

BYU Risk Management and Safety Department 2021 3rd Quarter Report

## **TABLE OF CONTENTS**

	Page No.
Compliance Committee Support Committee Involvement	3
	J
<b>Emergency Management</b>	4
COVID Case Management	
Emergency Management Support	
Programs	
Outreach	
Trainings/Conferences	
Other	
Environmental, Health, and Safety	
Academic Safety	6
Environmental Management	9
Industrial Hygiene	15
Occupational Safety	18
Fire and Life Safety	28
Fire Marshal's Report	
Life Safety Systems	
Special Events	
Hot Work Permits/Inspections	
Fire Safety Inspections	
Information Technology	30
Overview	
Projects	
Metrics	
Insurance Services, Risk Management & Risk Assessment	33
Insurance Services	
Risk Management/Child Protection Program	
Incidents & Claims Reporting	
Risk Assessment	

## **COMPLIANCE COMMITTEE SUPPORT**

The Department of Risk Management and Safety in addition to Emergency Management personnel provide support to the following committees as chairpersons, members, responsible officials, and/or resources:

- Academic Safety, Health, and Environmental Committee
- Campus Safety, Health, and Environmental Committee
- Minor Protection Compliance Committee
- Dining Services Safety Committee
- Executive Risk Management Compliance Committee
- Institutional Animal Care and Use Committee
- Institutional Biosafety Committee
- Institutional Review Board Committee
- Laser and Radiation Safety Committee
- Physical Facilities Safety Committee
- Records Management Advisory Committee
- The Local Emergency Planning Committee
- The University Disability Standards Compliance Committee
- Timely Warning & Emergency Notification Committee
- University Clery Committee
- University Continuity Steering Committee
- University Security and Alarms Committee
- Vehicle Accident Review Committee

## **EMERGENCY MANAGEMENT**

The Office of Emergency Management provides management and coordination of university-wide preparedness, mitigation, response, and recovery operations.

#### **COVID Case Management**

The Office of Emergency Management manages the BYU Case Management team. This team performs contact tracing for the university, answers COVID-19 related questions and responds to emails regarding COVID-19. The Case Management team coordinates with the Student Health Center, Utah Department of Health, Utah County Health Department, and many individual departments on campus.

- 6 additional student employees were hired to bring the total team count to 8
- Case Management operations were moved to a classroom in the McDonald Building.

COVID Cases	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2021 Total
Confirmed Cases*	2132	166	431	-	2729
Close Contacts	1123	121	522	-	1766
COVID "hotline" phone calls received	17005	2282	2621	-	21908

<sup>\*</sup> Includes individuals not included in case count, self-reported individuals who were later found to be negative, and individuals awaiting test results

#### **Emergency Management Support**

Emergency Management personnel coordinate with several departments and outside agencies to prepare emergency plans for large campus events.

- Stadium of Fire and Patriotic Service attended planning meetings hosted by America's Freedom
  Festival Provo staff. An Event Action Plan was created to facilitate the sharing of information
  between the multiple departments and agencies. A Public Safety Briefing was coordinated and
  held with participants from BYU Risk Management, BYU Special Events, BYU Police and Security,
  Department of Homeland Security (DHS), FBI, UTA, Provo Fire and Rescue, Provo Police, and
  others
- BYU hosted football games attended athletic coordination meetings for 4 football games. An Event Action Plan was created for each BYU football home game and a Public Safety Briefing was held with public safety partners.
- Incident Management Team (IMT) coordinated monthly Zoom meetings with the University IMT.

#### **Programs**

To improve campus preparedness, the Office of Emergency Management administers several campus-wide programs.

 AEDs (Automatic External Defibrillators) are checked monthly to ensure that each AED is operational and that alarms are functioning. 8 Additional AEDs were purchased in December of 2020 and locations for placement were coordinated with various building representatives.

- Emergency Caches are supplies of food, water and mylar blankets that are placed in locations around campus. At the request of BYU dispatch, Emergency Caches were placed in dispatch centers at the Marriott Center, the LaVell Edwards Stadium, and the Talmage building.
- Evacuation Chairs are placed near stairwells across campus. Locations of evacuation chairs on campus had not been well documented. Emergency Management staff identified locations of current evacuation chairs, serial numbers were obtained, and pictures and descriptions of locations were documented. Training on the use of evacuation chairs was created by Risk Management student graphic designers and uploaded to BYU's LMS system.

#### **Outreach**

- The Office of Emergency Management hosted a booth at New Student Orientation. Students were provided with emergency preparedness handouts.
- Emergency Management coordinated with Dave Smith and the Risk Management EH&S group on inviting the National Guard 85<sup>th</sup> WMD-Civil Support Team to present information on their abilities to select BYU partners.
- After extensive support from the National Weather Service at several events, a basket of "BYU swag" was delivered to the Salt Lake City NWS office.

#### **Trainings and Conferences**

The Office of Emergency Management supports continual training and staying abreast of current best practices. Below are some of the trainings and conferences our team attended.

- ESRI GIS Conference
- Utah State Public Safety Summit
- FEMA AWR-404 Counter Unmanned Aircraft Systems

#### <u>Other</u>

• The National Weather Service (NWS) has recognized BYU as a StormReady supporter and presented BYU with a large sign. Earning this recognition indicates that the university has taken necessary steps to improve emergency preparedness in the event of extreme weather.



## ENVIRONMENTAL, HEALTH, & SAFETY DEPARTMENT

The EH&S department is comprised of several groups that oversee the following areas:

- Academic Safety (including Lab Safety),
- Environmental Management (including Inventory, Environmental Compliance, and Hazardous Materials and Waste),
- ❖ Industrial Hygiene
- Occupational Safety (including Safety Programs Management and Safety Training).

### **ACADEMIC SAFETY**

During the third quarter of 2021, the Academic Safety group completed the following activities:

#### **Radiation & Laser Safety**

- Completed inspections of campus x-ray producing equipment (17 devices) and renewed annual registration with Utah DWMRC.
- Conducted radiation safety training for new student researchers.

#### **Biological Safety**

- Reviewed 7 Material Transfer Agreements.
- Reviewed and made corrections to a draft of a Biosafety training module for LMS
- Responded to concerns related to biohazardous waste disposal in the BNSN
- Finalized updates to the Biosafety Plan for BSL2 Lab, 1272 KMBL
- Provided lap-specific Biosafety training for Dr. Wooley's Chemistry graduate student
- Responded to a High Temperature Alarm in 5138 LSB.
- Trained Environmental Management personnel on BBP and Biosafety
- Coordinated with Environmental Management for a lab cleanout in the CB
- Responded to a Safety Concern from Professor Keith Wilson, Ancient Scripture
- Held meetings to discuss the approval process for Special Events with Jason Jay, IACUC
  Administrator, regarding IACUC research conducted off campus, which is not under the purview
  of IACUC scope. Current protocols were discussed regarding approval of off-campus activities,
  especially dealing with research.
- Responded to questions from an engineer in Physical Facilities regarding eyewash and safety showers in academic labs and relative regulations covering this type of safety equipment.

#### **BSL3 Labs**

- SRA Approvals 2 Individuals
- Weekly review of Entry Logs from CCure9000 to ensure no security issues were observed
- Monthly review of BSL3 Suite pressure sensor readings for the 6-labs
- Assisted 3 individuals with non-CDC approval to gain access to the BSL3 Virology Lab
- Assisted Electric Shop with annual testing of smoke detectors.
- Summarized new CDC regulations on Information Security and Contingency Planning

#### **IACUC**

- Submitted 4 Physical Facilities requests for services related to animal lab facilities.
- Reviewed several documents, letters, and emails and participated in several discussions about an ongoing chicken research project.
- Attended 2 webinars and reviewed 3 scientific articles dealing with Animal Care regulations
- Tested noise levels in animal research areas & submitted a report to IACUC
- Followed up on a bat in the KMBL vivarium
- Provided T. gondii protocol for Dr. Steffensen, including the following:
  - o A re-inspection of ABSL2 lab in KMBL
  - Answers to questions regarding health effects of T. gondii to laboratorians, especially pregnant laboratorians
  - o Assistance in training students with Dr. Eric Wilson
  - o Preparation of a summary of treatments available for individuals infected with T. gondii

#### **IBC**

- Summarized NIH Guidelines on what is considered an 'exempt' experiment and created a PowerPoint to train IBC committee on NIH Guidelines.
- Responded to questions from 4 researchers regarding their research activities and what IBC oversight and approvals were needed.

