
Check Valves Inspected			103		96		149	
Total (All Services)			31,31()	34,352		34,762	
Table 3: Fire Safety Evacuatior	n Drills, FY20-22	:F	Y20	:F	·Y21·····	:F	Y22	
Evacuation Drills	Frequency D	rills	Evacuees	Drills	Evacuees	Drills	Evacuees	
Academic Buildings	Annually	20	2,824	0	0	23	1,497	
Assembly Buildings	Quarterly	36	774	25	214	52	2,192	
Child Care Facilities	Monthly	12	676	10	494	12	729	
Residence Halls	Four Times/Year	89	8,260	90	1,677	90	9,522	
Total (All Locations)		157	12,534	125	2,385	177	13,940	

EHS-LABORATORY SAFETY

LABORATORY INSPECTION FINDINGS

EHS-Laboratory Safety conducts inspections of all university laboratories and laboratory support spaces annually and provides each Principal Investigator (PI) or laboratory supervisor with a detailed report identifying safety or compliance deficiencies and recommendations for corrective actions.

In FY20, the primary deficiency found in laboratories during inspections was non-compliance with required training, specifically annual refresher training. Training compliance improved when training programs transitioned to a virtual format. SEERM continues to pursue both synchronous and asynchronous online training for all SEERM programs where appropriate to meet customer demand.

In FY21 and FY22, the most common inspection deficiency cited was maintenance of emergency shower and eyewash stations (ESEW). ESEW are required to be flushed every two weeks to ensure that there is sufficient water flow and to clear sediment and contaminates that can prevent the device from working properly or cause infection. Laboratory inspectors concluded that ESEW maintenance declined during periods when laboratory staff were absent from Mason laboratories during COVID restrictions, but improved when COVID restrictions had been lifted. Table 5 provides a summary of laboratory inspections and deficiencies by department from FY20 through FY22.

WASTE MANAGEMENT

EHS-Laboratory Safety works collaboratively with university units to manage regulated waste streams generated by university operations, including hazardous waste, non-hazardous chemical waste, and biological waste (regulated medical waste).

Table 4 and Figure 9 illustrate annual total volume in pounds for each waste stream generated in FY20 through FY22. The volume of waste generated in FY21 and FY22 in significantly lower than previous years due primarily to reduced activity on campus during the height of the COVID pandemic.

COVID BIOLOGICAL WASTE MANAGEMENT

Figure 9: Waste Disposed by Type and Location, FY20-22 (lbs.)

Beginning in FY21, Mason's EHS-Laboratory Safety team was called upon to assist with the proper disposal of biological waste generated from Mason's COVID vaccine clinics, vaccine administration, and COVID testing program. Waste generated from COVID related activities are called out in Table 4 and Figure 9.

Table 4: Waste Disposed by Type and Location (Key), FY20-22 (lbs.)

		FY20	FY21	FY22
	FFX	7,607	1,967	6,538
snop.	STC	4,188	2,143	3,193
Hazaı	PSC	1,009	653	2,020
	Total	12,804	4,763	11,751
sn		3,888	1,876	2,200
zardo	STC	3,796	1,572	687
n-Hai	PSC	919	440	112
No	Total	8,603	3,888	2,999
ê a	FFX	853	679	1,189
ologic egulate	STC	1,860	1,349	3,394
Ш. Ж	Total	2,713	2,028	4,583
aled)	FFX	2,012	4,388	5,497
ologid -Regula	STC	2,944	3,036	4,273
(Non	Total	4,956	7,424	9,770
	Regluated	-	4,074	4,470
COVID	Non-Regulated	-	1,760	3,595
ä	Total		5.834	8.065

