

SAFETY ASSESSMENT & ANALYSIS



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## Section I: Policy Statement

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The Department of Public Works values the health and safety of each and every employee. Safety must be recognized and enforced as the number one priority for all DPW jobs and at every work site. DPW employees and managers are provided initial safety orientation training with annual safety training thereafter. Employees must know and adhere to all safe work requirements, policies and practices. Managers must set the example for use of personal protective equipment and assist in guiding and educating employees on how to appropriately use that equipment along with working safely and efficiently out in the field or in the office work setting. DPW Safety & managers must strictly enforce all safety practices consistent with the State of Wisconsin's Chapter SPS 332 and OSHA's Standard 29 CFR 1910 requirements.

DPW continues to be vigilant at being proactive in best safety practices and procedures with the intent of reducing employee incidents, injuries and accidents. The DPW goal is to give the City of Milwaukee residents quality city service in an efficient and safe manner. The DPW Safety Program consists of:

- Prompt medical attention for an injured party when necessary.
- Investigation of every incident reported, reviewed as needed, and any necessary corrective measures are taken.
- Continued monitoring of safety policies and procedures.
- Enforcement of all safety and work rules.
- Continued annual training and any necessary updated or optional training that may be required/desired for all DPW employees.
- Inspection of work sites, buildings and crews for any unsafe conditions or unsafe work practices.
- Transitional Duty Placement Program

### A. GENERAL SAFETY POLICIES

Per the Department of Employee Relations Safety Plan Template, below are the General DPW Safety Rules. These rules apply to all employees in all departments and shall be followed by all field employees working for the Department of Public Works.

The general safety rules are given to new employees during orientation and again when division work rules are distributed to each employee. This typically occurs on an annual basis.

Specific safety rules and policies for departments are kept by the safety section or the department's Technical Training Supervisor.

Policies such as Lock-Out Tag-Out, Lifting Operations, and Confined Space Entry are covered in each department's safety training activities.

Sign in sheets are kept to document employee attendance and participation.

## **1. Eye Protection**

Protective eye-glasses that meet or exceed the American National Standard Z87.1-2003 must be worn by all Department of Public Works employees working during all field operations. Approved eye protection must have the ANSI standards abbreviation permanently stamped on the lenses.

All employees must wear safety glasses or goggles when performing their regular work assignment. This applies to shops, inventory, and inside maintenance personnel except custodial personnel.

Exceptions are allowed for temporary or seasonal employees with prescription non-safety glasses; however, these persons must wear coverall goggles or plain safety glasses.

## **2. Safety Shoe Requirements**

All field employees must wear division approved safety shoes in satisfactory condition during working hours.

Safety Shoes must be intact, steel-toed American National Standards Institute (ANSI) approved ASTM F2413-05 I/75 C/75 footwear. The uppers must cover the ankle. There should be no visible rips or tears. Laces must be functional and soles must be firmly adhered to the shoe body. Tennis type safety shoes are not allowed.

## **3. Safety Vests**

Employees working in roadways and alleys must wear safety vests or high visibility coveralls equipped with reflective striping. Reflective clothing increases visibility to general traffic as well as City vehicles on the job site. All safety vest or high visibility clothing must meet or exceed the ANSI / ISEA 107-2004 Class II or higher.

## **4. Seat Belts**

All DPW employees who drive or ride in vehicles, including their own automobiles, in the performance of their work, are required to use their safety lap and shoulder belts. An employee assigned to an activity that requires getting in and out of the vehicle several times in a given block, such as an Operations Driver Worker on a collection route, is exempt from the rule while moving the vehicle down that block.

## **5. Hard Hats**

In accordance with OSHA Regulations (Standards – 29 CFR), Head Protection – 1910.135, which states, in part:

(a)(1) – The employer shall ensure that each affected employee wears a protective helmet when working in areas where there is a potential for injury to the head from falling objects.

(a)(2) – The employer shall ensure that a protective helmet designed to reduce electrical shock hazard is worn by each such effected employee when near exposed electrical conductors which could contact the head.

All employees are required to wear their hardhats whenever there is a danger of being struck in the head from an overhead or swinging hazard.

Hardhats are mandatory in Underground Assignments. Hardhats are required:

- while pouring concrete, there is a danger from the chute on the concrete truck and from individuals with shovels
- when loading and unloading trucks
- when working in close proximity (20 feet) of heavy machinery/equipment (such as a Grade All, Back Hoe, Vac All, Reach All, etc.)
- while operating a skidloader (Bobcat) or working in close proximity (20 feet) of the skidloader
- when a trencher is on the job site
- when an aerial lift, boom truck, bucket truck, etc. is on the job site
- while under the city's movable bridges
- when a crane is on the job site
- while operating the vacuum hose of the Vac All
- while on any contractors construction site, and where a contractors requires hardhats
- when required by your supervisor or Safety Specialist

## **6. Stereo/Radio Headphones**

For reasons of safety, productivity and public image, DPW employees are not allowed to wear stereo/radio headphones during work hours. No radios of any type are allowed.

## **7. Hazardous Communications Standard**

Material Safety Data Sheets (MSDS) are available to all employees for the chemicals that exist in the work place.

The following Hazard Communication Program has been designed to ensure that:

- Hazardous substances present in the work place are identified and labeled.
- Employees have ready access to information on the hazards of these substances.
- Employees are given information on how to prevent injury or illness due to chemical exposure.

## **8. Injury Reporting**

The most important aspect of the injury reporting process is accurate and timely reporting of injuries. All injuries are to be reported to your supervisor immediately. If you are claiming an injury, an injury report form must be completed. Injury reports should be received by your supervisor by the end of the working shift on the day of injury occurrence. Medical treatment and a Physician's Authorization may be required before the authorization of injury pay or a return to work from an injury.

## Section II: Safety Best Practices

| Safety Items   | Currently in Place?<br>Yes/No | Date Effective | Who's Responsible                           | Last Time Updated |
|--|-------------------------------|----------------|---|-------------------|
| Work Rules/Handbook that Outlines Safety Expectations and Guidelines     | Yes                           | 6/26/2012      | DPW Administration/Safety                   | 6/26/2012         |
| Mandatory Safety Training  | Yes <sup>2*</sup>             | On going       | Safety                                      | On going          |
| Optional Safety Training   | Yes <sup>3*</sup>             | On going       | Safety                                      | On going          |
| Viable & Functioning Safety Committee                                    | Yes <sup>4*</sup>             | On going       | Safety                                      | On going          |
| Safety Orientation for New Employees                                     | Yes                           | On going       | Safety                                      | 10/26/2005        |
| Job Hazard Analysis  | Yes <sup>5*</sup>             | 9/20/2013      | Safety                                      | On going          |
| Safety Field Inspections   | Yes                           | 1/01/2013      | Safety Specialist                           | On going          |
| Accident Investigation Protocol & Forms                                  | Yes                           | On going       | D.E.R./Safety                               | 2009              |
| Mechanism for Employees to Report Safety Concerns before Accident Occurs | Yes                           | 6/26/2012      | DPW Admin/Safety                            | 6/26/2012         |
| Recognition Programs/Safety Awards                                       | Yes                           | On going       | Safety                                      | 3/2007            |
| Medium for Sharing Safety Information & Report with Employees            | Yes                           | On going       | Safety Committee Reports Posted & 300A Logs | Oct. 2013         |
| Supervisory Job Descriptions that Include Safety Related Goals/Outcomes  | Yes                           | 6/26/2012      | Annual Safety Plan & DPW Work Rules         | 2013              |
| Designated Individual Responsible for Safety Program Effectiveness       | Yes                           | Sept. 2013     | Safety Supervisor                           | On going          |

\*Appendix 2; 3; 4; 5



## Section III: Data Analysis

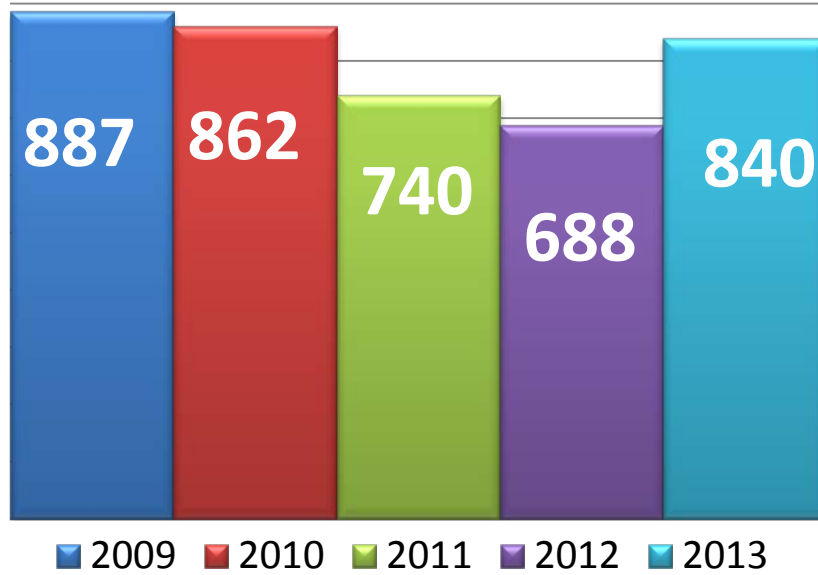
### A. Overall DPW Workers Compensation Data 2008 - 2013

| DPW All Divisions         | 2008        | 2009        | 2010        | 2011        | 2012        | 2013        | % Change Over Prior | % Change Since 2008 | 3 Yr Avg    |
|---------------------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------------|---------------------|-------------|
| FTEs                      | 2,057       | 2,061       | 2,004       | 1,991       | 1,980       | 1,941       | -2.0%               | -5.6%               | 1,970       |
| Claims                    | 1075        | 887         | 862         | 740         | 688         | 840         | 22.1%               | -21.9%              | 756         |
| Serious Cases             | N/A         | 374         | 359         | 343         | 264         | 317         | 20.1%               | -33.1%              | 308         |
| Incidence Rate            | 26.01       | 21.25       | 20.99       | 21.74       | 16.42       | 21.28       | 29.6%               | -18.2%              | 20          |
| Lost Workdays             | 10,341      | 7,567       | 7,061       | 6,822       | 3,895       | 6,626       | 70.1%               | -35.9%              | 5,781       |
| Injury Hours              | 66,553      | 47,064      | 44,198      | 35,007      | 22,379      | 27,432      | 22.6%               | -58.8%              | 28,273      |
| Injury Pay                | \$1,164,474 | \$814,767   | \$786,257   | \$640,467   | \$336,226   | \$405,353   | 20.6%               | -65.2%              | \$460,682   |
| Sick Leave                | 142,972     | 128,098     | 121,671     | 143,250     | 90,423      | 100,672     | 11.3%               | -29.6%              | 111,448     |
| Workers Comp Expenditures | \$6,282,452 | \$5,287,441 | \$5,579,227 | \$4,231,682 | \$5,639,407 | \$5,782,021 | 2.5%                |                     | \$5,217,703 |

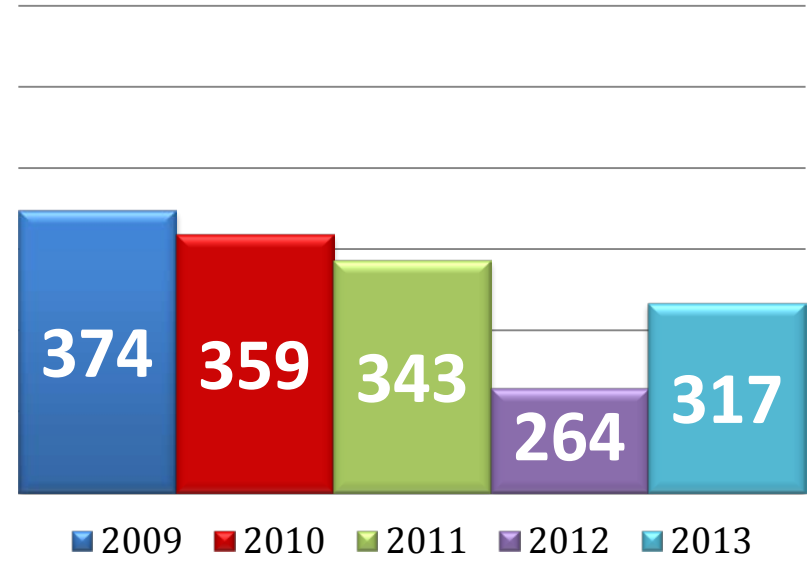
- The above chart gives the overview of Workers Compensation data. Since 2008, the claims have been going progressively down. Unfortunately, in 2013, even though the FTEs have gone down, claims (reported injuries) have increased by 22%. Lost Workdays increased 70% and Injury Pay increased almost by 21%.
- The following report and charts will outline the Internal and External Factors contributing to this increase.