#### **Medical Surveillance:**

- 7 individuals submitted Medical Surveillance reports to IHC Workmed
- Followed up with Gay Tregaskis multiple times regarding the reports.
- Conversed multiple times with Dr. Biggs regarding his questions related to specific individuals' medical histories.
- Received and emailed reports to IHC Workmed
- Processed 5 invoices from IHC Workmed.

#### Env-Lab

- Interviewed, hired, and trained 2 new students
- Created a Chemical Hygiene plan for Env-Lab
- Submitted 11 new service requests to Physical Facilities
- Followed up on 10 completed requests.

#### **03 Additional Highlights**

- Presented a "Lessons Learned" session at the annual Church Risk Management & Safety Conference
- Taught a "Responding to lab spills and accidents" class to ~50 students enrolled in Chem 201.

#### **Academic Safety Metrics** No. of Inspections/Tests **TOTALS** Q1 Q2 **Q3 Q4 TOTALS** General Academic Labs Safety Equipment Inspections Eyewash/Safety Showers **Unknowns Tested** Radiation Labs Inspected Radiation/Lab Calibrations Tested \_ Sealed Source/Leak Checks Other Radiation Sources Checked -Animal Care/Use Areas -Animal Care Protocols Reviewed -Animal Care SOPs Reviewed **Ergonomic Assessments** (Academic and Industrial) **Ergonomic Assessments** (Group Presentation) **IBC Protocols Reviewed** \_ **IBC Lab Inspections** BSL3 CDC Plans/SOPs Reviewed -BSL3 CDC Plans/SOPs Updates BSL3 CDC Meetings/Inspections **BSL3 Exercise Scenarios Created BSL3 Exercise Plans/Summaries** Created/Updated **BSL3** Medical Surveillance **Blood Borne Pathogen Trainings** -**Blood Borne Pathogen Trainings** (Individuals) Blood Borne Pathogen Program Reviewed

#### **ENVIRONMENTAL MANAGEMENT**

During the third quarter of 2021, Environmental Management completed the following:

#### **Environmental Management Achievements**

- The Chemicals Management Building (CMB) managers worked with Mike Pettersson to include all "high hazard chemicals" to the CMB website. Special precaution must be taken when these chemicals are submitted for a pickup request from a lab or professor. The website now "flags" these "high hazard chemical" on the screen, alerting the CMB staff that a potential hazard may exist, and that these chemicals must be viewed by a supervisor, or other knowledgeable person to know if any special requirement are needed for this picked up.
- Ed Corbett and Brian Harris provided environmental information to Bremen Leak in the BYU Office of Sustainability. This information will help consultants working with BYU to identify areas that BYU should monitor and chart to show progress or decline in key environmental areas. The information provided included greenhouse gas (GHG) emissions (10-year history), sulfur-dioxide (SO2) emissions (10-year history), carbon-monoxide (CO) emissions (10-year history), particulate matter (PM) emissions (10- year history), unwanted laboratory waste (10-year history), and other parameters. A DRAFT report was reviewed along with comments offered related to items in the report.
- Chemicals Management Building leadership met personally and individually with Matt Allen, Rebecca Scholl, and Bryant Brown, to review with them what the CMB offers and to ask how we can help simplify their jobs and responsibilities. The meetings were very beneficial and helpful. This meeting also asked for suggestions and recommendation that could be made to improve the service we offer to each of them. This will become an annual meeting with each of these key individuals. We believe that this meeting helps to build rapport with each person and lets them know that we are always here to help.
- Staff at the Chemicals Management Building are developing written Standard Operation Procedures (SOPs) for every process done at the CMB, or by CMB staff. These SOPs identify the potential hazards, the personal protective equipment (PPE) that must be worn, the steps, in order, that must be taken to complete each process, and photos where and when needed to show how the step is performed. The written SOPs will provide a standardized way for performing all processes done at the CMB. It is believed that by all of us following these SOPs, safety will be improved and the risk of errors and injuries occurring will be reduced. Mostly it provides a consistent manner and guidance for work performed by our staff. A spreadsheet has also been developed to identify each SOP, the percentage that the SOP is completed, and which employees have been trained on that specific SOP.
- A new training for the "Proper Handling, Care, and Disposal of Glass, Sharps, and Batteries" was
  created, which will be sent out to campus for training this year. This training will encourage BYU
  students and staff to use caution when using and/or disposing of these types of items that could
  cause injury.
- As a precautionary measure each August, Ed Corbett and Brian Harris check the CMB storage tanks located north of the building. Over time, these tanks fill up with water from the sprinklers and rainwater. In the event of an emergency which activates the building fire sprinklers, the water leaving the building and entering into the tanks is heavily contaminated and must be captured and retained on site. No discharge is permitted. When the tanks are full of water, it greatly diminishes their ability to operate as designed. If the tanks get too full, water samples are

checked and analyzed to determine if it contains anything harmful. If there is nothing harmful in the water, the water will be pumped out and disposed of properly. If there is a hazard in the water, we will coordinate with the Church who has existing contracts with various hazardous waste companies and will work with them to properly dispose of the contaminated tank water. Ed and Brian are maintaining a spreadsheet to track how much water is in these tanks on an annual basis. There is currently less than a foot of water in the tanks.

- A spreadsheet has been developed for all "unknown" chemicals that are received at the CMB. This spreadsheet will be used to better track and manage all "unknown" chemicals until they can be disposed of by the vendor.
- The CMB management are still working to incorporate many of the recommendations from the Security Assessment that was completed last year by BYU Police. Two new security cameras were installed to allow visibility to two areas that were not monitored previously, namely the hallway near the key box and the bio-hazard room. A card access device is scheduled to be installed this year at the door from the kitchen to the back storage area. This will control who has access to this area.

#### **Environmental Compliance**

- The BYU Campus underwent the annual compliance audit from the Utah Division of Air Quality, to assess compliance to the Approval Order (Air Quality Permit) issued to BYU. The BYU staff located at the areas visited by the State inspector were very helpful in answering the inspector's questions. The final Audit Report showed BYU in compliance in all areas of the BYU permit. The inspector recommended that the lid to the parts washer at the auto shop be kept closed when the parts washer is not in use.
- The Notice of Intent (NOI) for BYU to update their existing Approval Order (Air Quality Permit) was submitted to the Utah Div. of Air Quality. The permit must be updated to include the following items:
  - o A new Tier III emergency generator and fuel tank will be installed in the new Music Hall.
  - The Chemicals Management Building's old emergency generator will be replaced by a new Tier III generator and fuel tank.
  - The existing emergency generator for the Crabtree Building will be removed and not replaced.
  - The University Laundry Building boilers are being replaced and downsized from 12.6 MMBTUs for 6.0 MMBTUs.
  - The permit wording for the two large (192 MMBTU) boilers at the Central Heating Plant is being modified to give greater flexibility in how BYU staff choose to operate the boilers.
- Aspen Grove is serviced by the Risk Management staff in many ways. During a recent visit to Aspen Grove for Spill Prevention Control and Countermeasure (SPCC) asset evaluation, several items were noticed that needed to be addressed including the following:
  - o Three emergency generators that need to be included in the SPCC Plan.
  - Two fuel tanks at Aspen Grove that also need to be included in the SPCC. One tank is in a horse trough for a secondary containment. That trough is showing signs of rust and the other tank is in an Army surplus tank which has no secondary containment. This is very concerning since these tanks are located in a watershed just a few hundred feet from a drainage.
  - The elevator hydraulics equipment, located in the parking garage, does not have adequate secondary containment. A hydraulic leak will go into the parking garage floor drain system and be discharged directly into the watershed drainage. It was recommended that the Aspen Grove staff install a drain plug in the drain of the nearest garage floor drain collection box.

- This will convert the box into a sump where hydraulic fluid would flow and could be collected.
- There are three large propane tanks at Aspen Grove that have been buried for nearly 30 years. Without cathodic protection there is concern that these propane tanks could rust and begin to leak. Aspen Grove and the BYU Fire Marshal are looking into whether these tanks need to be replaced and who should replace these tanks.
- A Spill Prevention Control and Countermeasure asset evaluation was also completed at BYU's
  Springhaven and Timp Lodge. It was discovered that Timp Lodge has an emergency generator.
  This generator will be included in the SPCC Plan, so it can be monitored and checked for leaks
  each month.