			FY20	1.20		FY21	a ¹⁰		FY22	1,30
Department			oected sciencie	sl		petted sciencies		.:e ⁵	oected cief	ciest
	* Defi	ient. abs	Inst # Defr	*06	cient. ab	Met t Dell	* De	icient.ab	MST HDen	
Atmospheric, Oceanic and Earth Sciences	2	2	1.00	10	19	0.53	9	11	0.82	
Biological Engineering	4	8	0.50	7	17	0.41	12	18	0.67	
CEHD Administration	0	0	0.00	0	2	0.00	0	2	0.00	
Center for Applied Proteomics & Molecular Medicine	0	0	0.00	19	23	0.83	3	24	0.13	
Center for Drug Discovery for Rare Underserved Diseases		NA			NA		2	1	2.00	
Center for Infectious Disease Research	7	9	0.78	9	12	0.75	9	43	0.21	
Chemistry & Biochemistry	16	26	0.62	33	52	0.63	41	54	0.76	
Civil, Environmental, & Infrastructure Engineering	0	0	0.00	8	12	0.67	4	10	0.40	
College of Science Administration	0	0	0.00	12	13	0.92	1	10	0.10	
Department of Biology	18	24	0.75	34	63	0.54	29	43	0.67	
Department of Physics & Astronomy	3	6	0.50	7	14	0.50	8	15	0.53	
Electrical & Computer Engineering	0	0	0.00	6	12	0.50	14	6	2.33	
Environmental Science & Policy	15	22	0.68	28	37	0.76	13	26	0.50	
Facilities Administration	0	0	0.00	1	1	1.00	2	1	2.00	
Governor's School	1	1	1.00	1	1	1.00	2	1	2.00	
INOVA	0	0	0.00	0	5	0.00	0	0	0.00	
Interdisciplinary Program in Neuroscience	0	0	0.00	7	15	0.47	11	14	0.79	
Krasnow Institute	0	0	0.00	2	3	0.67	0	4	0.00	
Mechanical Engineering	3	5	0.60	5	12	0.42	17	14	1.21	
National Center for Biodefense & Infectious Diseases	0	15	0.00	0	22	0.00	0	19	0.00	
Nutrition & Food Studies	0	0	0.00	0	1	0.00	4	6	0.67	
Psychology	1	2	0.50	2	3	0.67	7	5	1.40	
Recreation, Health, & Tourism	0	0	0.00	0	0	0.00	0	1	0.00	
School of Systems Biology	6	6	1.00	3	11	0.27	7	7	1.00	
Science & Technology Administration	0	0	0.00	3	3	1.00	2	2	1.00	
Shared Research Instrumentation Facility	1	1	1.00	2	5	0.40	0	1	0.00	
Sociology & Anthropology	0	0	0.00	1	3	0.33	0	4	0.00	
Volgenau School of Engineering	0	0	0.00	2	2	1.00	1	2	0.50	
Total	77	128	0.60	203	366	0.55	189	346	0.55	

EHS-OCCUPATIONAL HEALTH & SAFETY

FALL PROTECTION

Per Occupational Safety & Health Administration (OSHA), the number one most cited non-compliance issue nationally in 2021 was conformance with OSHA's fall protection regulations. Whenever an employee is working at heights of 4 feet or greater from an adjacent surface, fall protection (e.g., guardrail, warning line, fall restraint/arrest personal protection equipment) must be utilized. George Mason University initiated a university wide fall protection compliance program in 2015 and continues to prioritize fall protection projects to mitigate accidents related to this job-related hazard. Between FY20 and FY22 EHS-OHS:

- Completed all anchor point inspections as required by OSHA regulations.
- · Completed the Hazel Hall fall protection project.
- Initiated the planning and design process for future installation of fall protection equipment on Eagle Bank Arena.
- Coordinated with Facilities Administration to install fall protection on Horizon Hall.
- Designed and coordinated with Facilities Administration to install fall protection on Harris Theater.