**B. DPW Total Injury Charts Comparing Past 5 Years**

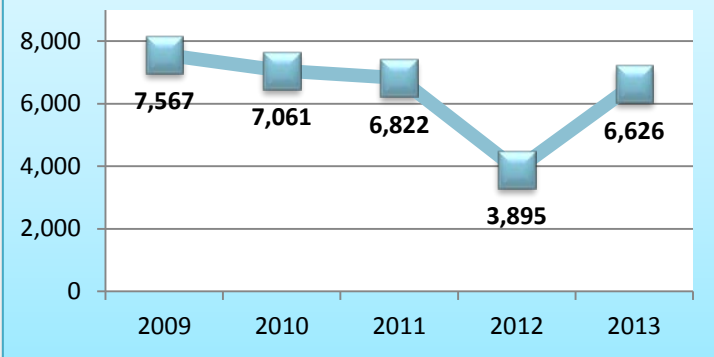
**DPW TOTAL REPORTED INJURIES  
PAST 5 YEARS**



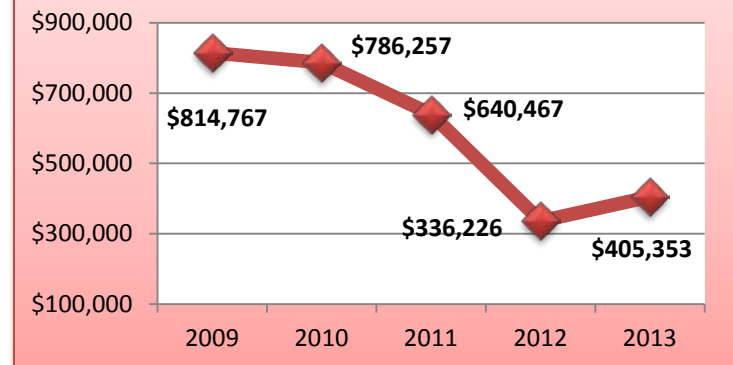
**DPW TOTAL SERIOUS CLAIMS  
PAST 5 YEARS**



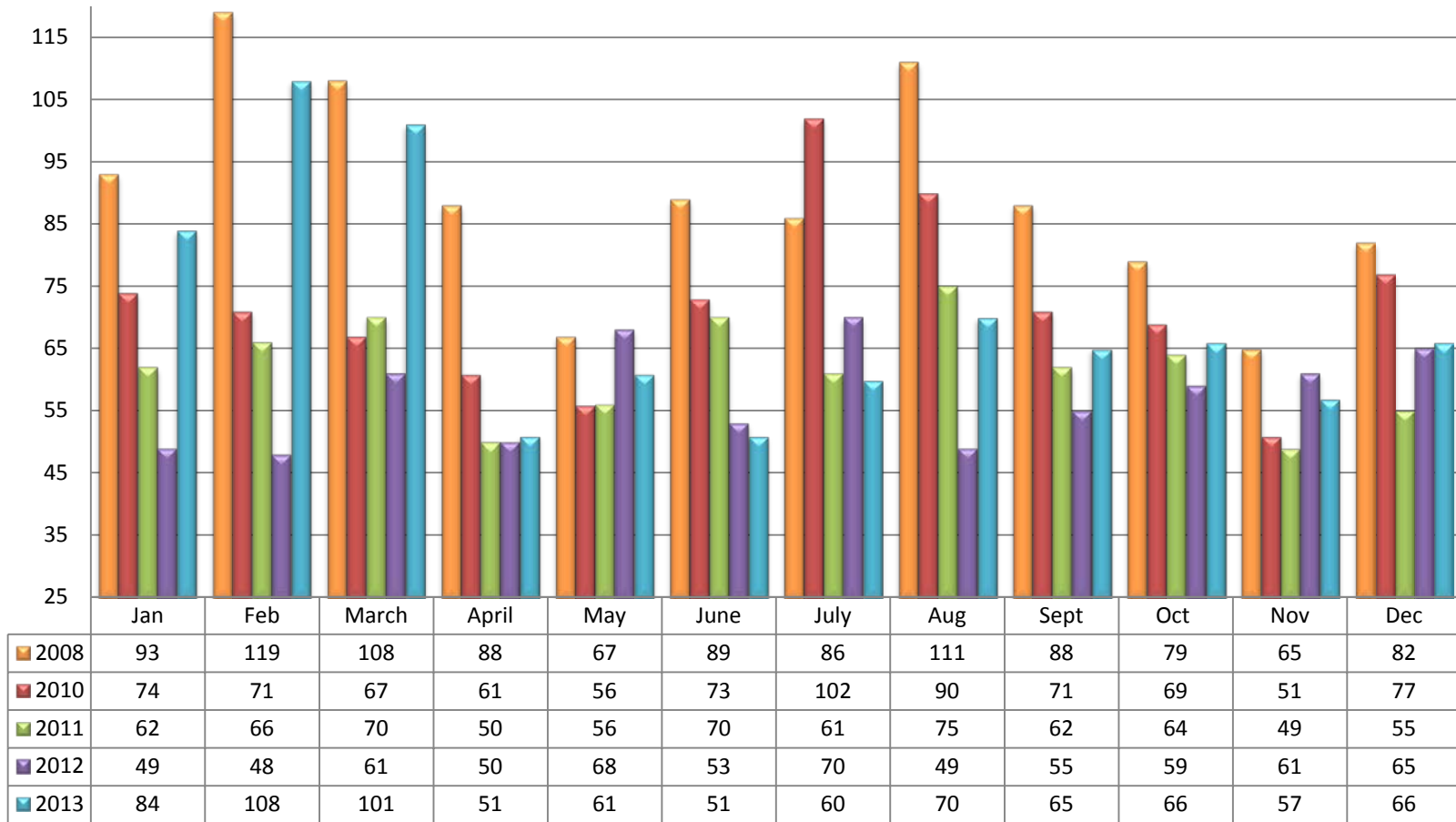
**DPW TOTAL LOST WORKDAYS  
2009-2013**



**DPW TOTAL INJURY PAY  
2009-2013**



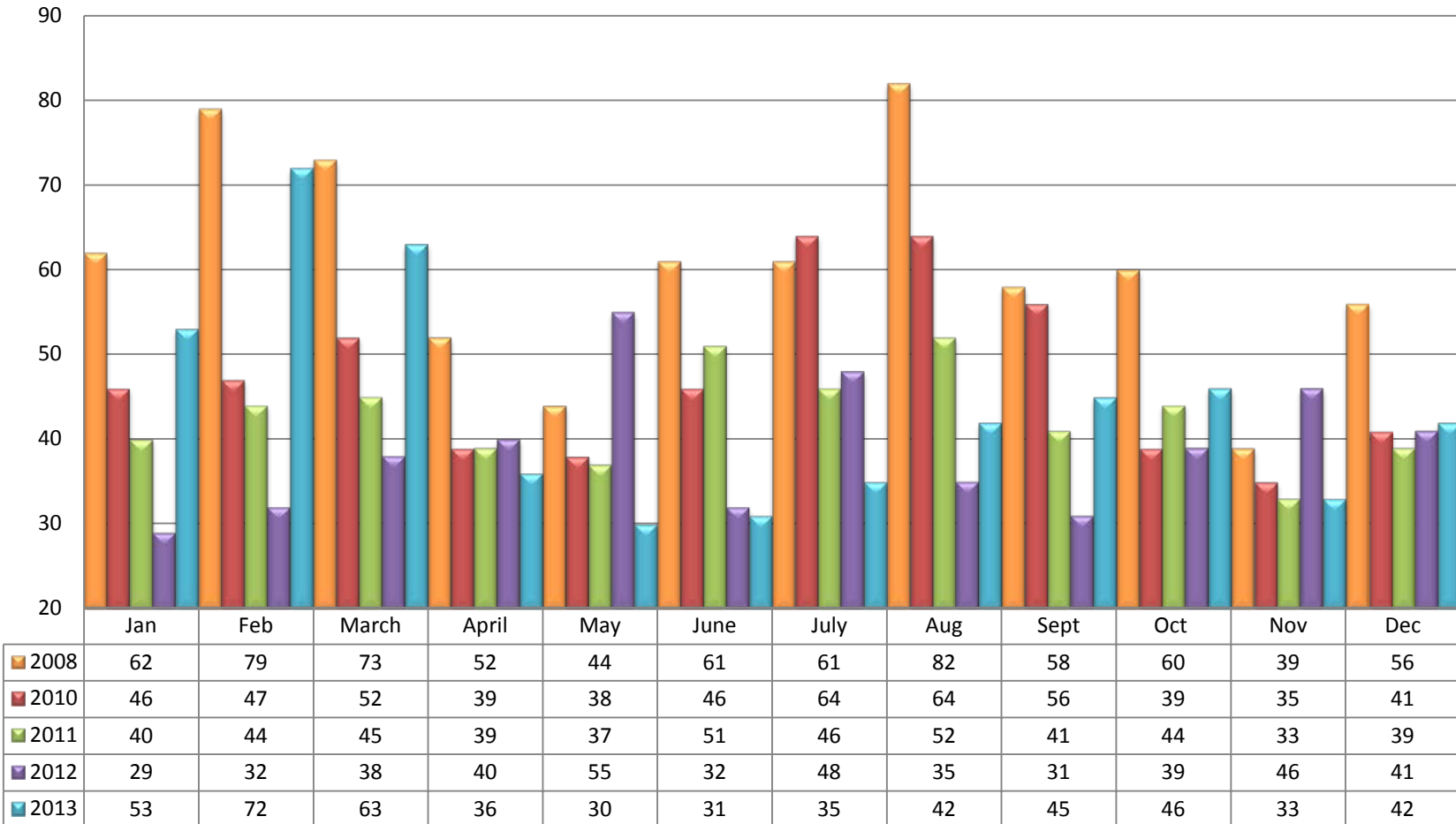
**DPW Total Reported Injury by Month  
2010-2013  
Highest Year 2008 Comparison**



- 2013 winter (January – March) resulted in higher reported injuries due to the snow, cold temperatures, and ice.

- **Serious Claims** are 1) Care beyond 1<sup>st</sup> Aide; and 2) DART<sup>1</sup>; there was an increase in serious claims, because most reported injuries were slip/fall on ice/snow during the months of January, February, and March of 2013.

**DPW Total Serious Claims by Month  
2010-2013  
Highest Year 2008 Comparison**



<sup>1</sup>Days Away, Restriction, or Transfer - **Definition of DART Cases** involve days away from work, days of restricted work activity, and/or days of job transfer.

## **A. DEPARTMENT INITIATIVES/INTERNAL FACTORS**

### **A. Confined Space Policy**

In fall of 2013 the confined space alternative entry policy was expanded from use in the Milwaukee Water Works Meter Shops to both Water Treatment Plants increasing employee safety when taking meter readings or samplings. The Policy requires every confined space entry conducted for the purpose of taking meter readings to sample the air quality of the space before entry and to utilize fresh air ventilation regardless of safe oxygen content readings. Thus, providing an additional layer of protection against exposure to hazardous atmospheres for the employees.

### **B. Accident/Incident Investigation Training**

In fall of 2013 in excess of a 130 DPW field supervisors and managers attended accident/incident investigation training given by one of the DPW Safety Specialists to assist managers and supervisors in the importance of understanding and identifying root causes and any contributing factors. In addition, it allows managers and supervisors to document any action taken.

### **C. Foot Care**

In Sanitation, Infrastructure and Forestry we brought in a podiatrist who was able to further educate the employees on the importance of foot care. One main focus for employees was proper shoe selection and maintenance coupled with adjusting appropriate foot protection in temperature changes.

### **D. Liquid Oxygen & Ammonia Training**

In the Water Department outside vendors were brought in at the water plants for updated training on working safely with large quantities of Liquid oxygen and ammonia. Safety believes the better our employees know and understand these chemicals and their hazards the safer the work environment will be.

### **E. Globally Harmonized System (GHS Standard) Training**

Safety researched and hired an outside vendor to conduct a Train the Trainer Course in the new GHS standard (Globally Harmonized System of Classification and Labeling of Chemicals). We initiated training to 30 managers, representatives from every department, sharing the ability to ensure successful compliance for the new federally mandated GHS standard. In addition, this wide spread knowledge assists safety in recognizing potential hazards of unlabeled containers and improper chemical storage at our facilities.