#### <u>Spill Prevention—Control and Countermeasures (SPCC)</u>

- Supported the development of a value-added program to assure compliance to the BYU Spill Prevention Countermeasures and Control (SPCC) plan.
- Continued the monthly inspection protocol that was created in Q3 of 2020, to assure compliance to the BYU SPCC Plan
- The following assets (> 250, each) fall under the BYU SPCC plan for the monthly inspection criteria, and were inspected on a monthly basis during Q3, 2021 (i.e. July, August and September):
  - o 145 electrical transformers
  - o 56 hydraulic elevators
  - o 41 emergency generators
  - o 6 drum storage sites
  - 4 used cooking oil storage sites
- Received a proposal from Kleinfelder Engineering Consultants to do an annual BYU SPCC Plan review and update, as necessary.
  - The Kleinfelder proposal was finalized and approved. Kleinfelder will commence their work during October 2021.
- The InspectNTrack (INT) app (i.e., an electronic inspection application to facilitate the SPCC related asset inspection practices) has been fully rolled out and has replaced the Mobile Inspection app for SPCC inspection practices.
  - Worked closely with Risk Management IT and coordinated discussions with the staff at Wentworth (i.e., developers of INT) to provide updates on our progress. The INT app continues to be used with success.
  - Approved barcodes were installed on more than 250 campus assets which are associated with the BYU SPCC Plan and are functional with the INT app.
- Support was continued for the development of emergency action plans (EAP) for the BYU Culinary Support Center (CSC) and the Central Heating Plant (CHP).
  - o A roundtable discussion focused on the CSC EAP practices to take place in October 2021.
- Continued to hold weekly team meetings to coordinate work objectives and strategies and assist in any special individual needs my team may communicate to me.
- Hired three new student employees during Q3, 2021.

#### **Hazardous Materials and Waste**

The Hazardous Waste Technicians collect, categorize, and consolidate many different types of hazardous waste from across campus. The technicians package and prepare the collected waste for shipment according to DOT requirements. They are carefully trained to execute these tasks in a manner that is safe for them and for others on campus.

- Hazardous Waste Technicians retrieved 1,062 items. These items included acids, bases, flammable liquids, solid hazardous items, RAD, and biohazardous waste among other items, (e.g., lab packs, mercury, etc.).
- Forty-two (42) 55-gallon drums of waste including absorbent debris contaminated with acids, bases, fish specimen preserving fluid, mercury debris, universal waste mercury containing devices, waste flammable solvents, and solid hazardous waste were consolidated and shipped.
- 37 lab packs were shipped out for disposal as small waste.
- 87 boxes of four-foot, eight-foot, and miscellaneously shaped tubes of fluorescent lights were shipped out for disposal.
- A total of 35,519 lbs. of waste was shipped out for disposal. This included acids, bases, alkaline batteries, cadaver preserving fluid, mercury debris, universal waste mercury containing devices, waste flammable solvents, solid hazardous waste, and bio-hazardous waste.

In addition, over 100 fluorescent lights were improperly disposed of in two Heritage Halls dumpsters. The CMB staff were made aware of this situation and the lights were retrieved from the dumpsters, so they could be properly processed for disposal. Great care and caution were taken by the CMB staff to protect and prepare themselves for collection of all the fluorescent lights and respective glass shards from the dumpster.

#### 55-GALLON DRUMS CONSOLIDATED/SHIPPED

Waste Stream	Number of Drums Shipped
Acids (liquid)	7
Bases (liquid)	3
Debris c/w beryllium fluoride & lithium fluoride	1
Fish specimen preservation fluid	6
Gasoline	4
PCB ballast	1
Solid hazardous waste (cubic yard box)	3
Waste flammable solvents	17
TOTAL	42

#### SHIPPING BOXES FLUORESCENT LIGHT BULBS PACKED/SHIPPED

Type of Lightbulb	Number of Boxes Shipped
Boxes of four foot – light bulbs	70
Boxes of eight food – light bulbs	1
Boxes for miscellaneous shaped (u-tube, circular, incandescent, halogen)	16
TOTAL	87

## BIOHAZARD WASTE CONSOLIDATED/SHIPPED

Waste Stream	Weight in Pounds
Biohazardous waste	507
TOTAL	507

#### WASTE ITEMS PICKED UP FROM CAMPUS LABORATORIES

Waste Stream	Number of Items Picked Up
Acids (liquid)	96
Bases (liquid)	73
Biohazardous waste	476
Damaged lithium batteries	2
Fish specimen preservation fluid	4
Lab-pack items	25
Mercury Debris	4
RAD items	3
Solid hazardous waste	151
Universal waste mercury containing devices	3
Unknowns pending analysis	20
Waste flammable solvents	25
Acids (liquid)	96
TOTAL	1,062

#### RECYCLING

Item Type	Weight in Pounds
AI- sheet	7
A-transformer	14
Copper transformer	55
Electric ballasts	1,130
Ferrous-lite iron	50
Insulated copper wire	30
Lead acid battery	217
Lead-mix	10
TOTAL	1,513

#### GAS CYLINDERS SHIPPED OUT FOR DISPOSAL

4.10 612.1122.110 61111122 6611 6112		
Waste Stream	Number of Cylinders Shipped	
Deuterium 99.5%	1	
Hexafluoropropene 98.5%	1	
Sulfur dioxide	1	
TOTAL	3	

#### HAZARDOUS WASTE SHIPPED OUT FOR DISPOSAL

Acids (liquid)	2,559
Bases (liquid)	1,333
Broken fluorescent light tubes, dirt & misc. debris (15-gallon)	26
Fish specimen preservation fluid	1,669
Gasoline	1,446
Lab-pack items (5-16 gallons)	113
Mercury Debris	4
Solid hazardous waste (cubic yard box)	1,496
Waste flammable solvents	6,684
TOTAL	15,330

## 5-16 GALLON DRUMS/BOXES, & OTHER SMALL WASTE SHIPPED OUT FOR DISPOSAL

Waste Stream	Number of Drums/Items Shipped
Broken fluorescent light tubes, dirt & misc. debris	1
Lab-pack	37
Lithium batteries (damaged)	2
Mercury debris	1
Universal waste – aerosol cans – non-punctured (5 gallon)	1
TOTAL	42

## OTHER TYPES OF WASTE SHIPPED OUT FOR DISPOSAL

Waste Stream	Weight in Pounds
Biohazardous waste	14,629
Debris c/w beryllium fluoride & lithium fluoride	83
Fluorescent light bulbs – four-foot tubes	4,132
Fluorescent light bulbs – eight-foot tubes	69
Fluorescent light bulbs – miscellaneous shaped (u-tube, circular, incandescent, halogen)	599
Gas cylinder	38
Lithium batteries (damaged)	55
PCB ballast	565
Universal waste – aerosol cans – non-punctured (5-gallon)	19
TOTAL	20,189

\*\*\*TOTAL WEIGHT (IN POUNDS) OF WASTE ITEMS SHIPPED OUT

35,519

## **INDUSTRIAL HYGIENE**

Industrial Hygiene focuses on the anticipation, recognition, evaluation, and control of chemical and physical hazards in the workplace. Industrial Hygiene manages the following:

- Noise Sampling
- Confined Spaces
- Respirator Program
- Sensor Calibration
- Ventilation System Evaluation
- Indoor Air Quality
- Asbestos
- Ergonomics Programs
- Lab equipment for Industrial Hygiene Department

The following tables provide the metrics for the first, second, and third quarters of 2021:

Industrial Hygiene Metrics					
Respiratory Program	Q1	Q2	Q3	Q4	2021 TOTALS
Voluntary Fit-tests Performed	2	0	0	-	2
Mandatory Fit-tests Performed	2	24	0	-	26
New Mandatory Respiratory Users	2	4	0	-	6
Times EBA's (Emergency Breathing Apparatus) were Checked	4	30	9	-	43
Total Masks Distributed – all kinds (Break down below)	3,304	230	8,721	-	12,255
-Cloth Face Coverings (CFC) Distributed (COVID related)	11	190	8,360	-	8,561
-N95's Distributed (non-COVID related)	423	20	95	-	538
-N95's Distributed (COVID related)	0	20	0	-	20
-KN95's Distributed (COVID related)	2,870	0	266	-	3,136
Total Mask Inventory – all kinds (Break down below)	44,254	43,747	31,566	-	31,566
-N95 (including V-flex) on hand	7,313	8,343	9,126	-	9,126
-KN95 on hand	2,511	3,234	3,500	-	3,500
-Surgical Mask on hand	9,150	6,950	5,760	-	5,760
-Double layered CFC on hand	25,280	25,220	13,180	-	13,180