ARC FLASH

An arc flash occurs when an electric current deviates from its intended path and travels through the air from one conductor to another, or to the ground. The consequences of an arc flash incident in proximity to people are severe and can result in serious injury or death. In accordance EHS-OHS prioritizes and coordinates arc flash studies of areas where these events may occur. Arc flash studies produce warning labels, identify risks, and stipulate what personal protective equipment must be worn when working on energized equipment. In addition, EHS-OHS provides training to staff at risk of encountering these events. Between FY20 and FY22, EHS-OHS:

- Provided Arc Flash Training for Facilities Management staff.
- Completed Arc Flash studies and installed hazard labels on Aquia Data Center and the Central Heating and Cooling Plant.
- Initiated an arc flash study of Merten Hall and Police and Safety Headquarters.

ROUTINE SAFETY SERVICE

During FY20 to FY22, EHS-OHS and EHS-Laboratory Safety conducted routine services in support of Mason's research mission at the request of Mason faculty and staff. Services include sampling for potential environmental contaminants, testing and certifying research and instructional laboratory equipment, and assisting faculty and staff with work area design. A summary of services is provided in Table 6.

TRANSITIONING EHS-OCCUPATIONAL HEALTH PROGRAMS

In FY22, EHS-Occupational Health programs and services began transitioning under SEERM's new Employee Health & Well-Being team. These services include ergonomics, hearing conservation, medical surveillance, respiratory protection, and occupational allergy assessments. In addition to taking on responsibility for these occupational health program areas, Employee Health & Well-Being will soon offer additional medical and elective services to faculty and staff at Mason.

ACCIDENTS AND INCIDENTS

Despite the collective efforts of SEERM and our community to mitigate hazards and implement safe work practices, accidents and incidents do occur. Employee work-related accidents or on-incidents are required to be reported to Mason in accordance with Mason's Accident and Incident Plan. OSHA requires that some injuries (e.g., injuries that result in loss of consciousness, lost work time, restricted work, require medical treatment, diagnosis of disease or broken bone) be recorded and reported annually to the campus community and OSHA or state occupational safety agency.

There are also recording criteria for work-related needlesticks and sharps injuries. Most of the accidents/incidents listed in Table 7 did not qualify as OSHA recordable incidents.

The total recordable incident rate (TRIR) is an indicator of an organizations accident and incident rate. The TRIR for State Government - Colleges and Universities in 2020 was 1.2 (U.S. Department of Labor; Bureau of Labor Statistics).

Mason's average TRIR of 0.46 (Table 8, Figure 10) has been significantly below the national average for State Government – Colleges and Universities. Mason observed a significant decrease in the number of reportable accidents and incidents in FY20 and again in FY21. The decrease in recordable incidents in FY21 is most likely in response to the COVID pandemic, when fewer employees were working on campus. As people returned to work on campus in FY22, the recordable incident rate increased slightly but remained lower than pre-pandemic reported rates.

Safety, Emergency, & Enterprise Risk Management Annual Report FY2020-2022

Table 6: EHS-Occupational Health & Safety Services Summary, FY20-22 Table 7: Accident / Incident Totals, FY20-22

Service Description	FY20	FY21	FY22
Air Samples Collected	0	2	2
Bulk Samples Collected	28	17	3
Autoclaves Permitted	19	19	19
Biosafety Cabinets Certified	129	129	129
Chemical Fume Hoods Certified	241	241	239
Ergonomics Consultations/Assessments	21	4	15
Indoor Air Quality Assessments	9	10	18
Shower and Eye Wash Units Tested	476	763	775
Research Materials Packages Shipped	4	6	2
Totals	927	1,191	1,202

Category	Description	FY20	FY21	FY22
	Chemical	9	3	5
Exposure	Needlestick	1	5	2
	Infectious Agent	0	0	1
O :II	Environmental	7	5	5
Spill	Laboratory	5	3	4
	Burn	0	0	6
	Cut/Abrasion	8	7	16**
	Caught in/Crushed By	3	0	1
	Insect/Animal Bite	4	0	6
Accident	Strain/Sprain	23	3	18
	Slip/Trip/Fall⁺	27	17	42
	Struck By	11	1	14
	Medical Emergency	17	6	4
	Other**	10	74	24
	Vehicle	2	1	0
Other	Safety Concern/Near Miss	6	1	7
	Total	133	126	155