## **F. Beta Tested Investigation Application**

The Safety team has implemented a beta test for an investigation app in DPW. The app is designed to collect information for any injury or incident in a consistent manner. The purpose is to identify root causes and contributing factors of events. The app has the capability to attach reports, photos, videos, and more. All injuries are now investigated through this process. Safety has met with DER and the intent is to implement this investigation app DPW-wide in 2014 with hopes of a full city wide implementation by 2015. Upon the initial implementation in 2014, Safety Staff believes with the accident/incident investigation app we will have a more detail oriented system for reviewing the root causes or contributing factors of injuries and be better able to reduce the number of injuries.

## **G. One Arm Collection Trucks**

Operations intends to expand the current fleet of one arm collection trucks by an additional 6 and implement a year round set out pilot program. The introduction of the automated trucks and pilot year round set out program have the potential to reduce employee exposure to hazards while walking up and down driveways to retrieve refuse containers. Beginning in 2014, injuries will be tracked by type of collection truck to assess the impact on injury rates.

## **H. Leadership Participation**

Supervisors attend training, some give training, others are members of the joint safety committees. Supervisors and Department heads work closely with Safety in purchasing equipment and implementing policies and procedures.

## **I. DPW Safety Committees**

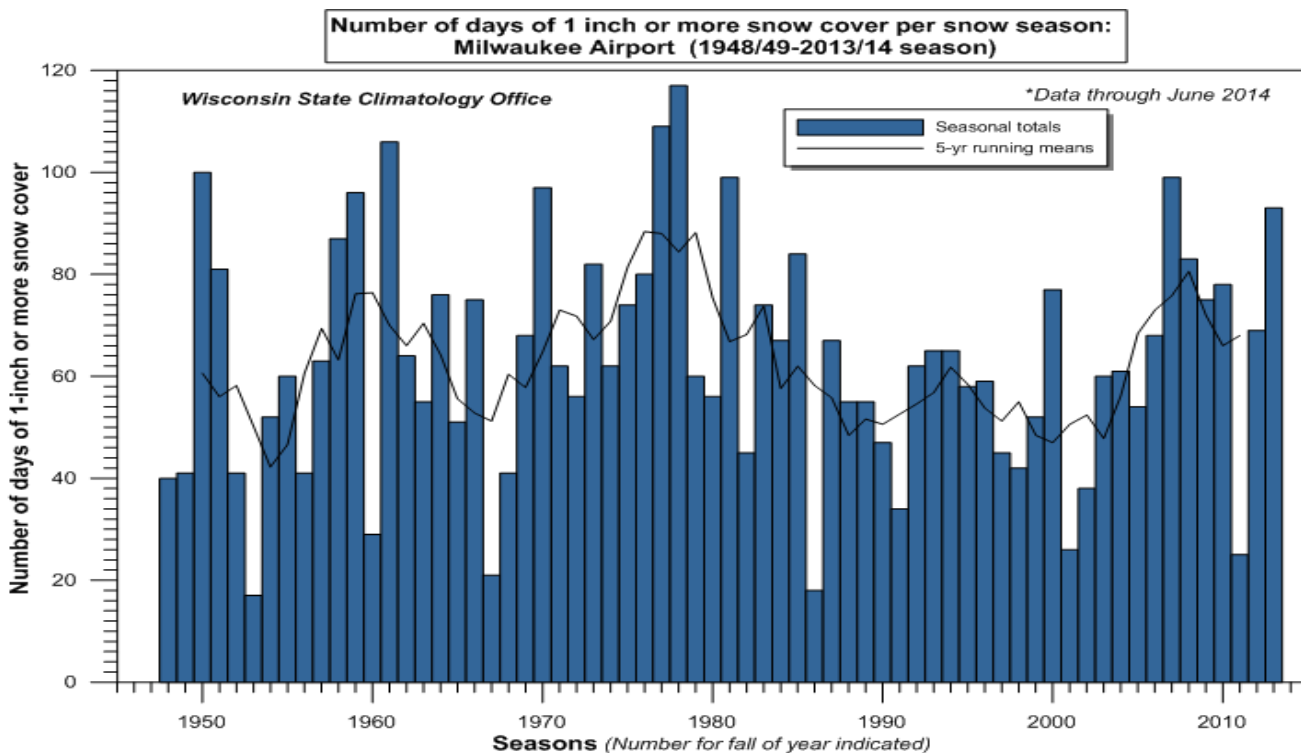
The Safety Committees work to identify, and eliminate from the workplace, any hazardous situations, equipment, or work procedure. The committees are comprised of a Safety Specialist, Section Manager and section employees from various job titles within that section. Committees meetings are usually held monthly or quarterly depending on each sections schedules and/or work load.

## B. EXTERNAL FACTORS

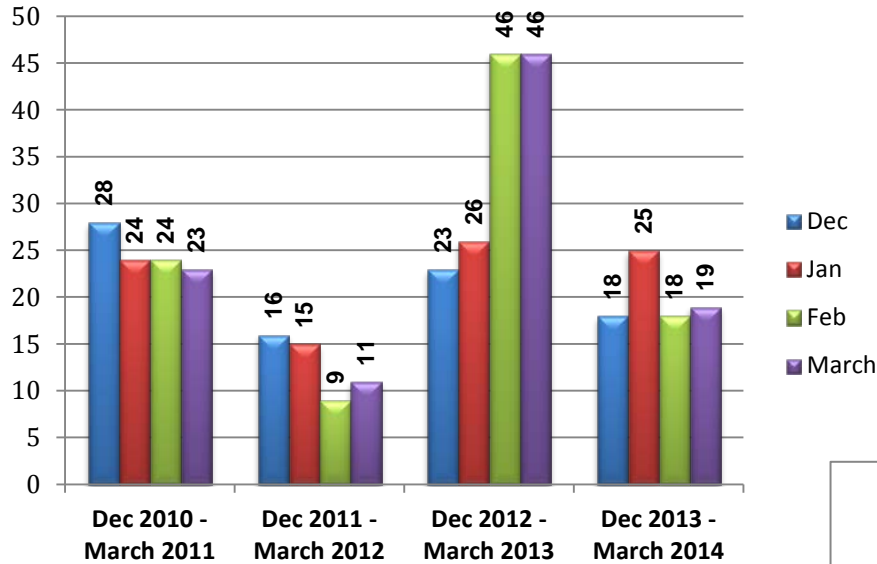
### 1. Weather

|          | 2013<br>Snow/Ice<br>Operations | 2012<br>Snow/Ice<br>Operations | 2011<br>Snow/Ice<br>Operations | 2010<br>Snow/Ice<br>Operations |
|----------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| January  | 11                             | 15                             | 21                             | 7                              |
| February | 22                             | 7                              | 19                             | 14                             |
| March    | 8                              | 4                              | 4                              | 1                              |
| April    | 0                              | 0                              | 1                              | 0                              |
| November | 5                              | 0                              | 1                              | 0                              |
| December | 29                             | 9                              | 5                              | 11                             |
| Total    | 75                             | 38                             | 50                             | 33                             |

- In 2013, there was a significant increase in snow operations from Jan to Mar 2013 and from Nov to Dec. 2013. Although most snow accumulations were less than 2 inches, they were constant, occurring every 2-3 days. This resulted in extremely icy conditions exposing the work force to very treacherous working conditions and an increase in slip/trips/falls on ice.
- It appears the positions most injury impacted by weather related injuries were Operations Driver/Workers, Water Distribution Crews and Street Maintenance Crews.



### Injuries Involving Garbage Carts & Slip/Trip/Fall on Ice

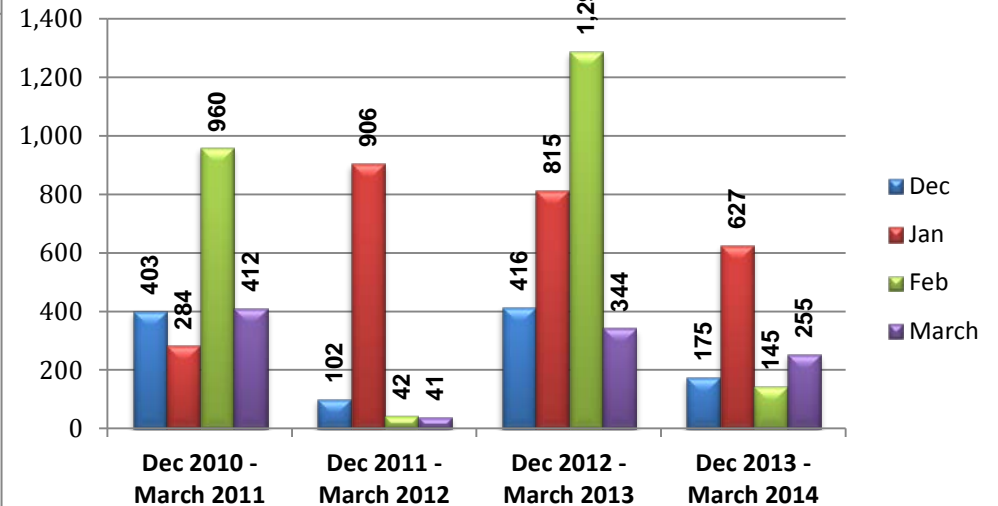


- Sanitation:**

2013 was a snowy year with extremely cold temperatures. Crew injuries went up from the previous year because of an increase in injuries involving Garbage Carts and Snow/Ice. In 2012 there were thirteen (13) claims. In 2013 the same injury rose to 88 claims. The severe winter weather also affected the road infrastructure by increasing freeze/thaw. Concrete and asphalt roads could not with stand the repeated stretching and bending of materials creating extensive damage and potholes. With this followed also an increase in injuries of road crew injuries in February 2013. (Refer to 2013 Weather Stats – Appendix 1)

- The winter of 2013 was plagued with 136 Sanitation workers injuring themselves removing carts while on snow/ice or black ice. There was nearly a 43% increase in reported injuries from the previous year 2012 from 58.
- Again in the winter of 2013 a 53% increase in serious injuries requiring time away from work (2624 days away) from the previous year of 2012 (1405 days away.)

### Days Away Involving Garbage Carts & Slip/Trip/Fall on Ice

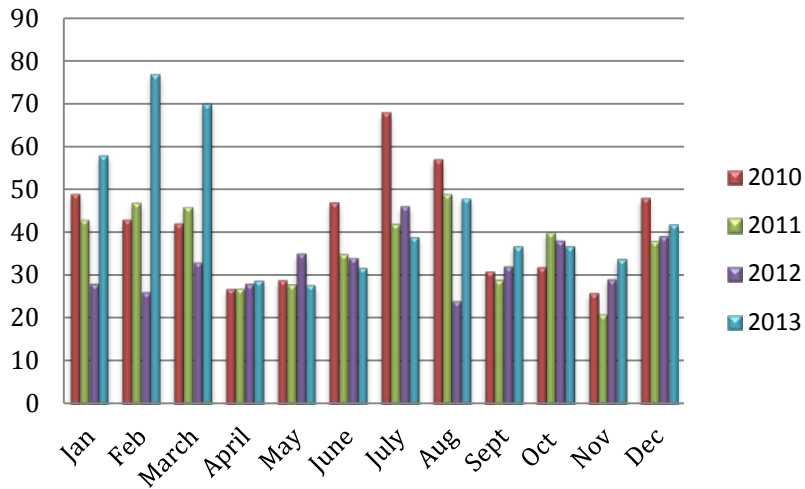




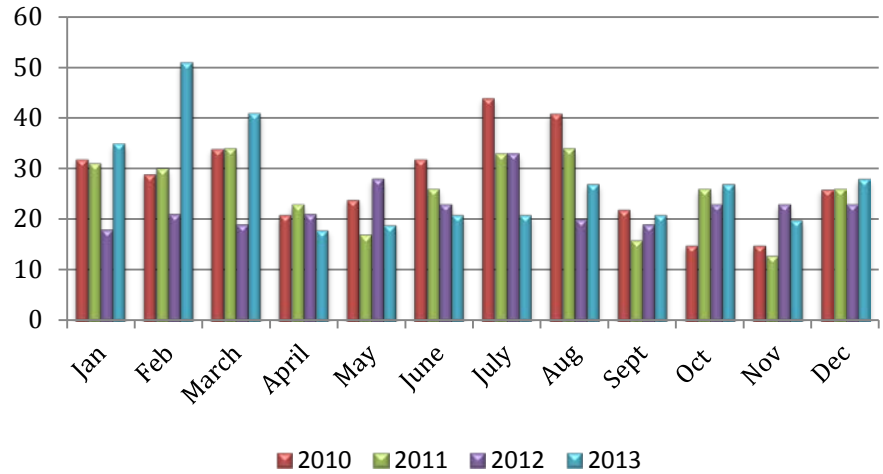
- Operations:**

This area includes Fleet Operations, Sanitation, and Forestry. These departments do primary snow duty and have a high number of Operational Driver Workers (ODW).