Industrial Hygiene Metrics								
Sensor Calibrations Tested - Total	141	55	46	•	242			
O2 Sensor Calibrations	5	4	0	1	9			
Mercury Meter Regeneration	3	2	2	- 1	7			
Combustible Gas Sensor Calibrations	40	26	26	-	92			
Carbon Monoxide Sensor Calibrations	76	19	0	-	95			
Ammonia Sensor Calibrations	17	2	18	-	37			
Bacharach Calibrations	-	2	-	-	2			
Ventilation Systems Tested Total (Break down below)	282	261	263	•	806			
Fume Hoods Tested	91	202	88	-	381			
Snorkel Hoods Tested	123	9	109	-	241			
Fixed Local Exhausts Tested	40	36	31	-	107			
Spray Booths Tested	8	4	5	-	17			
Vented Flammable Storage Tested	6	3	1	-	10			
Other Ventilated Systems Tested	14	7	29	-	50			

Industrial Hygiene Metrics							
Miscellaneous	Q1	Q2	Q3	Q4	2021 TOTALS		
Confined Spaces Labeled	0	213	148	-	361		
Departments Tested for Hearing Conservation	4	2	3	-	9		
Departments Reached out to for Annual Audiograms	6	2	2	-	10		
IH Lab Equipment Calibrated	8	4	2	-	14		
IH Lab Equipment Purchased	0	0	0	-	0		
IH Lab Equipment Repurposed	0	15	1	-	16		
IH Lab Equipment loaned out (times)	7	2	9	-	9		
Individual equipment SOP's and troubleshooting guides created and filed	20	1	4	-	25		

#### **IH Special Projects**

- Donated 8,000 CFCs for education week
- Donated 200 surgical masks to the Hinckley Visitor Center for visiting VIP's
- Donated 150 surgical masks to WSC ID center
- Updated the map and directions to access the EBA's stationed throughout campus
- Revising Gas Alarm Manual
- Investigated ammonia and CO sensors that were not functioning properly in the BNSN
- Created a "How to" video of the Industrial Hygiene Lab equipment.
- Collecting noise sample records from several platforms and combining into one platform to improve efficiency.
- Conducted training for the Auto Shop about Noise requirements. Noise readings are not required unless new machinery is added to their current equipment.
- Updated the Noise Conservation SOP
- Created compilation of Dynamic Coefficient of Friction measurements taken on floors of high traffic buildings on campus. The compilation was shared with the Safety Manager to review past injury reports and any correlation with areas of concern.
- Assisted in creating a Lock-Out-Tag-Out operation procedure for 11 machines in the UPB.
- Assisted in 5 ergonomic assessments:
  - Workstation assessments in the JKB, JFSB, ASB, and RMB
  - Lifting conditions at the MTC walk-in freezer
- Assisting the Academic Safety Officer in locating eyewash stations around campus with expired safety checks. Located 15 stations during Q3 2021.
- Assisted the EH&S Manager in acquiring equipment and accessories to take to BYU-H to train them on the use of certain IH equipment.
- Collaborated with the IT Manager to create an ideal platform for storing the IH sampling records.
- Coordinated access to Absorb records to assist the Respiratory Program verify training prior to fit-testing masks.

#### **Asbestos Projects**

The following buildings/departments were tested or otherwise sampled:

WSC	FLSR – Roofing	WT5 - Roofing
WT6 - Roofing	UPC - Roofing	CONE - Roofing
ESC - Full Building	ESC - Underground Physics Lab - full building	

#### **Other Sampling:**

- IAQ inquiry for Crabtree due to a "diesel like" odor; amounts of CO2 were detected, but not in an amount to be of concern.
- IAQ inquiry for HBLL where there was a "paint thinner" odor; the MultiRae was used upon arrival and 3M was left overnight. Neither showed elements in doses to be of concern.
- Sampled noise levels at the Stadium of Fire.
- Sampled noise levels at the BYU vs USU game.
- Mold and ammonia sampling in the CSC after complaint of headache received.

## **OCCUPATIONAL SAFETY**

Occupational Safety manages the following:

- Accident Investigation
- OSHA Accident Reporting and Recording
- DOT and BYU CMV Programs
- Safety Training
- CPR and First Aid Classes
- Safety Recognition Award Program
- VARC

#### **Industrial Metrics**

Industrial Metrics	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2021 TOTALS	2020 TOTALS	2019 TOTALS
CPR and First Aid Classes Taught	12	10	12	-	34	29	19
CPR and First Aid Certifications	56	27	37	-	120	134	319
New Online Safety Trainings Created	24	5	7	-	36	16	14
Existing Online Safety Trainings Modified	23	27	5	-	55	27	11
Special Graphic Design Projects	2	3	2	-	7	20	15
Corrective Actions Assigned	184	156	204	-	544	726	1,231
Corrective Actions Completed	184	147	199	-	530	709	1,213
OSHA Work Incidents Investigated	2	6	6	-	12	14	11
Other Work Incidents Investigated	60	40	68	-	168	177	89
Safety Recognition Awards	-	3	3	-	6	5	-
VARC Cases Managed	20	35	50	-	105	149	225

#### **OSHA Reportable and Recordable Injuries**

BYU employed approximately 18,225 personnel (full and part-time, including part-time students) who worked an average of 15,682,308 labor hours from January 1, 2021, to September 30, 2021. From the 85 reported workers' compensation injuries in Q3 of 2021, 6 were OSHA reportable and 31 were OSHA recordable (including the 6 reportable injuries).

An injury becomes reportable when it meets OSHA qualifications for severe injuries. It must be reported within 8 hours and have an official BYU investigation (which may be sent to OSHA upon request). An injury is recordable when medical treatment extends beyond OSHA's definition of first aid. All reportable injuries are also recordable. These injuries are included on BYU's official OSHA logs. The following chart compares BYU's OSHA injury rate from 2017-2021.

## **OSHA Reportable and Recordable Injuries**

Injury Metrics	2021 TOTALS	2020 TOTALS	2019 TOTALS	2018 TOTALS	2017 TOTALS
Workers' Comp Injury	211	260	465	449	398
Reportable Count	14	14	11	0	2
Recordable Count	93	127	202	199	177
Lost Time Cases	19	37	39	35	19
Total Days Away	177	572	539	457	281
Restricted Days Cases	37	51	87	81	63
Total Restricted Days	1024	2,568	2,929	3,095	2,019
Total Case Incident Rate	1.18	1.19	1.80	1.79	1.6
Lost Time Incident Rate	.24	.34	.35	.31	.17
Lost Workday Rate	2.25	5.38	4.81	4.11	2.54
Severity Rate	1.90	4.50	2.67	2.30	1.59
Days Away/Restricted	.71	.82	1.13	1.04	.74

**Lost Time Incident Rate** – the number of lost time cases per 100 full-time employees in any given time frame.

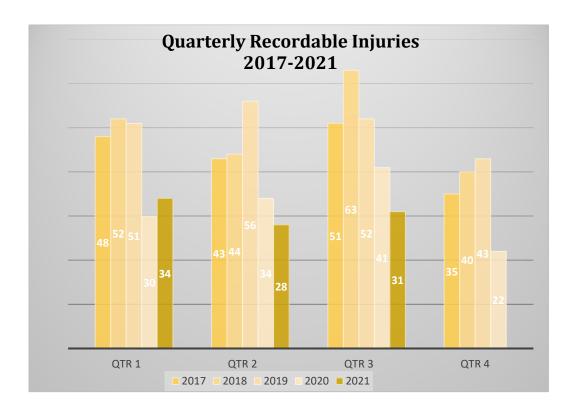
**Lost Workday Rate** – the number of lost workdays per 100 full-time employees in any given time frame.