Figure 10: TRIR*, FY18-FY22

* Category added in FY20 ** Increase in Cut/Abrasion is explained by clean needlestick injuries at vaccine clinics

+ Decrease in Slip/Trip/Fall accidents in FY21 is accounted for by a decreased presence of on-campus populations during

the pandemic. FY22 numbers are consistent with pre-pandemic years ++ Adverse events at vaccine clinics accounted for this increase in the "Other" category in FY21 and FY22 (this includes post-vaccine symptoms and temporary adverse events experienced by vaccine recipients)

0.90 0.80 0.70 0.60 0.50 0.40 0.30 0.20 0.10 0.00 FY18 FY19 FY20 FY21 FY22

Table 8: TRIR*, FY18-FY22

Fiscal Year	# OSHA Injuries	TRIR
FY18	53	0.80
FY19	51	0.77
FY20	28	0.35
FY21	11	0.14
FY22	21	0.26

*TRIR is calculated by multiplying the number of OSHA recordable injuries in one year by 200,000, then dividing this number by the total hours worked for all employees.

ENTERPRISE RISK MANAGEMENT

During the pandemic, Mason paused the traditional Enterprise Risk Management (ERM) program that focuses on mitigation plans, instead devoting resources to practicing and implementing risk management for the health and safety of the community, instructional continuity, funding uncertainties, infrastructure challenges, and enrollment uncertainties brought on by the pandemic. In addition, there continue to be a handful of risks that were identified before the pandemic, but their affect was felt more significantly during the pandemic, such as inadequate staffing, turnover, personnel data and identity management, cross-functional data integrity, and an increase in mental health concerns for faculty, staff and students.

These risks and others identified during the COVID Management Assessment that will be initiated in FY23 will be included in assessment, prioritization, and mitigations efforts of the resumed ERM program in FY23.

OPERATIONAL RISK MANAGEMENT

INSURANCE PREMIUMS AND RENEWALS

Operational Risk Management (ORM) oversees the annual renewal of a variety of insurance policies related to university property and activities (Table 9, Figure 11). FY20 insurance renewal premiums totaled \$1,108,124, FY21 renewal premiums totaled \$1,117,430 and FY22 premiums totaled \$1,256,330. Insurance policies cover the University's property, assets, and liability exposures, including international travel, cyber, and excess liability coverages. The renewal process can be arduous and involves gathering data from various departments and statistical analysis to summarize data and negotiate with Mason's insurance brokers.

PROPERTY INSURANCE RENEWAL

In FY21, The Commonwealth of Virginia Division of Risk Management (DRM) conducted an Actuary review of Commonwealth property insurance policy which included a review of plan funds and premiums charged to state agencies. This audit resulted in a 60% increase in property premium costs for FY23 (\$567,000 to \$910,000). Prior to the FY21 review, Mason's property premium had not increased since FY08 despite the construction of 16 new university buildings. Mason's building value increased from \$1.3 billion to \$2.5 billion from FY09-FY22.

Reports and Assessments Related to Property Insurance Renewal

VAPS/VACCS Reports

ORM updated the Virginia Agency Property System to ensure Mason Statement of Values (Inventory) Schedule was accurate to ensure adequate coverage for potential losses. The fields updated during FY20-22 included: Sprinkler, Sprinkler Functional, Fire Alarm, Fire Alarm Functional, and Building Status. In addition, ORM coordinated with departments to update the Virginia Auto Count and CarCare System to ensure an accurate count of agency owned and Department of General Services assigned "licensed for road use" vehicles as well as an accurate actual cash value to ensure adequate coverage in the event of a loss.