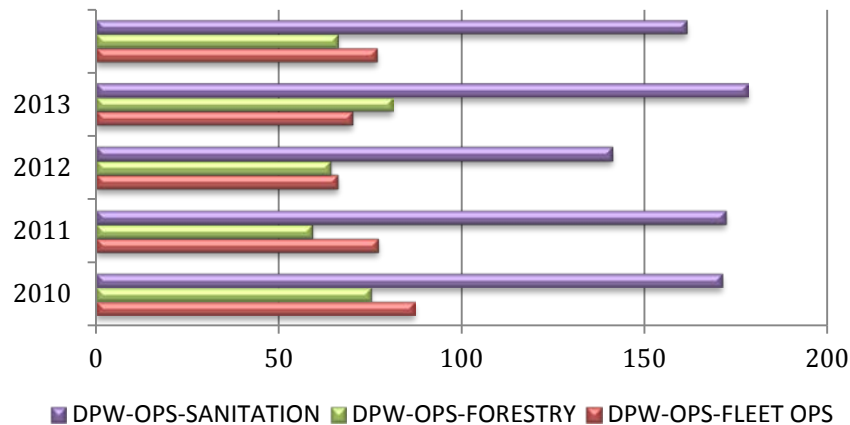
**DPW Operations Reported Injuries**



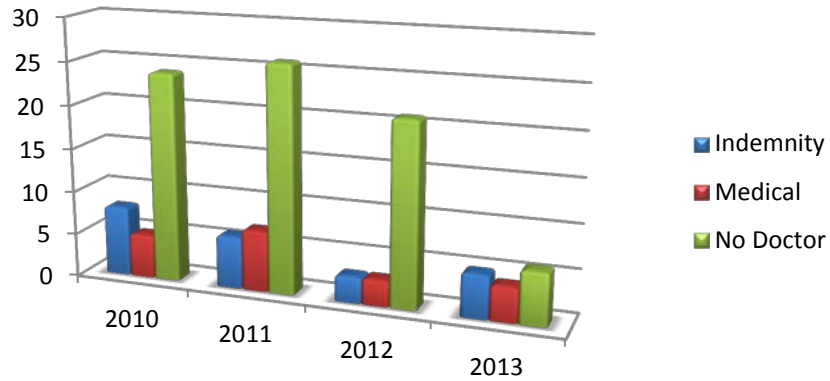
**DPW Operations Serious Claims**



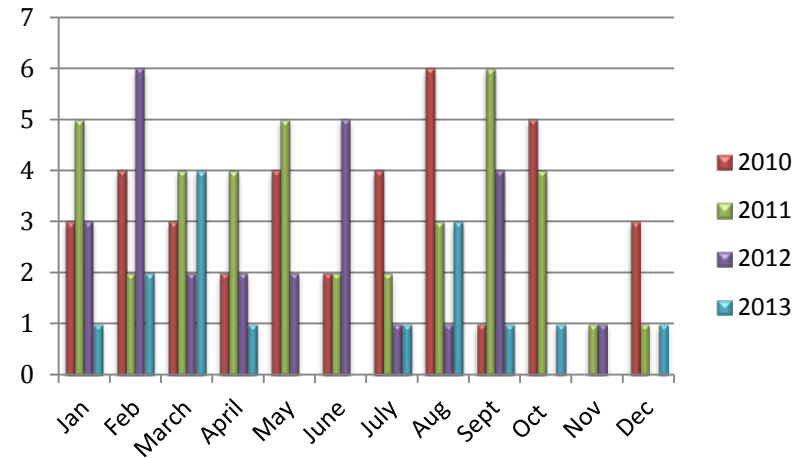
**DPW Ops Serious Claims by Division**



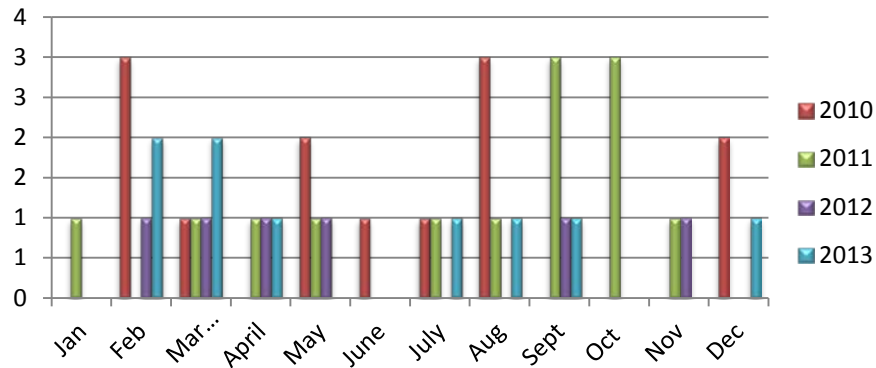
**DPW Parking Reported Injuries**



**DPW Parking Reported Injuries - Month**



**DPW Parking Serious Claims - Month**



• **Parking:**

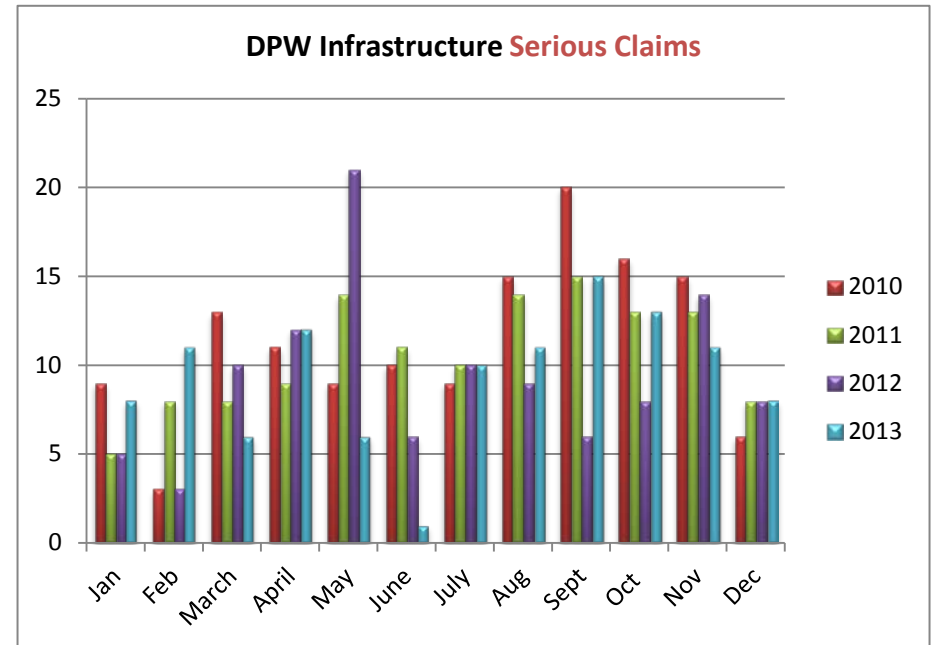
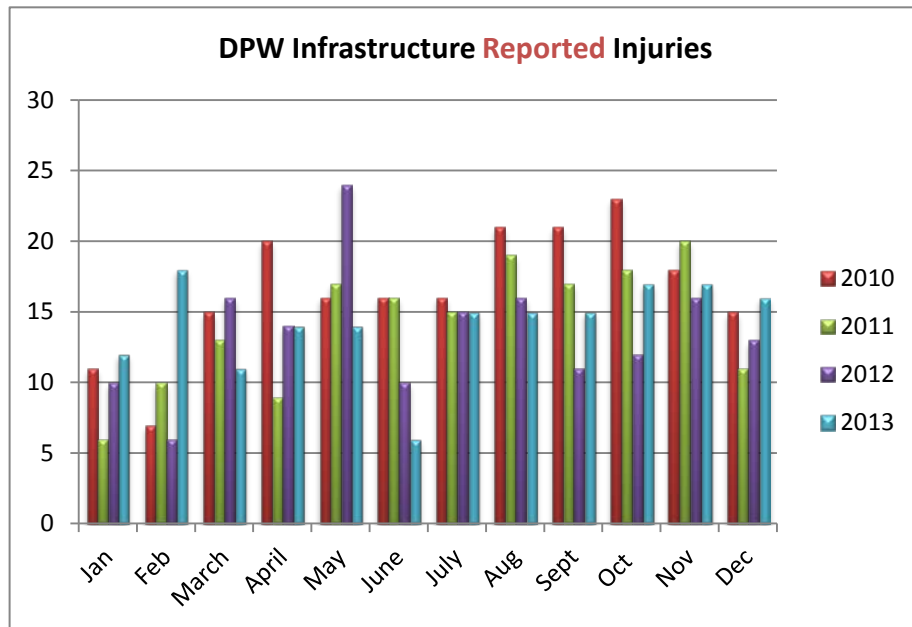
In 2013, Parking changed how incident claims are filed using EB49 forms and only incident claims which have the potential to lead to injuries are reported. This led to a decrease in the number of no doctor claims in 2013.

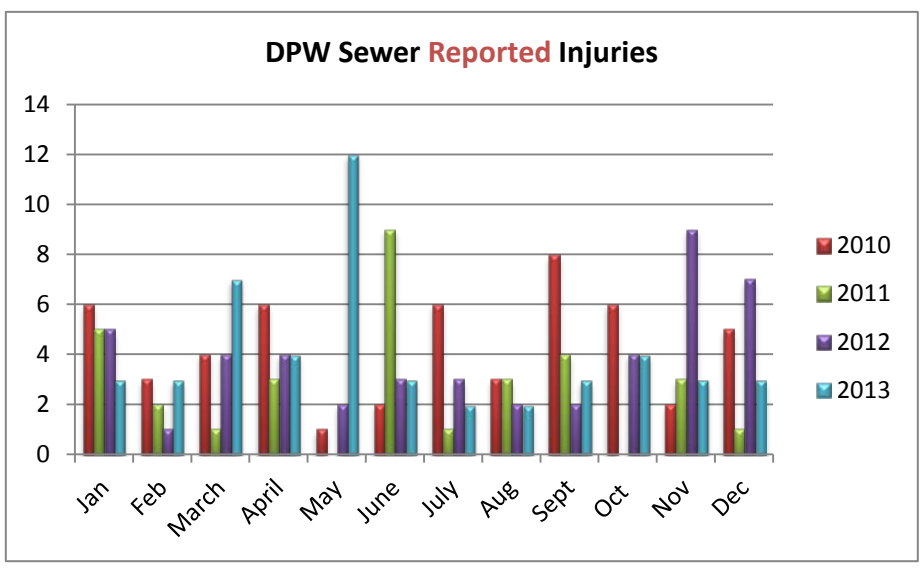
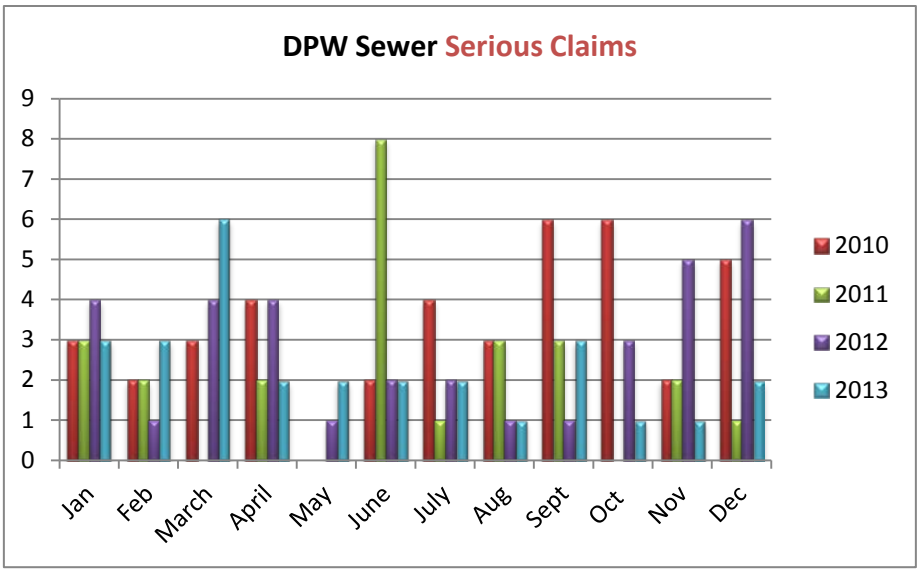
## 2. Effect Of Weather On Road Ways - Potholes

- 2013 – 12,836 pothole request; 5 days response time
- 2012 – 8,017 pothole requests; 3 days response time
- 2011 – 12,099 pothole requests; 5 day 23 hrs. response time
- 2010 – 9,752 pothole requests; 3 day 17 hrs. response time

Infrastructure Streets had addressed 8,017 requests for pothole repairs in 2012. This is 8,017 location requests not actual potholes. Each location request could be several potholes at one destination or a complete stretch of roadway riddled with potholes. In 2013, the much colder temps and the constant salting and plowing of the roadways took an extensive toll on pavement conditions resulting in a 37.5 % increase in pothole requests. Streets documented 12,836 pothole requests for 2013 exponentially increasing the work load and exposure to potential injuries for crews. Most notably the month of February 2013 showing about 18 employee injuries verses 6 injuries in February 2012.