**Severity Rate** - the number of lost days experienced as compared to the number of incidents experienced.

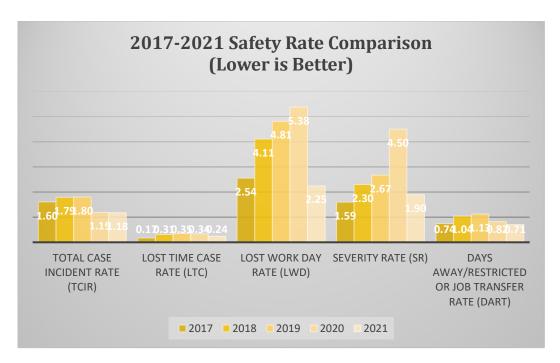
**DART Rate** (days away/restricted) - the number of recordable incidents per 100 full time employees that resulted in lost or restricted days.



Quarterly Recordable Injuries							
YEARS	Q1	Q2	Q3	Q4	TOTALS		
2017	48	43	51	35	177		
2018	52	44	63	40	199		
2019	51	56	52	43	202		
2020	30	34	41	22	127		
2021	34	28	31	-	93		
TOTALS	215	205	238	140	798		



	2017-2021 Safety Rate Comparison (Lower is Better)								
Year	Total Case Incident Rate (TCIR)	Lost Time Case Rate (LTC)	Severity Rate (SR)	Days Away/ Restricted or Job Transfer Rate (DART)					
2017	1.60	.17	2.54	1.59	.74				
2018	1.79	.31	4.11	2.30	1.04				
2019	1.80	.35	4.81	2.67	1.13				
2020	1.19	.34	5.38	4.50	.82				
2021	1.18	.24	2.25	1.90	.71				



Total Case Count Comparison 2017-2021								
Year	Total Recordable Injury	Total Days Away from Work						
2017	177	19	63	281				
2018	199	35	81	457				
2019	202	39	87	539				
2020	127	37	51	572				
2021	93	19	37	177				



2021 OSHA Reportable Injuries									
Department	Date of Injury	Injury Description	Action Taken	OSHA Citation					
Dining Services	2/26/2021	Fractured Finger	Internal Investigation	No					
Physical Facilities	3/17/2021	Partial Fingertip Amputation	OSHA Investigation	No					
Civil Engineering	4/20/2021	Fractured Finger	Internal Investigation	No					
Grounds	4/29/2021	Fractured Ankle	Internal Investigation	No					
Security	5/28/2021	Fractured Ankle	Internal Investigation	No					
Grounds	6/9/2021	Fractured Nose	Internal Investigation	No					
Continuing Education	6/9/2021	Fractured Elbow	Internal Investigation	No					
Building Care	6/25/2021	Fractured Toe	Internal Investigation	No					
Building Care	8/16/2021	Fractured Finger	Internal Investigation	No					
Aspen Grove	8/25/2021	Fractured Toe	Internal Investigation	No					
Electric Shop	8/31/2021	Fractured Finger	Internal Investigation	No					
Building Care	9/17/2021	Fractured Hand	Internal Investigation	No					
Dining Services	9/22/2021	Fractured Foot	Internal Investigation	No					
College of Nursing	9/29/2021	Fractured Wrist	Internal Investigation	No					

Currently, BYU has three OSHA citations that are within the 3-year period.

- April 24, 2019, Machine Guarding
  - Citation 1 Item 1 Type: Serious UAC R614-1-5.C.7 Employee bypassed a safety guard.
- May 26, 2020, Lockout Tagout
  - Citation 1 Item 1a Type: Serious 29 CRF 1910.147(c)(5)(i)
     Employer did not provide lock out equipment.
     Citation 1 Item 1b Type: Serious 29 CFR 1910.147(e)(2)(i)
     During repairs, machine was not locked or tagged out.
  - Citation 2 Item 1 Type: Other-than-Serious 29 CFR 1910.147(c)(7)(i)
     Employer did not provide training.

As all of BYU shares the same EIN number, if any department at BYU receives another citation for the same provision within 3 years, BYU will be ineligible to receive a reduction agreement, and the violation could be considered a serious repeat or willful violation.

#### **Utah OSH Notification:**

- UOSH contacted Risk Management and Safety with an official complaint notification on January 13, 2021. UOSH received an anonymous call that an employee in the BYU Store was not wearing a face cloth covering. Risk Management and Safety posted the compliant notification for the required three days and shared the mask regulations that BYU has in place with UOSH and the BYU Store management. No further action was taken.
- UOSH contacted Risk Management and Safety on March 10, 2021. They received an anonymous
  call that individuals in the BYU Creamery were not wearing face cloth coverings. At this time,
  UOSH did not have jurisdiction and asked us to work directly with Dining Services. Upon
  investigation, it was concluded that Dining Services was compliant with the BYU mask
  regulations including posting signs for customers.

2021 OSHA WC Types of Recordable Injuries							
Type of Injury	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2021 Totals		
Recordable Injuries	34	28	31	-	93		
Days Away Cases	7	8	4	-	19		
Days Away	80	57	40	-	177		
Restricted Days Cases	7	13	16	-	37		
Restricted Days*	479	387	158	-	1024		
Other Recordable**	19	7	11	-	37		

<sup>\*</sup>Restricted Days. This number also includes the restricted days in the Days Away Cases.

<sup>\*\*</sup>Other Recordable. Incidents may fall under the other recordable group when the employee received care beyond OSHA's definition of First Aid and did not miss any days from work nor have any work restrictions. Examples include receiving a prescription, getting stitches, and physical therapy.

2021 OSHA WC Recordable Injuries by Department/Unit-Campus Wide							
Campus Department/Unit	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2021 Totals		
Admissions	-	-	1	-	1		
Alumni and External Relations	-	4	-	-	4		
Aspen Grove	-	-	1	-	1		
Athletics	1	-	-	-	1		
BYU Broadcasting	1	-	-	-	1		
BYU Security	-	1	-	-	1		
BYU Store	3	1	-	-	4		
College of Chemistry/Biochemistry	-	1	-	-	1		
College of Engineering	-	1	2	-	3		
College of Fine Arts	1	-	-	-	1		
College of Life Sciences	1	1	-	-	2		
College of Nursing	-	1	1	-	2		
Dean's Office of Undergrad Studies	1	-	-	-	1		
Department of Continuing Education	-	1	1	-	2		
Dining Services	5	1	10	-	16		
English Language Program	-	1	-	-	1		
HBLL	-	1	1	-	2		
Marriott School of Management	-	-	1	-	1		
Physical Facilities	18	11	11	-	40		
Physical and Math Sciences	1	-	-	-	1		
Print and Mail Services	2	1	1	-	4		
Residence Life	-	1	1	-	2		
Special Events	-	1	-	-	1		
TOTALS	34	28	31	-	93		

## OSHA WC Recordable Injuries by Two Highest Departments

PHYSICAL FACILITIES							
Type of Injury	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2021 Totals		
Recordable Injuries	18	11	11	-	40		
Days Away Cases	2	4	1	-	7		
Days Away	19	14	2	-	35		
Restricted Days Cases	5	5	6	-	16		
Restricted Days	251	122	39	-	412		
Other Recordable	12	2	4	-	18		

OSHA WC Recordable Injuries for Specific Areas within Physical Facilities								
Area	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2021 Totals			
Building Care	5	4	3	-	12			
Building Envelope	-	-	1	-	1			
Carpenter Shop	3	1	-	-	4			
Electrical Shop	-	2	2	-	4			
Grounds	5	2	2	-	9			
Mechanical Shop	2	1	-	-	3			
Moving	-	-	1	-	1			
Paint Shop	2	1	-	-	3			
Upholstery Shop	1	-	1	-	2			
Warehouse	-	-	1	-	1			
TOTALS	18	11	11	-	40			

DINING SERVICES									
Type of Injury	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2021 Totals				
Recordable Injuries	5	1	10	-	16				
Days Away Cases	2	0	2	-	4				
Days Away	22	0	31	-	53				
Restricted Days Cases	1	1	6	-	8				
Restricted Days	99	7	71	-	177				
Other Recordable	2	0	2	-	2				

OSHA WC Recordable Injuries for Specific Areas within Dining Services								
Occupation         2021 Q1         2021 Q2         2021 Q3         2021 Q4								
Cannon Commons	1	-	1	-	2			
Catering	-	-	2	-	2			
Central Stores	1	-	1	-	2			
CSC	-	-	4	-	4			
MTC Dining	-	1	1	-	2			
Retail Dining	3	-	1	-	4			
TOTALS	5	1	10	-	16			