Fine Arts Inventory Assessment

ORM worked collaboratively with the University Curator and Fixed Assets to streamline the Fine Arts Inventory process. The Curator's artwork collection inventory had no minimum value while the Fixed Assets artwork listing had a \$10,000 minimum value requirement resulting in discrepancies between the two listings. ORM consolidated the two listings into one and Fixed Assets was able to add the Curator's additional artwork in the system to match the final inventory. This collective effort resulted in the resolution of discrepancies and final compilation of a comprehensive Fine Arts Inventory listing valued at \$7.7M for use in the annual insurance renewal process.

CYBER INSURANCE RENEWAL

Mason has had cyber insurance coverage under the Commonwealth's carrier since 2014. Over the years, premiums have increased due to volatility in the institution of higher education cyber insurance market. Unfortunately, the FY23 proposed renewal had a 10-fold increase in the retention limit, increasing from \$100,000 to \$1M, which would likely produce a policy that is too high to trigger a cyber incident claim. Mason made a swift change in June 2022 and negotiated with a new provider to obtain a \$5M per occurrence cyber insurance policy with broader coverage and a \$100,000 retention limit, thereby potentially saving Mason one million dollars per claim.

INTERNATIONAL TRAVEL INSURANCE RENEWAL

Before renewing Mason's current insurance policy for international travel emergencies, ORM explored alternative insurance policies for cost savings and improved coverage. Ultimately, ORM retained Mason's current insurer, but negotiated a more robust policy for faculty, staff, and student international travelers. The policy enhanced coverage in the following areas:

- Added a standalone quarantine benefit of \$2,000 per trip
- Increased Mental (Inpatient) coverage to \$50,000
- Increased Mental (Outpatient) coverage to \$10,000
- Increased Security Evacuation coverage to \$250,000 (\$1M aggregate)
- · Provided special coverage limits for travelers to Mason Korea

During FY21, the Provost requested assistance with an insurance issue for Fairfax employees contracted to work at Mason Korea. Due to the pandemic, the Korean Government increased its insurance requirements from \$500,000 to \$1M for foreigners, which would have cost an estimated \$78,000 if Mason employees were forced to enroll in the Korean National Health Insurance Plan. Mason Korea and the Fairfax employees assigned in South Korea were sharing the burden of the fee for enrolling in the Korean Health Plan. ORM was able to negotiate an additional population class for South Korea travelers with an increased coverage limit of \$1M effective August 1, to provide coverage for those who arrived in country prior to the normal renewal date of September 1. Mason's insurer provided the coverage for this additional population class, an estimated charge of \$6,000, at no additional cost to Mason. This addition to the policy saves the University and employees an estimated \$70,000 per year.

EXCESS LIABILITY RENEWAL

During each renewal period ORM participates in the Risk Management Premium Credit Program which, when completed, provides a 6% credit to the institution's insurance premium. Activities include, but are not limited to, meetings, webinars, roundtable discussions, policy updates, driver training program enhancements and training. During FY20 to FY22 Mason was awarded a premium discount of \$42,000 for participating in this program.

CLAIM CAUSE ANALYSIS

ORM strives to reduce the frequency and severity of accidents. The following tables represent data from FY20 to FY22 for auto, property, and tort claims. This information provides ORM with details of which types of claims occur the most frequently and which require further analysis. Using this data, ORM is able to develop and implement controls to minimize the severity and risk exposure to known risks.

PROPERTY

Table 10 represents the number of claims and the cost associated with each claim type for FY20 to FY22. Damages resulting from water damage or flooding in campus buildings was the most costly and the most frequent type of claim. The most severe claim for FY20 to 22 was a named storm claim.

VEHICLE

Claims for FY20 to FY22 are represented in Table 11. FY20 to FY22 demonstrated that backing remains the number one cause of vehicle claims.

TORT

Slips, trips, and falls accounted for 56% of all personal injury claims to non-employees in FY20 to FY22. These claims typically increase during inclement weather events. Table 12 represents the Tort claims numbers for FY20 to FY22.