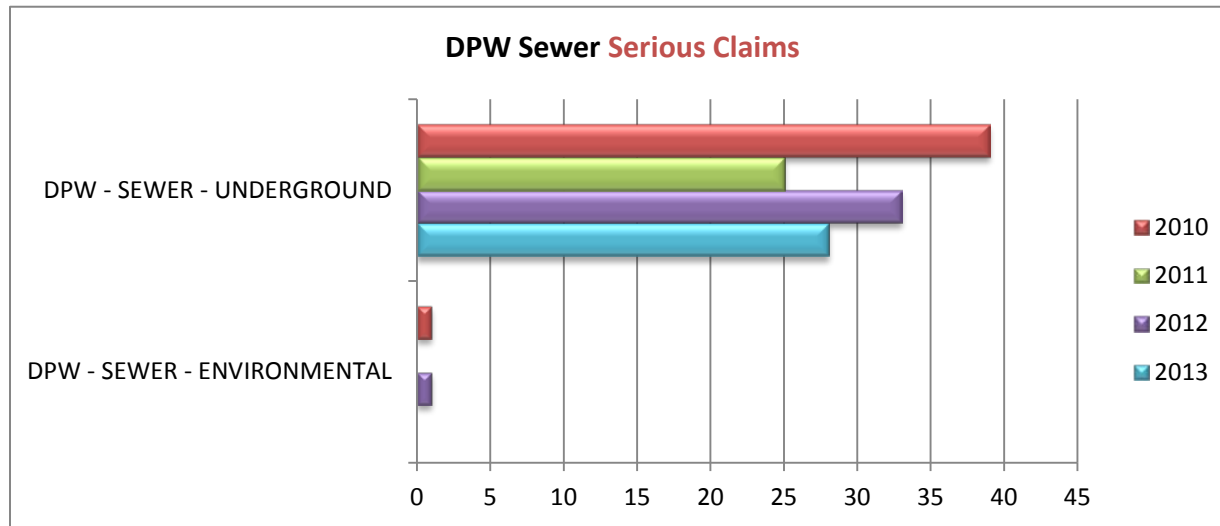
### Streets/Bridges/BES









- Sewers:**

Cold weather also affects sewers, not during the cold weather, but when the spring thaw begins. You can see an uptick at the March early thaw and then again when the May repair season begins.

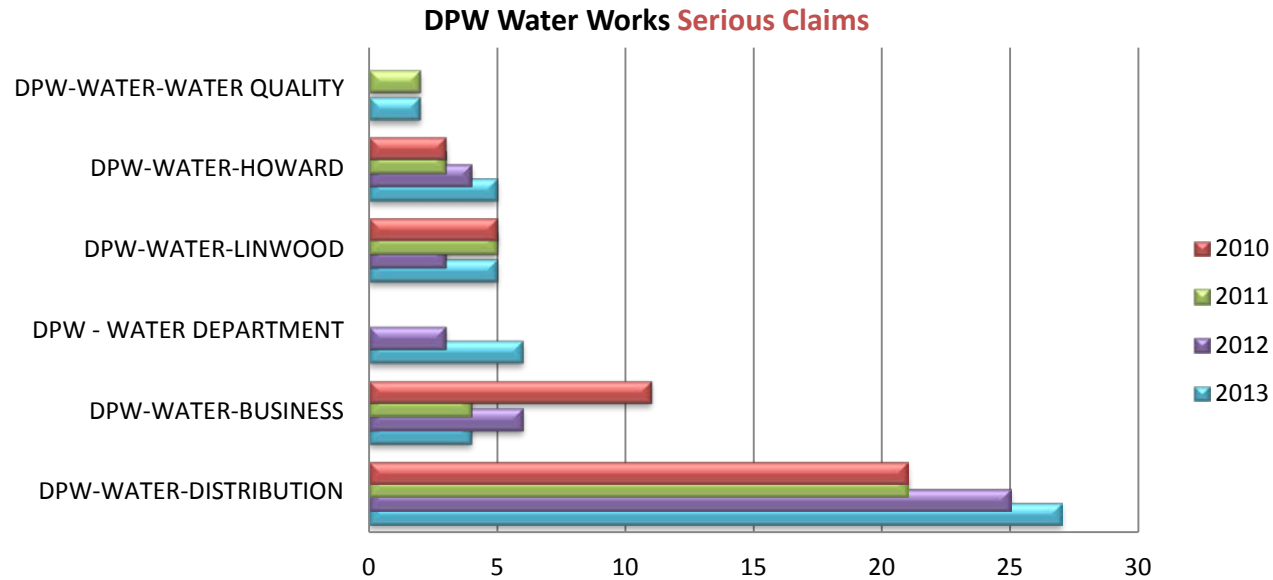
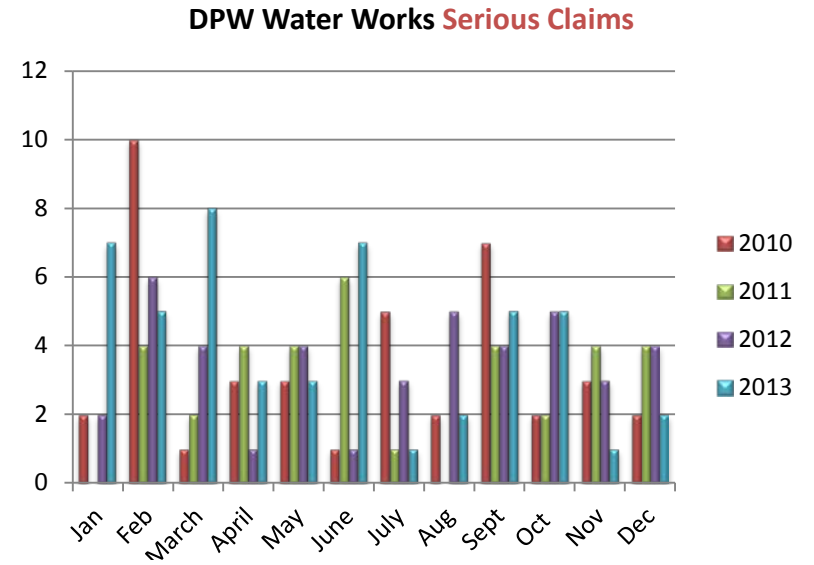
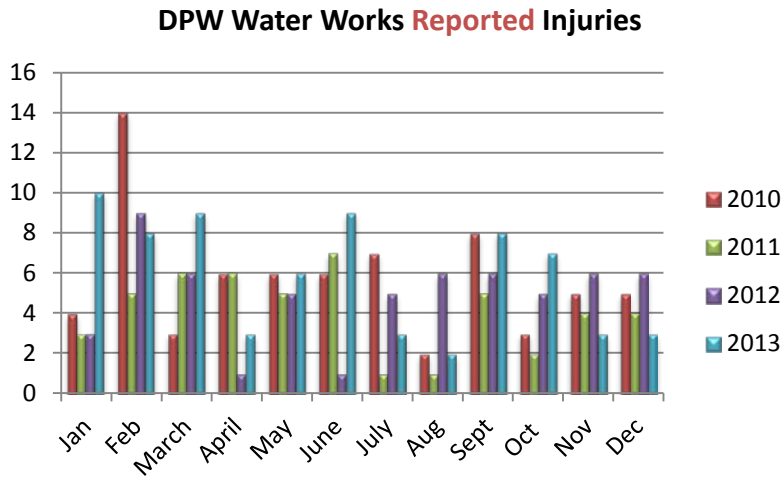


### 3. Effect Of Weather On Water Main Breaks

Milwaukee Water Works crews have also experienced difficult weather related working conditions. In 2012 there was total of 467 water main break repairs done for the year. In 2013, the water main break repairs had increased by 24% to 616 break repairs. The most significant 2013 increases occurred during the winter months of January, February, March and December increasing the employee work load and exposure to potential injuries. Distribution repair workers had a significant increase in injury claims during the months of January and March of 2013.