## OSHA WC Recordable Injuries by Causes, Body Part Injured, and Injury Type Q3 2021

Top 5 Recordable Injury Causes									
Cause	Number of Recordable Injuries	Percentage of Injuries							
Struck By or Against	11	35.48							
Contact With	9	29.03							
Lifting	4	12.91							
Slip and Fall	4	12.91							
Other	3	9.67							
Total	31	100%							
Top 5	Body Parts Injured in a Recorda	ble Injury							
Body Part	Number of Recordable Injuries	Percentage of Injuries							
Leg (Knee, Foot, Toes)	7	22.58							
Arm (Elbow, Hand, Wrist)	6	19.35							
Finger/Thumb	6	19.35							
Back	4	12.91							
Other	8	25.81							
Total	31	100%							
	Top 5 Recordable Injury Type	es							
Injury Types	Number of Recordable Injuries	Percentage of Injuries							
Fracture (Including teeth)	6	19.36							
Strain	6	19.36							
Laceration	6	19.36							
Sprain	3	9.67							
Other	10	32.25							
Total	31	100%							

#### **Corrective Actions**

204 Corrective Actions were assigned to help prevent future injuries and to address safety concerns from the incidents reported. Supervisors select the appropriate corrective actions and, in general, have two weeks to complete them. During the 3rd quarter, 199 were completed. An additional 27 corrective actions from previous quarters were also closed. From the 204 corrective actions, the following Types of Corrective Actions were established.

Types of Corrective Actions	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2021 TOTALS
Human Factor	65	56	75	ı	196
Management Systems	65	56	75	ı	196
Environmental Systems	26	25	26	-	77
Tools/Equipment	17	10	15	-	42
Other	11	12	13	-	36

#### **Contributing Factors**

In addition to the Types of Corrective Actions established, several other contributing factors were identified. In quarter 3, the most common contributing factor from the Human Factor group was Lack of Awareness on the part of the employee who was injured. The most common Management Systems corrective action chosen was Minimal Contribution.

Contributing Factor	2017	2018	2019	2020	2021
Complacency	18	28	31	15	10
Didn't Follow Procedures	15	29	30	13	14
Haste/Rush or Hurried	101	104	112	65	54
Lack of Awareness	189	221	258	138	98
Unfit for Duty	0	3	7	2	5
Hazard Recognition	77	71	98	50	48
Improper/Inadequate Training	38	31	55	26	14
Inadequate Procedures	27	36	29	22	11
N/A Minimal Contribution	178	220	225	123	98
Oversight/Supervision	20	30	24	15	7



#### **Vehicle Accident Review Committee (VARC) Cases**

The number of reported incidents to Risk Management. (Incidents reported are not necessarily in quarter order and often contain incidents from previous years.) The VARC meets monthly to determine whether vehicle incidents were preventable or non-preventable, and then assigns consequences accordingly. In most cases where an individual caused a preventable accident, their department is assessed a \$200 fee and the individual must complete a defensive driving class.

VARC Decisions											
	2021   2021   2021   2021   2020   2019   2018										
	Q1	Q2	Q3	Q4	TOTALS	TOTALS	TOTALS	TOTALS			
Incidents	21	35	50	-	106	120	225	203			
Preventable	14	25	37	-	76	83	136	99			
Non-Preventable	5	6	12	-	23	33	59	32			
Not Applicable	2	4	2	-	8	5	30	71			
Cause=Backing	6	12	20	-	38	43	46	21			

#### **Department of Transportation Summary Statistics**

Official DOT statistics for BYU. This includes stops and accidents which may incur penalties of violations and/or citations. For the majority, these statistics apply to CDL drivers, but may also include a non-CDL CMV driver.

BYU has approximately 53 CDL drivers and over 300 non-CDL CMV drivers.

	Department of Transportation (DOT) Statistics										
	2021	2021	2021	2021	2021	2020	2019	2018	2017		
	Q1	Q2	<b>Q</b> 3	Q4	TOTALS	TOTALS	TOTALS	TOTALS	TOTALS		
DOT Stops	0	0	0	-	0	0	0	5	3		
Violations	0	0	0	-	0	0	0	3	2		
00S	0	0	0	-	0	0	0	0	0		
Citations to BYU	0	0	0	-	0	0	0	0	0		
Citations to Driver	0	0	0	-	0	0	0	0	0		
DOT Crashes	0	0	0	-	0	0	0	0	0		
DOT Reportable	0	0	0	-	0	0	0	0	0		
DOT Audit	0	0	0	-	0	0	0	0	0		
		DOT Cu	rrent So	cores as	of Septem	ber 30, 20	21				
Unsafe Driving					0%						
Hours of Service (HO	S) Comp	liance			< 3 driver inspections						
Driver Fitness					< 5 driver inspections						
Vehicle Maintenance	!					< 5 ve	hicle inspe	ctions			
Controlled Substance	es and Al	cohol					0%				
Crash Indicator					0%						
ISS Inspection Score	ISS Inspection Score						67				
ISS Recommendation	1			-			Optional				

## FIRE AND LIFE SAFETY

The Fire and Life Safety area supervises and manages all aspects of fire and life safety on campus while complying with all applicable fire and building safety laws.

## Fire Marshal's Report

#### **Items of Interest:**

- The beginning of the third quarter is always one of the busiest times of the year due to the Stadium of Fire event. It was canceled in 2020 due to COVID, but held this year. The stadium and surrounding area were inspected every day and night leading up to the show. In addition, the incoming fireworks, propane, storage and exiting were all inspected in hopes of maintaining a safe environment for those setting up and rehearsing for the big show. The Stadium of Fire was a great success and safely enjoyed by all.
- We also inspected and covered fire watch for the Patriotic Service held on Sunday following the Stadium of Fire. There was a problem with the stage sinking into the grass, and the base support plates were adjusted to make it safe for those performing. We had to shelter in place as a weather event came through the area. High winds, rain, and lightning were a concern. Once the storm passed, the show was another safe and successful event.
- With the beginning of a new school year, the plan for covering fire watch was put into full action for the upcoming scheduled events on campus. Our department has the best individuals, who are always willing to take a turn in covering and ensuring that these events are safe and enjoyable.
- Our fire technicians presented fire safety training classes and demonstrated how and when to use the campus fire extinguishers safely and effectively.
- We hired two new technicians, and they are doing a great job.

## **Life Safety Systems & Special Events**

Life Safety Systems  A physical inspection of equipment and systems designed to help protect building occupants during fires and other emergencies.								
Descriptions	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2021 TOTALS			
Fire Extinguishers Inspected	1,258	1,127	999	-	3,381			
Fire Department Connection Inspections	133	133	133	-	399			
Fire Sprinkler Control Valve Inspections 795 795 - <b>2,385</b>								
Fire Hydrants Inspected	-	105	•	-	105			

• In addition to inspecting all these items, our students are responsible for maintaining and performing service and tests on all the extinguishers on campus.

## **Special Events**

Risk Management personnel, under the direction of the Fire Marshall, serve at Special Events on campus to provide fire and life safety support and direction. These events range from Stadium of Fire to Athletic and Dance events. Due to COVID-19, some special events were cancelled in 2021.

Special Events	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2021 TOTALs	2020 TOTALS
Events Covered	60	23	52	-	135	99
Event Shifts	65	29	117	-	211	150
Labor Hours	317.75	116	389.5	-	823.25	636.5

## **Hot Work Permits/Inspections**

A hot work permit is required before beginning any temporary operation involving open flames or producing heat and/or sparks. There are locations on campus that have been designated as a hot work location and must be inspected monthly.

Descriptions	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2021 TOTALS	2020 TOTALS
Temporary hot work permits issued	6	59	43	-	108	73
Permanent site inspections	48	48	48	-	144	162

## **Fire Safety Inspections and Reviews**

An inspection or review performed to identify, assess, and mitigate potential fire and life safety hazards in buildings and on campus.

Whole Building Fire Safety Inspections	12	6	9	-	27	80
Fire Safety/Fire Extinguisher Training	1	1	2*	-	4	7
Plan Reviews	10	2	6	-	18	17
Spot Inspections	32	41	62	-	135	57
Student Housing Fire Drills	37	33	37	-	107	37
Fire Alarms Reviewed	-	90	116	-	206	-

<sup>\*170</sup> Persons Attended

## **INFORMATION TECHNOLOGY**

The Information Technology area provides focused attention to the IT needs of the Office of the General Counsel, Risk Management and Safety, and the Integrity and Compliance Office. Our efforts allow those we support to focus on the jobs they were hired to do rather than general IT related tasks. We accomplish this with highly responsive, high-quality help-desk service and a willingness to help in any way possible. We also support department objectives by developing high quality applications, websites, and services that are well organized, properly maintained, and highly functional.