In summary, Figure 12 represents Mason's five-year claims history. ORM processes between 80 to 125 claims per year. Claim processing includes incident investigation, gathering and organizing claim documentation, working with vendors, negotiating with insurance companies, collaborating with Mason departments, and engaging University Counsel or the Office of the Attorney General and the Commonwealth of Virginia Division of Risk Management as necessary.

Figure 12: Insurance Claim Processing, FY18-22

CLAIM RECOVERY

From FY20 to FY22, ORM managed 236 claims related to auto and property losses. From these 236 claims, ORM was able to recover \$769,000 that was redistributed to university departments. In addition, ORM managed 55 new tort claims, some in association with University Counsel and the Office of the Attorney General.

CERTIFICATES OF INSURANCE

ORM provides support to departments when evidence of insurance coverage is needed. From FY20 to FY22, ORM provided 207 certificates of insurance to Mason departments and of those 118 required contract reviews.

Table 10: Property Claims, FY20-22

Tuno of Claim	FY20		F	Y21	F	Y22
Type of Claim	# Claims	Cost	# Claims	Cost	# Claims	Cost
Water / Flood Damage	12	\$626,918.63	17	\$153,880.58	4	\$107,655.77
Property Damage by POV	21	\$68,642.22	8	\$3,679.62	11	\$28,652.71
Property Damage	12	\$12,445.41	7	\$64,240.62	6	\$7,733.15
Other	10	\$61,824.70	2	\$7,262.12	6	\$21,377.98
Vandalism	5	\$4,885.71	6	\$4,481.98	4	\$8,954.04
Theft	6	\$9,682.42	5	\$71,058.77	4	\$2,718.52
Property Damage by SOV	2	\$2,906.31	1	\$701.84	1	\$254.27
Golf Cart Damage	2	\$1,017.77	1	-	2	-
Environmental	0	-	3	\$1,729.00	0	-
Named Storm	1	\$193,141.37	1	\$1,870.00	2	\$70,031.69
Fire	2	\$60.00	1	\$23,372.23	1	\$1,608.41
Weather-Related	2	\$4,197.00	0	-	2	\$20,470.01
Totals	75	\$985,721.54	52	\$332,276.76	43	\$269,456.55

Table 11: Vehicle Claims, FY20-22

Turne of Claim	FY20		F	Y21	F	Y22
Type of Claim	# Claims	Cost	# Claims	Cost	# Claims	Cost
Backing	8	\$8,621.22	6	-	10	\$11,243.22
Non-Collision	8	\$6,964.15	3	\$3,770.60	7	\$7,519.94
Side-Swipe	5	\$13,504.01	4	\$2,250.97	1	\$717.56
Head-On / Frontal	5	\$26,948.62	2	\$51,135.60	0	-
Rear-End	1	-	1	-	1	\$5,054.23
Deer	1	\$3,303.29	0	-	0	-
T-Bone	0	-	1	\$6,815.73	2	\$42,474.23
Totals	28	\$59,341.29	17	\$63,972.90	43	\$67,009.18

Table 12: Tort Claims, FY20-22

Incident	FY20	FY21	FY22
Non-Employee Personal Injury	3	9	1
Non-Employee Personal Injury (Slips, Trips, Falls)	9	4	4
Tort Property	5	6	4
Theft	1	0	0
Other (Legal Actions)	0	6	3
Totals	18	25	12

VEHICLE USE PROGRAMS

Pursuant to the provisions of Section 52-4 of the Code of Virginia and as an agency that operates state vehicles, ORM established a Safe Driver Program. The purpose of this program is to emphasize the importance of safe driving, develop a sense of responsibility and accountability among operators of state-owned vehicles, and encourage defensive driving to reduce the frequency and severity of automobile accidents. The Safe Driver Program has been in place for seven years and is supported administratively by the Accident Review Committee (ARC), Driver Safety Awareness Training, and Motor Vehicle Report checks. These components enhance safe driving awareness and accountability, thereby minimizing Mason's liability exposure and evidenced by the decline in automobile accidents recorded since the inception of this program (Figure 13).