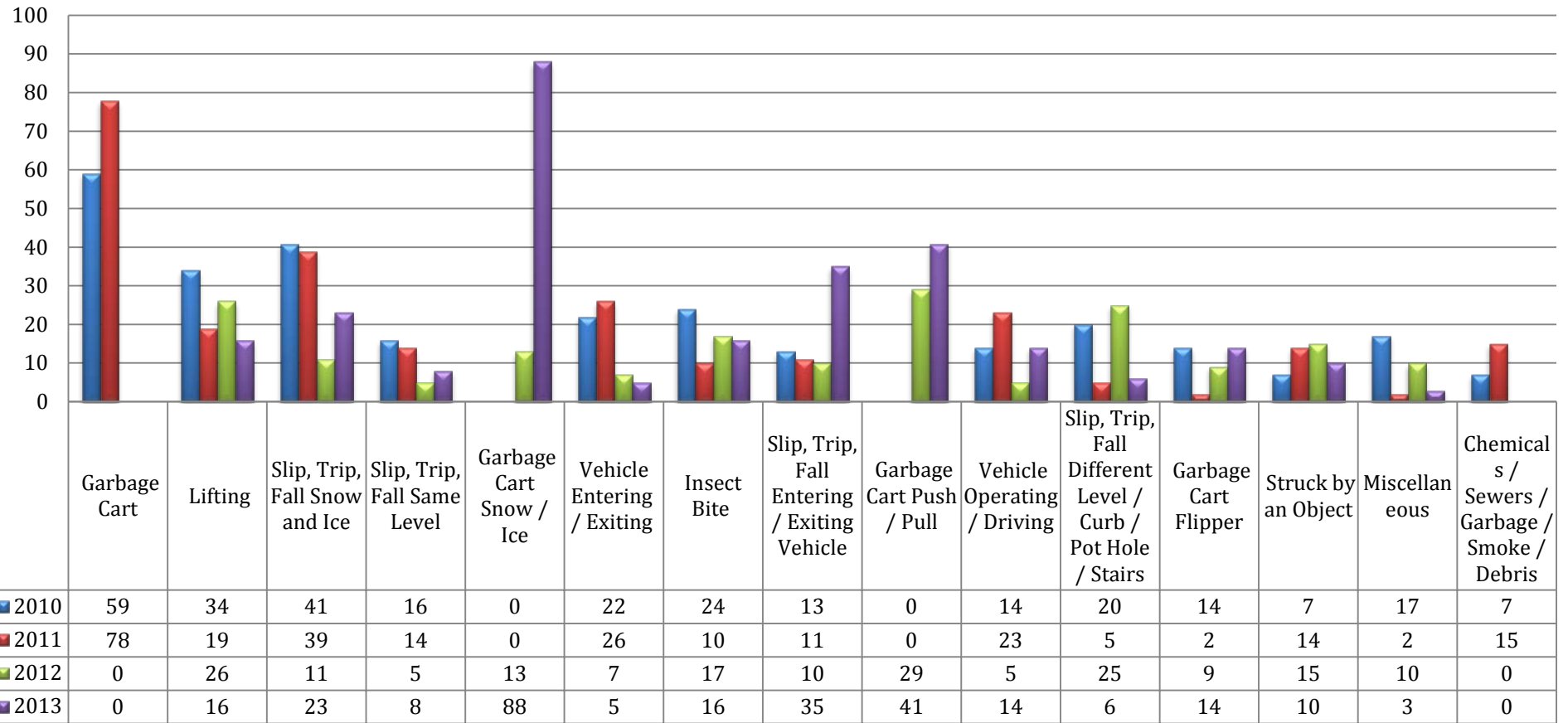
| <b>MILWAUKEE WATER WORKS</b>  |                 |            |            |  |            |            |            |            |            |            |                 |               |  |
|---|-----------------|------------|------------|--|------------|------------|------------|------------|------------|------------|-----------------|---------------|--|
| <b>5 and 10 YEAR MAIN BREAK REPAIR HISTORY</b>  |                 |            |            |  |            |            |            |            |            |            |                 |               |  |
|   |                 |            |            |  |            |            |            |            |            |            | <b>AVERAGES</b> |               |  |
| <b>MONTH</b>  |                 |            |            |  |            |            |            |            |            |            | <b>10 Year</b>  | <b>5 Year</b> |  |
|   | 2005            | 2006       | 2007       | 2008   | 2009       | 2010       | 2011       | 2012       | 2013       | 2014       | 2005-2014       | 2010-2014     |  |
| January   | 100             | 45         | 52         | 73   | 120        | 60         | 118        | 52         | 139        | 211        | 97              | 116           |  |
| February  | 48              | 68         | 209        | 119  | 172        | 59         | 81         | 29         | 107        | 234        | 113             | 102           |  |
| March   | 40              | 47         | 93         | 41   | 48         | 27         | 46         | 22         | 61         | 108        | 53              | 53            |  |
| April   | 50 <sup>1</sup> | 17         | 30         | 26   | 18         | 18         | 18         | 12         | 20         | 38         | 25              | 21            |  |
| May   | 21              | 20         | 51         | 19   | 17         | 11         | 10         | 16         | 24         | 111        | 30              | 34            |  |
| June  | 37              | 24         | 46         | 18   | 34         | 18         | 35         | 38         | 21         | 49         | 32              | 32            |  |
| July  | 65              | 55         | 59         | 33   | 31         | 43         | 41         | 90         | 29         | 37         | 48              | 48            |  |
| August  | 83              | 55         | 36         | 66   | 29         | 48         | 69         | 62         | 27         | 34         | 51              | 48            |  |
| September   | 93              | 39         | 32         | 41   | 38         | 30         | 47         | 35         | 43         | 23         | 42              | 36            |  |
| October   | 26              | 27         | 20         | 24   | 18         | 23         | 32         | 34         | 29         | 19         | 25              | 27            |  |
| November  | 32              | 36         | 29         | 29   | 24         | 29         | 22         | 37         | 25         |            | 29              | 27            |  |
| December  | 75              | 52         | 53         | 64   | 32         | 73         | 28         | 40         | 91         |            | 57              | 53            |  |
| <b>TOTALS</b>   | <b>670</b>      | <b>485</b> | <b>710</b> | <b>553</b>   | <b>581</b> | <b>439</b> | <b>547</b> | <b>467</b> | <b>616</b> | <b>845</b> | <b>591</b>      | <b>583</b>    |  |
|  Greenfield Tank OOS             |                 |            |            |  |            |            |            |            |            |            |                 |               |  |
|  Pressure District Increase 2010 |                 |            |            | (18 main breaks within pressure change area, 35 main breaks outside) |            |            |            |            |            |            |                 |               |  |
|  Pressure District Increase 2012 |                 |            |            | (12 main breaks within pressure change area, 30 main breaks outside) |            |            |            |            |            |            |                 |               |  |
|  Howard Plant OOS 2014           |                 |            |            |  |            |            |            |            |            |            |                 |               |  |

- Water Works:**  
 Water Distribution injuries increase with the increase of water main breaks; note January, February, and March repair numbers.



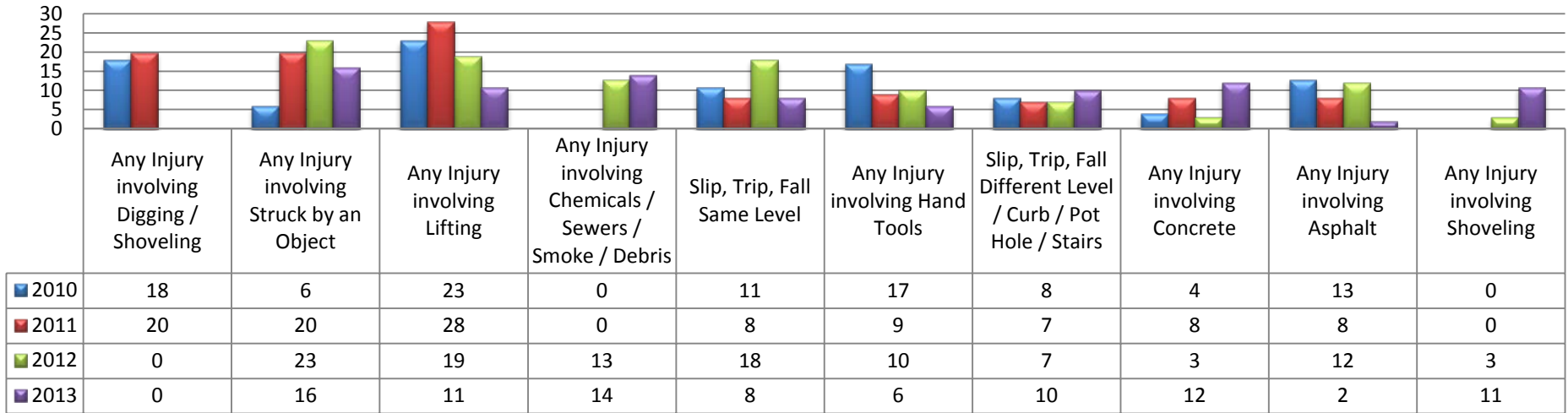
**C. TOP ACTIVITIES WHEN INJURED**

**DPW Fleet Operations/Sanitation/Forestry - Top 15 Activities When Injured**

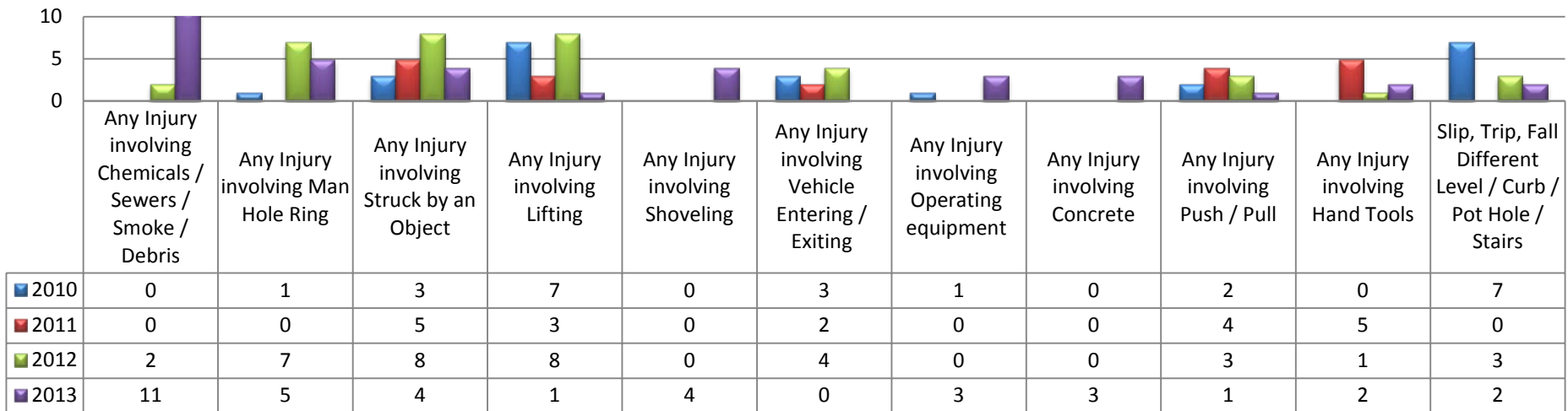


- DER Codes Appendix 6 – DPW expanded their activity injury codes in 2012 which accounts for some of the category fluctuations from 2011 to 2012.

### DPW Infrastructure - Top 10 Activities When Injured

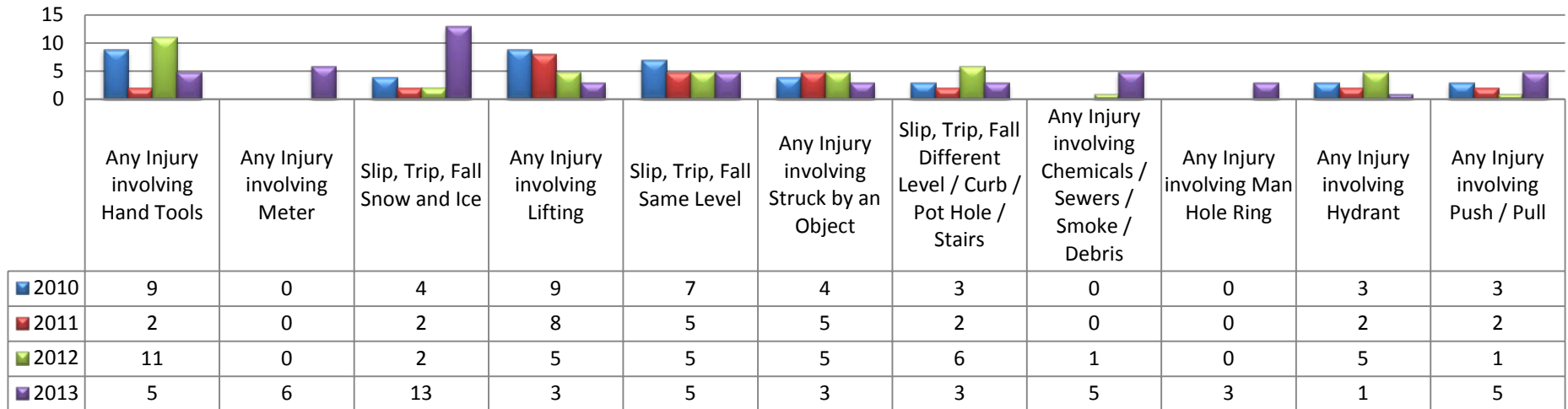


### DPW Sewer Top 10 Activities When Injured

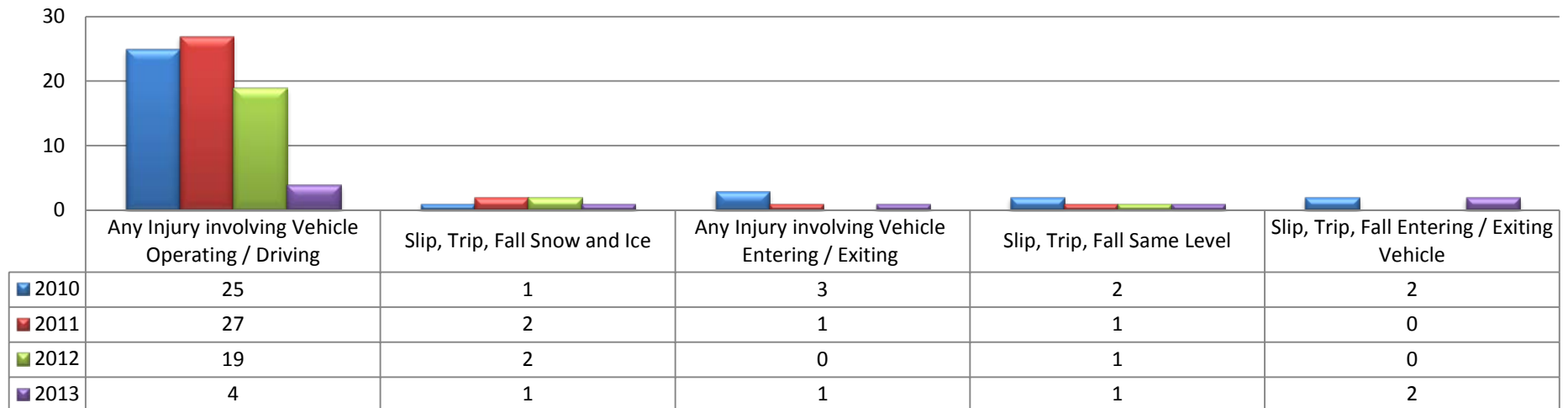




### DPW Water Works - Top 10 Activities When Injured



### DPW Parking - Top 5 Activities When Injured



- In 2013, Parking changed how incident claims are filed using EB49 forms and only incident claims which have the potential to lead to injuries are reported. This led to a decrease in the number of no doctor claims in 2013.