#### <u>Accessibility</u>

Approximately 404 pages were made accessible across 111 documents.

#### Minor Protection Website and Application

On the website, we modified the program requirements page and did a final verification on desktop and mobile.

We added several new features to the app: We call an API to determine the person type instead of asking the user to enter that data. We added a feedback module for users to quickly ask questions. We now query the training dates directly from Absorb which removes the need for Risk employees to do manual data entry. A button was added on the staff page to recheck the authorization status. We also added a daily CRON that rechecks authorization and training dates for events that have not ended.

#### **Litigation Site**

The focus this quarter was visual parity between the Mendix and AWS versions and filtering on the case list. Case list filtering got about as close as can be done with out-of-the-box Mendix. Also, the case list UI is nearly identical to the AWS version. We began to work to make the details page identical. Once the UI portion is done in Q4, we'll finally be able to roll out the merge between financials and litigation and import the data.

#### <u>Audit Request Manager</u>

Several issues were identified and improved in the approval process. We also added email notifications to stewards, custodians, and auditors when elements are approved or denied. These features are currently in acceptance waiting for testing by ICO.

#### **Building Coordinator Planning Portal**

We began designing the UI for this project in Adobe XD, which helped answer many questions about how this application should look and function. Primary focus was on the desktop app, though we also designed several mobile screens.

#### Risk Website

Extensive pages were created for the new supervisor training effort. We created a training matrix feature that will be used with the new supervisor training content. Dozens of other smaller improvements were made to various pages and elements.

#### OGC Website

Attorney bios and practice areas were updated, a few items were removed from the menus, and the About Us page was modified. The website is ready for production pending an accessibility issue with Brightspot that we hope will be resolved early Q4.

#### **Policy Website**

The order of the blue metadata boxes on the left-hand side of the policy pages was adjusted.

#### **Equipment Audit**

The audit was completed which included the remaining devices on campus for OGC and all remote workers.

#### **AAIPCU Registration Software and Website**

A project to upgrade the AAPICU website for a better registration process was initiated.

#### **FileMaker Migration to Mendix**

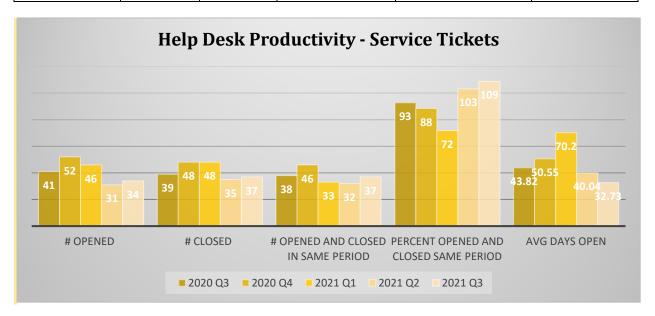
Most of the IH databases were created with initial version of the necessary screens and data import processes. The IH portion of this project is on hold until a new Senior IH is hired and we have an opportunity to discuss the direction they want their data to go.

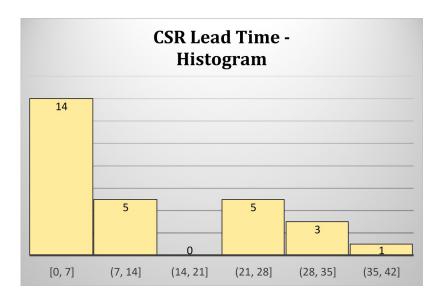
## **System Updates**

We investigated and began implementing an improved process for monitoring and updating Windows devices. We also learned how to do this in JAMF for Apple devices.

#### **METRICS**

Help Desk Productivity - Service Tickets											
Descriptions	# Opened	# Closed	# Opened and Closed in the Same Period	Percent Opened and Closed in the Same Period	Average Days Open						
2020 Q3	41	39	38	93	43.82						
2020 Q4	52	48	46	88	50.55						
2021 Q1	46	48	33	72	70.2						
2021 Q2	31	35	32	103	40.04						
2021 Q3	34	37	37	109	32.73						

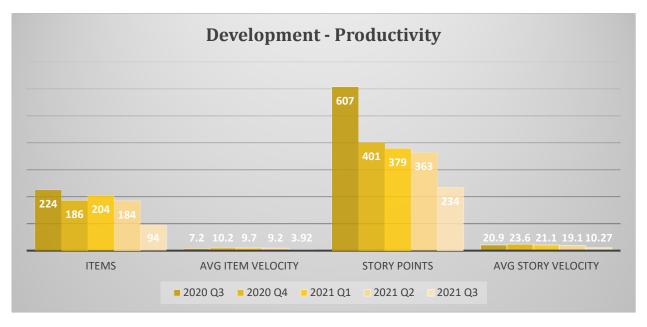




CSR Lead Time – Histogram					
Days From Initial Notice	Number of				
to Resolution	Resolved Items				
0-7	14				
7-14	5				
14-21	0				
21-28	5				
28-35	3				
35-42	1				

Lead time is how quickly issues are resolved from the time they are entered into the system.

Development - Productivity											
Statistics Measured	Itams		Story Points	Average Story Velocity							
2020 Q3	224	7.2	607	20.9							
2020 Q4	186	10.2	401	23.6							
2021 Q1	204	9.7	379	21.1							
2021 Q2	184	9.2	363	19.1							
2021 Q3	94	3.92	234	10.27							



Items and Story Points are completed work summed across all sprints. The average velocity is by sprint.

# INSURANCE SERVICES, RISK MANAGEMENT & RISK ASSESSMENT

#### **Insurance Services**

The Insurance Services Office analyzes and administers the insurance and bonding needs of the three BYU campuses and Ensign College separately from and in addition to the property and casualty (liability) insurance policies and self-insure and risk retention programs provided to the universities and college by the Church Risk Management Division.

Additionally, in conjunction with the university's recently revised Legal Documents Policy, the Insurance Services Office reviews all contracts and agreements of the University to ensure that the insurance, indemnity (hold harmless, duty to defend, indemnification, etc.), and legal liability language and provisions comply with the risk and insurance appetite and position of the University.

#### <u>Certificate of Insurance Processes - Year-over-Year Comparison</u>

- The Insurance Services Office manages the insurance verification process for the University, which includes providing proof of insurance coverage (Certificates of Insurance) on behalf of the University.
- The Insurance Services Office also verifies the insurance position of third-party companies working with the University including contractors and architect partners, caterers, concessionaires, livery businesses, and other miscellaneous vendors and contractors.

Certificates of Insurance	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2021 TOTALS	2020 TOTALS	2019 TOTALS
Issued by BYU	21	29	46	-	96	113	224
Received/Reviewed by BYU	200	*	*	-	200	76	*

<sup>\*</sup>Information is unavailable

	Contracts Reviewed for BYU - Year-over-Year Comparison										
2021	2021         2021         2021         2021         2021         2020         2019										
Q1	Q2	<b>Q</b> 3	Q4	TOTALS	TOTALS	TOTALS					
115	142*	175*	-	432	459**	658					

<sup>\*</sup>Including review and revision of contracts

#### **Insurance & Financial Related Items**

• We successfully negotiated terms for the renewal of multiple annual accident insurance policies in the month of August and finalized renewals of the casualty policies.

<sup>\*\*</sup>Due to the COVID-19 pandemic, these numbers declined significantly due to the cancellation of many events and activities.

## **Risk Management**

Risk Management is an important business practice, which helps identify, evaluate, analyze, monitor, manage and mitigate the risks and potential risks present in the University's business environment. This includes risks related to BYU physical property, personnel, students, visitors, departments, and volunteers.

## **Minor Protection Program**

The Minor Protection Program was assigned to the Risk Management and Safety Department in midsecond quarter of 2020. The following activities were completed during the first quarter of 2021.