THE ACCIDENT REVIEW COMMITTEE (ARC)

The ARC meets quarterly to evaluate each accident involving stateowned or state-rented vehicles. Each accident is reviewed and classified as "Preventable," "Not Preventable," or an "Incident" pursuant to the definitions provided by the Department of State Police. In the past five years, the committee has reviewed 134 accidents as represented by Table 13.

After an evaluation of each accident's causative factors, ARC recommendations can include but are not limited to additional driver training, verbal counseling by the driver's supervisor, revocation of driving privileges, and utilization of technology (e.g., installation of back-up cameras). ORM tracks and monitors the committee's recommendations to ensure each driver has completed the required actions and actively participates in the Safe Driver program. ORM collaborates with Human Resources and Payroll to help drivers and their supervisor understand how an unacceptable MVR report resulting in a restricted driver status can impact their department's daily operations and the driver's ability to conduct their required job functions. Strategies to achieve acceptable status, date the restricted status will expire, and alternate options for the employee to complete their job functions are presented to the supervisor and drivers during MVR status review meetings.

AUTO ACCIDENT REPORTING STATISTICS

ORM is responsible for providing a State Vehicle Crash report to the Commonwealth annually. The report is based on Mason's auto claims history and the miles driven over the course of the year by operators of state-owned vehicles (Figure 13). Due to the low number of accidents reported for FY21, George Mason University was selected by the Commonwealth of Virginia to receive a Motor Vehicle Accident Prevention Award that was presented in Richmond, VA on May 19, 2022. This award recognizes the University's Safe Driver Program and the collective efforts of its stakeholders (e.g., University Police and Facilities Management).

MOTOR VEHICLE REPORT (MVR) CHECKS

The MVR check program, established in University Policy 1411, requires all drivers to maintain a satisfactory driving record. ORM completed 981 Department of Motor Vehicles (DMV) records checks from FY20 to FY22, which included 227 from states other than Virginia. The DMV Alert program administered by the Commonwealth of Virginia has reduced the manual process of rechecking VA drivers, following their initial MVR review, as real time notifications of driver infractions are automatically sent directly to ORM. By utilizing the DMV Alert program, ORM can monitor 76% of Mason authorized drivers while increasing efficiency and staff workloads. Between FY20 and FY22, ORM received 229 reports of employee driving infractions. Many of the alert notifications were for minor infractions and did not affect the driver's authorization status.

CONTRACTS AND SPECIAL PROJECTS The institute for digital innovation (idia hq)

This new Fuse at Mason Square building will be a 350,000 square foot building for university research and design labs, classrooms and offices, corporate innovation centers, incubators/accelerators, co-working facilities, collaboration and convening spaces, and retail. Budgeted for \$178M, this is a unique construction project involving a ground lease, developers, box culvert, and environmental exposures. ORM collaborated with University Counsel, Commonwealth of Virginia DRM, and an Environmental Consultant from Mason's insurance broker to ensure that Mason completed its due diligence in risk transfer and establishing correct insurance requirements to mitigate liability exposure and financial risk.

AVIATION

University Athletics utilizes air travel for transportation to some athletic competitions and the department required consistent charter services. ORM collaborated with University Counsel, Purchasing Office, an insurance broker specialist, and other universities who utilize charter services for the same purpose to identify an insurance solution. ORM provided insurance language with limits of coverage and safety requirements for a request for proposal to solicit bids to provide aviation charter insurance. In addition to aviation charter services, ORM assisted with the insurance limits for two Mason affiliated flight training labs.