## Section IV: Accident Investigation

This section provides a detailed description of the Department's Accident Investigation protocols and procedures including a summary of completed safety audits and accidents investigations and the resulting outcomes. It also includes initiatives that were implemented as part of an investigation finding.

### A. ACCIDENT/INJURY INVESTIGATION PROTOCOLS & PROCEDURES

- Obtain immediate necessary medical attention for any injuries
- Report incident to immediate supervisor and safety personnel
- Supervisor shall complete EB-49 injury form and submit to safety within 24 hrs. of any injury
- Supervisor should forward any related medical documentation to safety upon receipt from employee
- Safety will review, number the EB-49, process, and then distribute the numbered EB-49 to Workers' Comp., Payroll and submitting supervisor.
- If after review of the incident/injury deems further investigation is required the safety specialist, along with management, would initiate the investigation to determine the root cause of the injury/incident.
- Upon completion of the investigation any corrective measures would be implemented.

### B. SAFETY AUDIT/INVESTIGATION OUTCOMES

| Audits & Investigations Conducted   | Resulting Outcomes   | Operational Changes Implemented   | Training Initiated        |
|---|--|---|---------------------------|
| 130 DPW field supervisors and managers attended accident investigation training given by DPW Safety Specialists   | Reporting of all incidents in 2014 within the DPW Incident Application | Injuries are investigated by immediate supervisor and reviewed by department heads            | Fall of 2013 and on going |
| Bureau of Electrical Services reviewed the mounting bracket for the aluminum arm on a light that mounts to the top of an electrical pole                      | Redesigned mounting bracket  | Reduce employee exposure to sharp edges on existing structures                                | August 2013               |
| Electrical Services distributed commendations to employees who immediately reacted when another employee was having a severe allergic reaction to a bee sting | Potentially saving a life and showing an example to other employees    | Importance of public recognition of employees by supervisors for doing exceptional work       | Summer of 2013            |
| Sanitation South reviewed the process utilized for obtaining calcium chloride readings at the storage tank in the yard  | Reducing the potential for a fall                                      | Replaced the existing access ladder structure with a platform ladder that has safety railings | December 2013             |

| Audits & Investigations Conducted (cont.)  | Resulting Outcomes   | Operational Changes Implemented  | Training Initiated       |
|--|--|--|--------------------------|
| Review of an incident where an employee suffered a medical emergency, required hospitalization, employee suffered a heart attack   | Root cause of the heart attack was hyponatremia or over hydration  | Interviewed employee, his retention from safety training was to "Drink plenty of water"; Safety researched and adjusted our training materials to make others aware of the potential hazards of over hydration | September 2013           |
| Sanitation issued a commendation to employee for action taken during a medical emergency involving his coworker  | His quick action in recognizing the dire situation and summoning immediate medical assistance was paramount to the survival of his coworker.   | Importance of public recognition of employees by supervisors for doing exceptional work  | August 2013              |
| Safety reviewed the confined space entry equipment for Water and Electrical Services   | Updates to the confined space air monitors, calibration and charging stations for both departments; Water also updated some hoists, harnesses and combination fall arrest and retrieval winches  | These are key factors to safe entry of confined spaces   | May 2013                 |
| After injury review, field interviews with employees and managers, safety determined that the current ice cleat in use was not performing within the expected parameters | Safety explored alternative options that were more conducive to the work environment. Safety utilized 10 employee volunteers to field test this product; conclusion was positive and the current ice cleats were replaced with the newer brand and at a significant cost savings to the department | Determined that another brand of ice cleat may perform better than the previous brand in use   | January 2013             |
| Safety procedures were violated in the improper operation of lowering a dump truck box which struck other employees  | Written discipline was administered  | Redesigned handle to shoot   | March 2013<br>April 2013 |

### C. INCIDENTS DUE TO NEGLIGENCE AND THE DEPARTMENTS RESPONSE

- After incident review written discipline was administered, in two separate cases, when safety procedures were violated in the improper operation of lowering a dump truck box which struck other employees. All operators were reminded of their responsibility for the safety of themselves and all others who may be in the vicinity of the equipment they are operating.
- After incident review written discipline was administered when safety procedures were violated in the improper operation of a skid loader resulting in a foot and knee injury to another employee. All operators were reminded of their responsibility for the safety of themselves and all others who may be in the vicinity of the equipment they are operating.

## Section V: Transitional/Light Duty Program

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### A. TRANSITIONAL DUTY

The Transitional Duty Program was originally established August 01, 1989 to assist injured employees transition from injured status to full duty status. On August 29, 2009 the Transitional Duty Program was revised to expand placement opportunities throughout all of DPW for injured employees transitioning back to work. Employee participation in the Transitional Duty Program is limited to a maximum 20 working days per calendar year, in most cases. Upon documented medical need, and provided unfilled transitional duty assignments are available, the employee may be eligible to extend the Transitional Duty for up to an additional 20 days. Any extension beyond the initial 20 days shall be at the Department's discretion. Employee's participation in the Transitional Duty Program may be permitted for multiple injuries in a calendar year. Placement of an employee in the Transitional Duty Program shall be determined by the nature of the employee's physical limitations, and the availability of a transitional duty assignment in the Department of Public Works.

Employee participation in the Transitional Duty Program shall not be determined by department seniority. The Department of Public Works' Return to Work Coordinator shall oversee the Transitional Duty Program. When involved in the program employees are expected to report as directed, and perform assigned task within their restrictions. Failure to do so may result in disciplinary action. Employees are also expected to fully cooperate in assisting management and healthcare providers share the information that is required to provide proper assignments in the program.

#### 1. 2013 DPW Transitional Duty Program

DPW feels that it is better for the department to have our employees at work performing meaningful duties. As a direct result DPW has seen an increase in the number of days and employees participating in the Transitional Duty Program:

| DEPARTMENT         | EMPLOYEES  | DAYS ON TD     |
|--------------------|------------|----------------|
| Sanitation / B&F   | 38         | 793            |
| Forestry           | 10         | 83             |
| Water              | 4          | 52             |
| Infrastructure     | 13         | 123            |
| Parking            | 0          | 0              |
| <b>TOTAL 2011</b>  | <b>65</b>  | <b>1,051</b>   |
| Sanitation / B&F   | 68         | 2,048          |
| Forestry           | 21         | 656            |
| Water              | 9          | 429            |
| Infrastructure     | 21         | 495            |
| Parking            | 2          | 50             |
| <b>TOTAL 2012</b>  | <b>121</b> | <b>3,678</b>   |
| Sanitation / Fleet | 77         | 2,521          |
| Forestry           | 31         | 823            |
| Water              | 20         | 403            |
| Infrastructure     | 27         | 1,209          |
| Parking            | 1          | 1.5            |
| <b>TOTAL 2013</b>  | <b>156</b> | <b>4,957.5</b> |

## 2. Participating Job Titles In Transitional Duty Program

Operation Driver Worker, Sanitation Inspector, Electrical Services Laborer, Electrical Mechanic, Iron Worker, Painter, Electrical Worker, Repair Worker, Urban Forestry Specialist, Water Meter Tech, Steamfitter/ HVAC Specialist, Water Plant Operator, Cement Finisher Helper, Water Distribution Laborer, Water Plant Laborer Machine Repair Person, Seasonal City Labor, and City Labor

## 3. Locations And Duties In Transitional Duty Program

DPW has established many different jobs that DPW employees can perform while on Transitional Duty. Some of the duties and locations are as follows:

- a. Lincoln and Industrial Rd. Self Help Centers
  1. Watch dumpsters to prevent contamination
  2. Assist with minor cleaning
  3. Check Drivers Licenses to verify residency
  
- b. Ruby and Lincoln Garages
  1. Answer phones
  2. Record truck numbers
  3. Accept deliveries
  4. Clean garage
  
- c. Industrial Rd. Sanitation Yard
  1. Obtain and record Cart numbers
  2. Supervise Summer Interns
  3. Transport County Workers and assist in cleaning various city locations
  4. Check out excess material on routes as needed
  5. Office/clerical work assistance
  6. Transport drivers to back and forth to truck repair facilities
  7. Cleaning
  
- d. Central Sanitation Yard
  1. Obtain and record Cart numbers
  2. Supervise Summer Interns
  3. Transport County Workers and assist in cleaning various city locations
  4. Check out excess material on routes as needed
  5. Office/clerical work assistance
  6. Transport drivers to back and forth to truck repair facilities
  7. Cleaning
  
- e. South Sanitation Yard
  1. Obtain and record Cart numbers
  2. Supervise Summer Interns
  3. Transport County Workers and assist in cleaning various city locations
  4. Check out excess material on routes as needed
  5. Office/clerical work assistance
  6. Transport drivers to back and forth to truck repair facilities
  7. Cleaning

- f. Parking Headquarters
  - 1. Answer phones
  - 2. Enter info on computer
  
- g. Upper Parking
  - 1. Vehicle maintenance
  - 2. Cleaning
  
- h. Ziedler Municipal Building
  - 1. Assist Custodial staff with cleaning duties
  
- i. Forestry Districts
  - 1. Pick up litter on Boulevards
  - 2. Weed Flower Beds
  - 3. Mulch Flower Beds
  - 4. Clean Garages
  - 5. Paint Tree Stakes
  - 6. Check Planting locations
  
- j. Tower
  - 1. Stock Room
  - 2. Fill sand bags
  - 3. Cleaning
  
- k. Central Garage/Dispatch/Stock Room/Repairs
  - 1. Shred Documents
  - 2. Office/clerical work
  - 3. Stock Room parts pick up
  - 4. Vehicle minor maintenance
  - 5. Data Entry
  - 6. Cleaning
  
- l. Electrical Services Canal Street (Infrastructure)
  - 1. Assist with scheduling dispatch duties in traffic
  - 2. Assist in overseeing electrical apprentices out on job sight
  - 3. Assemble Transformers
  
- m. Keep Greater Milwaukee Beautiful
  - 1. Cut laces out of shoes
  - 2. Assemble packets for neighborhood cleanups
  - 3. Light assembly (Rain Barrels, Trash Pickers)
  - 4. Assist with recycling informational packet distribution (Door to door delivery)
  - 5. Catalog Assembly
  
- n. Water Meter Shop
  - 1. Meter Repair
  - 2. Deliver material
  - 3. Shop cleaning
  - 4. Tagging Fire Hydrants

- o. Howard & Linnwood Water Plants
  - 1. Minor building maintenance
  - 2. Office/clerical duties
- p. Snow Dump/Hartung Dump
  - 1. Monitor trucks in & out

The DPW Transitional Duty Program allows for employees that would normally not be able to return to work to be placed in other areas of DPW. The type of work that injured employees perform varies depending on the work restrictions of the individual.

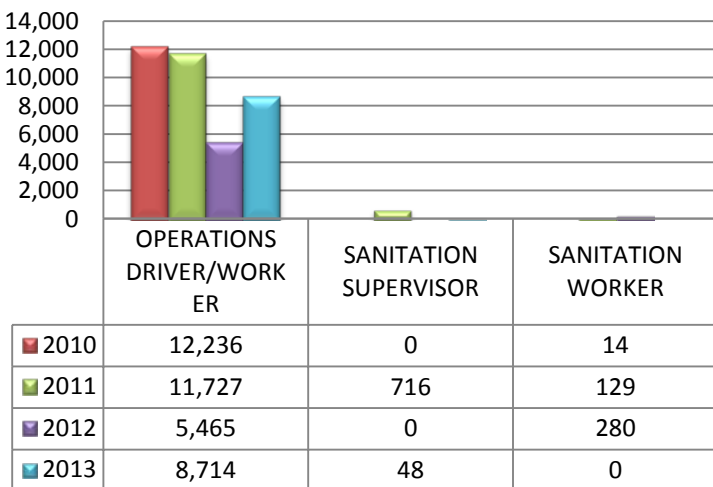
DPW makes an effort to find injured employees meaningful work while they are transitioning back to full duty. On the rare occasion of a high volume injuries occurring at one time, an individual could have a short wait for an initial placement on a transitional duty assignment (zero issues in 2013) but a placement match for the employee's restrictions is almost always achievable within a reasonable amount of time.