#### **Minor Protection Policy**

The Minor Protection Policy was accepted by the President's Council in May 2021. After the release of the policy to the campus community possible adjustments to the policy were noted based on the execution of the policy by multiple areas across campus. The Minor Protection Compliance Committee met on July 28, 2021, and determined those possible revisions were minor and the policy would benefit from a full year of execution before policy revisions were recommended to the President's Council. The committee will reevaluate suggested adjustments at their quarterly meetings to determine recommendations for policy revisions.

#### **Minor Protection Registration System**

Organizations throughout the university community continue to use the Minor Protection Registration System to register University Programs that serve minors or include minors as volunteers. The registration system was continually monitored to provide a user-friendly system that accurately reflects the programs that involve minors as outlined in the Minor Protection Policy. Meetings with the Risk Management IT Manager and software developers were held every two weeks to provide improvements to the system. One important upgrade completion was the integration of BYU's training platform allowing automatic updates when registered individuals complete the Minor Protection training.

Minor Protection Registration System										
	2021	2021	2021	2021	2021					
	Q1	Q2	Q3	Q4	Totals					
Programs Registered		25	41	-	66					
Adults Registered		250	543	-	793					

#### **Minor Protection Training**

With the acceptance of the new Minor Protection Policy, it was noted the current Child Protection training offered through the BYU LMS platform, needs to be revised to better reflect the updated policy. At the July 28, 2021 Minor Protection Compliance Committee meeting, a working group of five individuals from the committee was formed to assist in updating the Minor Protection training. A new script was written and reviewed by the working group. The new training will include a name change from Child to Minor, as well as updates to the Standards of Communication with Minors in University Programs, Duty to Report obligations, and Safety Guidelines. The new script will be presented to the Minor Protection Compliance Committee for their review at their October meeting.

## **Incidents and Claims Reporting**

Through BYU's incident reporting website and SharePoint, Risk Management's Incident Services receives reports of general incidents, general injuries, property loss, auto losses, general liability incidents and workers compensation claims. Upon receipt, the incidents are submitted as claims to the Church's Risk Management Department (CRMD) through their Global Incident Reporting system. The property loss claims, workers compensation claims, select general liability claims and auto loss claims are adjusted by Sedgwick Claims Management Services, Inc., a contracted third-party claims administration corporation.

During the third quarter of 2021, the Risk Analyst and Incident Assistants reviewed and processed the following incidents per Riskonnect and Sharepoint:

INCIDENTS AND CLAIMS 2020 - 2021											
Type of Incident	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2021 TOTALS	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2020 TOTALS	
Auto Prop Dmg	16	40	44	-	100	42	21	26	27	116	
Auto Liability	4	7	15	-	26	11	4	8	17	40	
EFY	0	4*	3*	-	7*	0	0	0	0	0	
General Incident	12*	5*	7*	-	24*	4*	1*	6*	3*	14*	
General Injuries	56*	50*	116*	-	232*	167*	4*	39*	34*	244*	
General Liability	4	2	7	-	13	2	4	8	2	16	
Property-Loss	8	6	8	-	22	12	12	20	8	52	
Workers Comp	71	55	85	-	211	76	68	71	45	260	
Totals	171	169	282	-	622	314	113	177	136	740	

(\*Per Sharepoint)

(Property-Loss includes PC/PD claims)

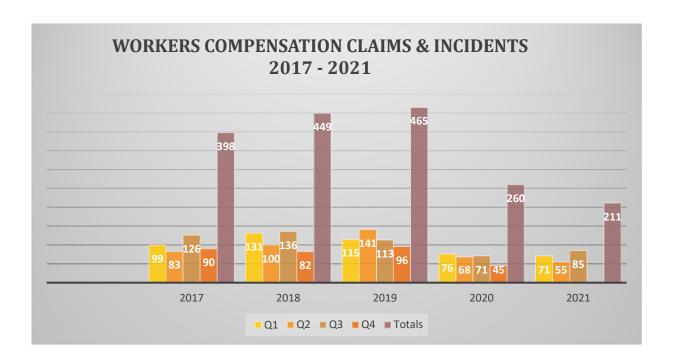


## **Workers' Compensation Incidents & Claims**

- In the third quarter of 2021, BYU Risk Management's incident office received and processed 85 workers compensation incidents/claims.
- This is a .17% increase from the 71 incident/claims reported in the third quarter of 2020.
- The average number of incident/claims in the third quarter for the last five years is 106.
- The second quarter of 2019 remains the highest number of claims reported (141) in a single quarter for the last five years.

	Workers Compensation Incidents/Claims 2017 - 2021											
YEAR	Q1 Q2 Q3 Q4 TOTALS											
2017	99	83	126	90	398							
2018	131	100	136	82	449							
2019	115	141	113	96	465							
2020	76	68	71	45	260							
2021	71	55	85	-	211							

<sup>\*</sup>WC numbers obtained from Riskonnect\*



## **Risk Assessment & Analysis Services**

Risk Assessment and analysis is a review of policies and practices, contractual risk transfer, facility inspections, risk surveys, staff interviews, gathering and interpreting statistical findings, and providing recommendations.

#### **Event Review and Approval (off and on campus)**

BYU departments or organizations may submit online event approval requests through risk.byu.edu. Risk Management staff review and assess the event requests and grant contingency approval. A component of that approval includes vetting non-BYU vendors to ensure that they are in good standing and possess appropriate financial resources to honor their indemnification obligations.

Event ROL waivers were created for all BYU affiliated departments, organizations, and groups. "Assumption of Risk" language was added to the waivers for all SWELL classes.

Type of Request	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2021 TOTALS	2020 TOTALS
Volunteer Waivers	5	0	4	-	5	13
Liability Release Waivers	24	95	103	-	119	82
Sponsorship Applications	0	0	4	-	0	7
Travel Exceptions	15	31	37	-	46	294
Travel Exception Denials	0	1	7	1	1	0
Unmanned Aircraft System (UAS)	7	5	25	-	12	31

Due to the impact of COVID-19 and the restrictions of on-campus events and activities, during the second quarter of 2021, Risk Management Event staff processed the following:

Action Processed	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2021 TOTALS	2020 TOTALS
Events Requested	116	121	227	-	464	293
Events Held	98	78	213	-	389	266
Events Approved/Cancelled *(COVID-19)	0	-	-	-	0	11

#### **Concussion Protocol**

Prior to first quarter of 2021, the concussion protocol was managed by the Safety Management Department. This responsibility has been transferred to the Risk Management Incident office. The following paragraphs are excerpts taken from BYU's Concussion and Head Injury Policy (Policy.BYU.edu) (Italics added).

"Brigham Young University recognizes the seriousness of concussions and head injuries and takes seriously its obligation to address concussions and head injuries suffered by individuals participating in university-sponsored sports and other activities. In Utah, the Protection of Athletes with Head Injuries Act requires "amateur sports organizations," which may include the university, to adopt and enforce a concussion and head injury policy.

This policy requires all campus departments to take steps to prevent and address concussions and head injuries in sports and other university activities. This policy shall be made available to all students; parents of minors participating in sports-related university programs; and university faculty members, employees, representatives, and volunteers.

After being suspected of sustaining a concussion or a traumatic head injury, a student or child may not return to any sporting event until the student or child is evaluated by a qualified health care provider and provides the university with a written statement from the qualified health care provider. The written statement must affirm that (1) the provider has, within three years before the date on which the written statement is made, successfully completed a continuing education course in the evaluation and management of a concussion, and (2) the student or child is cleared to resume participation in the sporting event."

Upon receipt of notification by the Risk Incident office of an incident confirming a head injury that could have resulted in a concussion, the individual is added to a concussion tracking list. The Risk Incident office sends a notification email to the individual with copies to all relative parties at BYU (e.g., Athletics, Residence Life, Intramurals, Extramurals, Student Wellness, etc.).

Information along with appropriate forms are provided to the individual to assist with obtaining clearance to resume participation in sporting events and activities from a qualified health provider. Once the Incident office receives confirmation of clearance from the health provider, the concussion tracking list is updated accordingly, and notice is sent out to advise the relative parties and the individual.

In the third quarter 2021, 24 head injury notifications were sent for a total of 54 notifications sent for first, second and third quarters of 2021. In addition, 8 head injuries were cleared for a total of 52 for the year.

CONCUSSION PROTOCOL									
Action Processed	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2021 TOTALS	2020 TOTALS			
Head Injury Notifications Sent	16	14	24	-	54	83			
Head Injuries Cleared	33	11	8	-	52	33			
Reminder Notifications Sent	99	0	0	-	99	-			