Table 13: Vehicle Accidents by Type, FY18-22

Fiscal Year	Preventable	Non-Preventable	Incident	Total
FY18	22	6	8	36
FY19	18	4	17	39
FY20	14	2	6	22
FY21	12	2	3	17
FY22	8	2	10	20
Totals	74	16	44	134

TRAINING

In response to the pandemic and the need for social distancing, SEERM quickly transitioned as many of its routine training programs as possible to virtual formats. Most training began as synchronous Zoom sessions, with at least one instructor present to deliver the training, answer questions, and facilitate quizzes. While this change had to happen quickly in response to Mason's abrupt transition to physically distanced activities, SEERM trainers and administrative staff managed to uphold SEERM's high standards for training quality in this new virtual environment. Now that pandemic conditions have allowed meetings and training to take place in person again, SEERM continues to offer some training in the virtual synchronous format and will continue to offer select trainings asynchronously online in FY23. Table 14 provides a summary of training sessions and attenndance from FY20 through FY22.

GOLF CART USE TRAINING

Mason operates 116 Motorized Utility Vehicles (MUV's) which include golf carts and other utility vehicles operated by faculty, staff, and students. From FY20 to FY22, ORM trained 594 operators and processed only five minor accidents involving MUV's. The University's MUV Policy (1131), revised in FY20, makes this training required for MUV operation. The training program has seen a significant increase (48%) in training participants since mandatory training was required.

Table 14: SEERM Training Sessions & Attendance, FY20-22

Course Name	FY20		FY21		FY22	
	Sessions	Attendees	Sessions	Attendees	Sessions	Attendees
1st Aid Heartsaver	1	29	0	0	0	0
Aerial Lift (Classroom & Hands-on)	6	46	4	18	10	40
Animal & Vivarium Safety	15	59	12	59	18	88
Asbestos & Silica Awareness	10	143	3	26	6	79
Athletics & Recreation Safety	17	212	30	222	35	293
Basic Fire Safety	2	169	0	0	3	261
Biological Safety for BSL-2 Laboratories	28	164	28	190	26	190
Biomedical Research Lab (BRL) Training	26	158	18	72	12	71
Bloodborne Pathogens	38	360	39	295	53	646
BSL-2 Biosafety Refresher	21	86	22	93	20	104
Chainsaw Safety	0	0	0	0	1	6
CPR/AED Heartsaver	8	25	0	0	7	39
Crowd Manager	2	232	0	0	2	174
Driver Safety Awareness	13	420	12	252	15	590
Environmental Field Safety	4	14	6	51	9	28
Fall Protection	4	25	3	11	3	10
Fire Extinguisher Use	34	400	19	174	34	297
General Safety	7	43	4	18	5	23
Hazard Communication	17	92	7	30	8	43
HAZWOPER First Responder - Operations	1	7	0	0	0	0
HAZWOPER Refresher	4	33	0	0	0	0
Hearing Conservation	13	141	8	83	8	93
IBC Member	0	0	0	0	1	8
Laboratory Safety Awareness	19	213	7	80	14	177
Laboratory Safety Orientation	40	412	37	406	31	626
Laboratory Safety Refresher	19	109	15	125	19	110
Lockout/Tagout	5	17	0	0	3	11
Mold Awareness	1	40	0	0	0	0
Motorized Utility Vehicle (Golf Cart Use)	11	184	10	144	12	307
PAPR	4	37	5	58	6	41
Powered Industrial Trucks (Classroom & Hands-on)	0	0	0	0	9	63
Respiratory Protection	12	95	23	120	17	104
Shipping Class 6.2 Infectious Materials	2	11	1	7	3	11
WASTE Hazardous and Universal Waste Handling and Storage	5	62	2	15	2	5
Working Safely with HIV	4	5	3	6	2	2
Totals	393	4,043	318	2,555	394	4,540

THANK YOU

Thank you for taking the time to review SEERM's performance and accomplishments during FY20 to FY22. If you have questions or comments about SEERM programs or the contents of this report, please contact SEERM at seerm@gmu.edu or (703) 993-8448.

Safety, Emergency, & Enterprise Risk Management 4393 University Drive, MS 5E2, Fairfax, VA 22030 (703)993-8448 seerm.gmu.edu safety@gmu.edu