In 2013 there were 156 employees placed into the Transitional Duty Program. 154 of those employees were released to full duty without restrictions and returned to their regular duties. Two (2) employees out of the 156 were required to move further on through the ADA /DEPP processes.

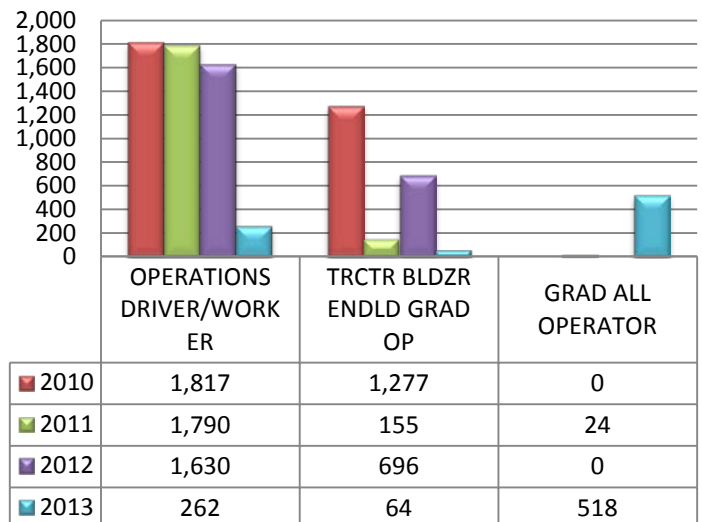
The Department standard is to utilize case management techniques that comply with medical restrictions to assist in successfully resolving injury issues for employees. DPW believes that having employees participate in the Transitional Duty Program allows the employee to stay active and be productive at work during their injury status yet allots ample time for the employee to participate in therapy or work hardening sessions required by their treating physician. Overall employees are not using injury pay or logging lost work days while on the Transitional Duty Program.

#### 4. Operations Time Away

**DPW Sanitation - Top 3 Time Away Hours**



**DPW Fleet Operations - Top 3 Injury Hours**



## **Section VI: Problematic Areas**

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### **A. HIGH COST CLAIMS/INJURIES**

Upon review of the high cost claims, it is evident that a great majority are due to cumulative or chronic conditions. These conditions compound over time and often result in surgery. There is an inherently high level of physicality involved in DPW jobs. This high level of physicality goes hand in hand with the national trend in the aging workforce. Safety personnel have begun to take a new approach in 2013. The most successful way to prevent injuries has been determined as early intervention. This is the cornerstone of the Public Works Athlete program. Through outside consultations and ride-alongs in the field, each job was assessed and separated on degree of physicality. In addition, the calendar year was broken into "seasons." Training will be tailored for each individual job classification. Program will be tested as a Pilot Program in 2014 at Bureau of Electrical Services.

### **B. REPEAT CLAIMANTS**

Repeat claimants will be addressed by Safety personnel working in conjunction with Payroll, Work Comp, and Department heads on an individual case by case basis. Safety will continue to use case management techniques to identify cases where attention may be needed. Safety can use the ADA process as a tool to help direct a case.

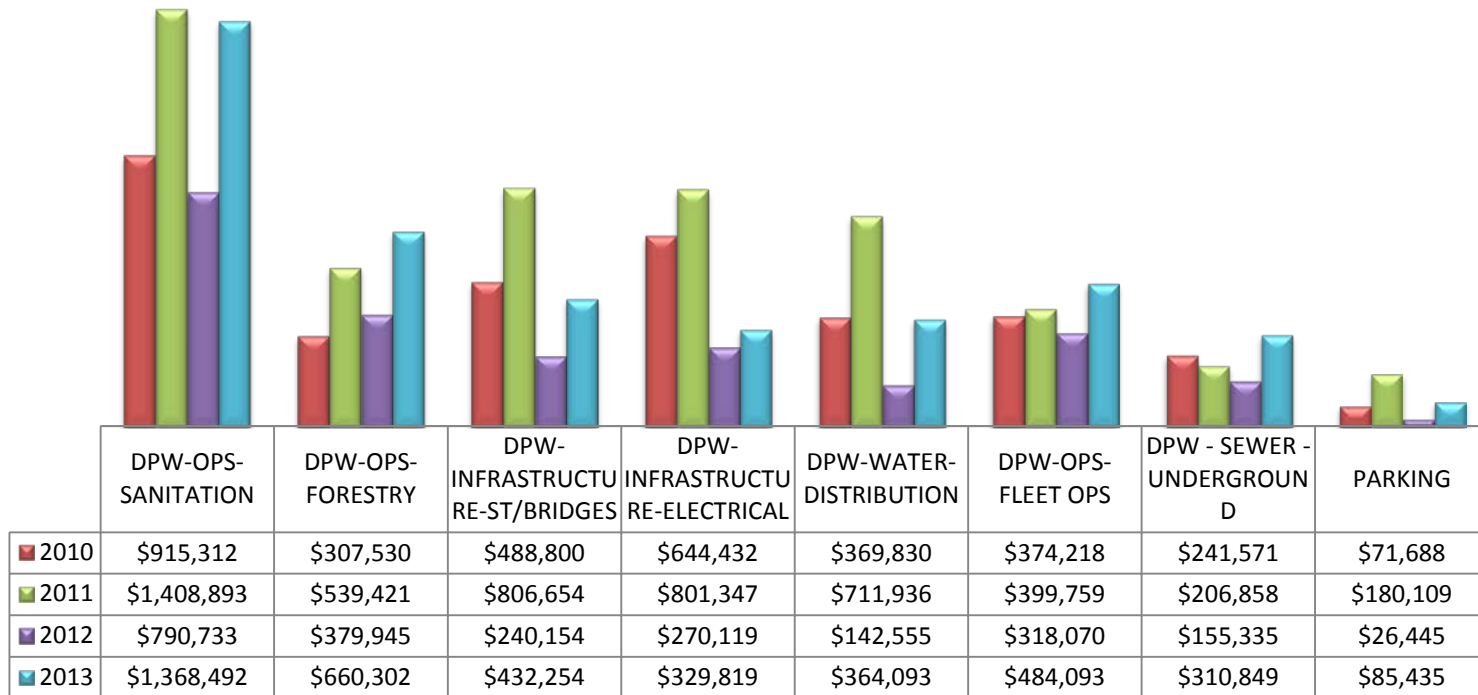
### **C. CLAIMS SUBMITTED LATE TO DER**

Late reporting is addressed with the incident app. which was developed and beta tested in the first part of 2013. In fall of 2013 Supervisors have been trained in the proper reporting procedure. The app creates uniformity in reporting throughout departments. In addition, employees have been notified during training of the DPW reporting work rule of "as soon as practical, and by the end of the shift." Safety has also added an additional step to ensure accountability by attaching a date received and emailed stamp to all EB-49s prior to forwarding the document to Department of Employee Relations.



## D. HIGH COST INJURIES

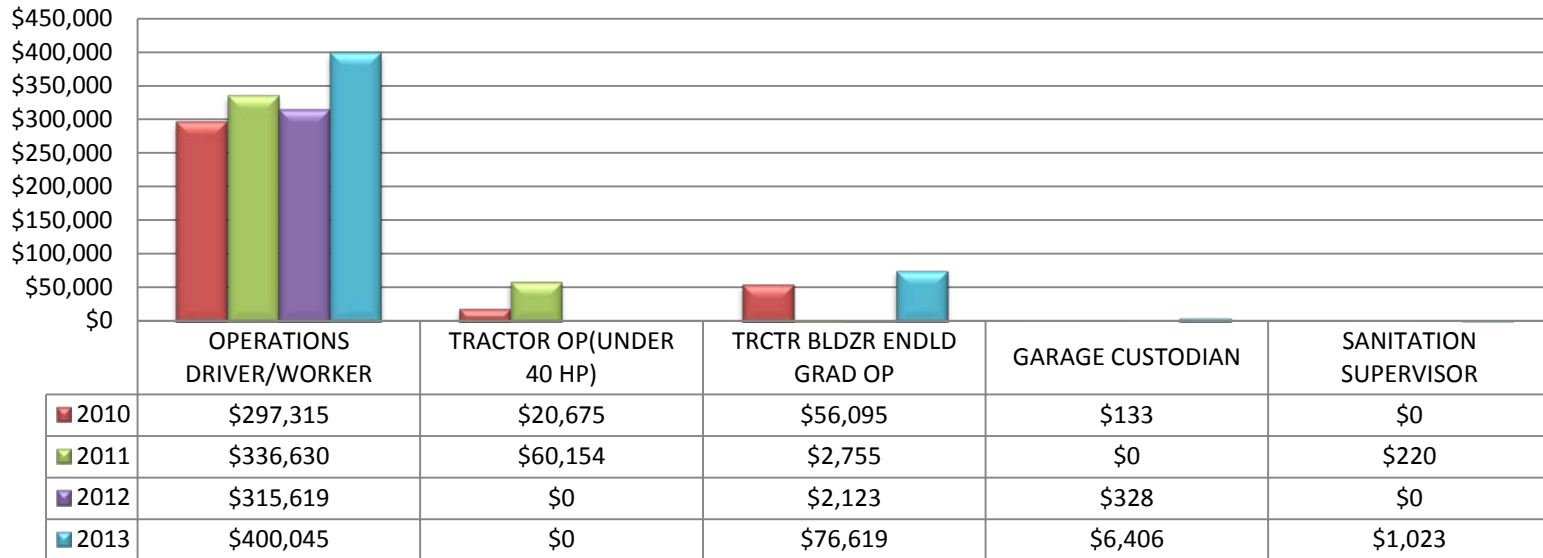
DPW Total Serious Claims Cost - Title/Division



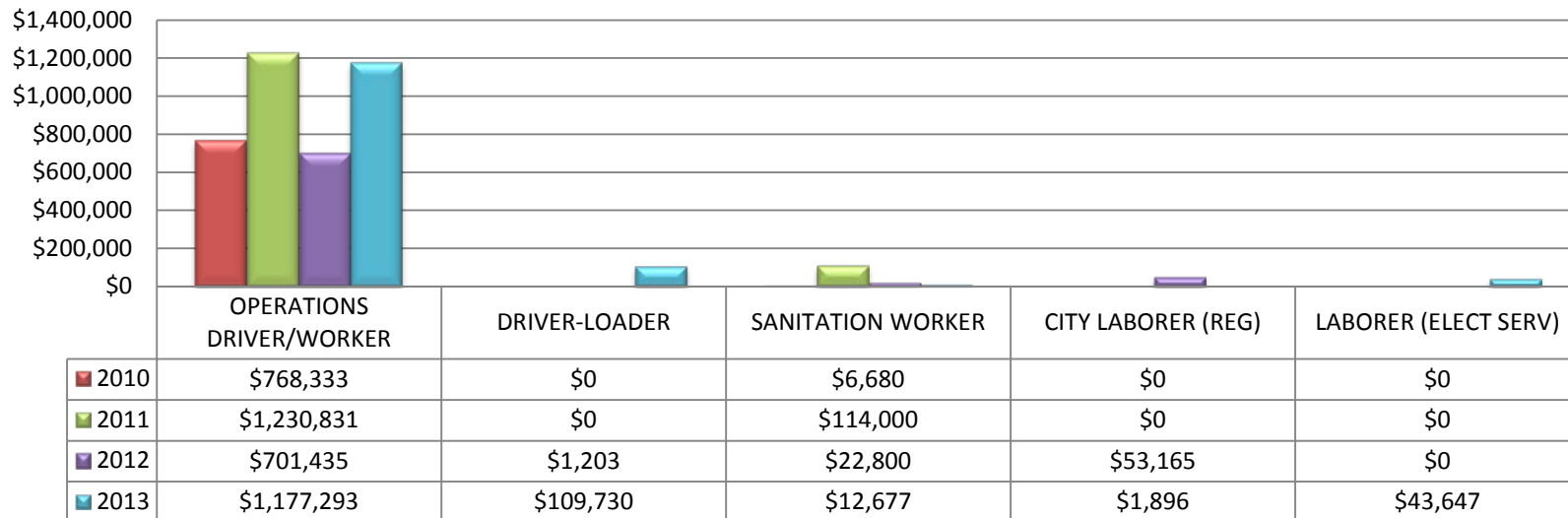
- In winter of 2013 Serious Claims increased in professions that perform snow duty and/or work outdoors; i.e. Operational Drivers, Sanitation & Forestry. Last spike was February 2011 (Groundhog Day Snow Storm).

**E. INJURIES COSTS BY DIVISION**

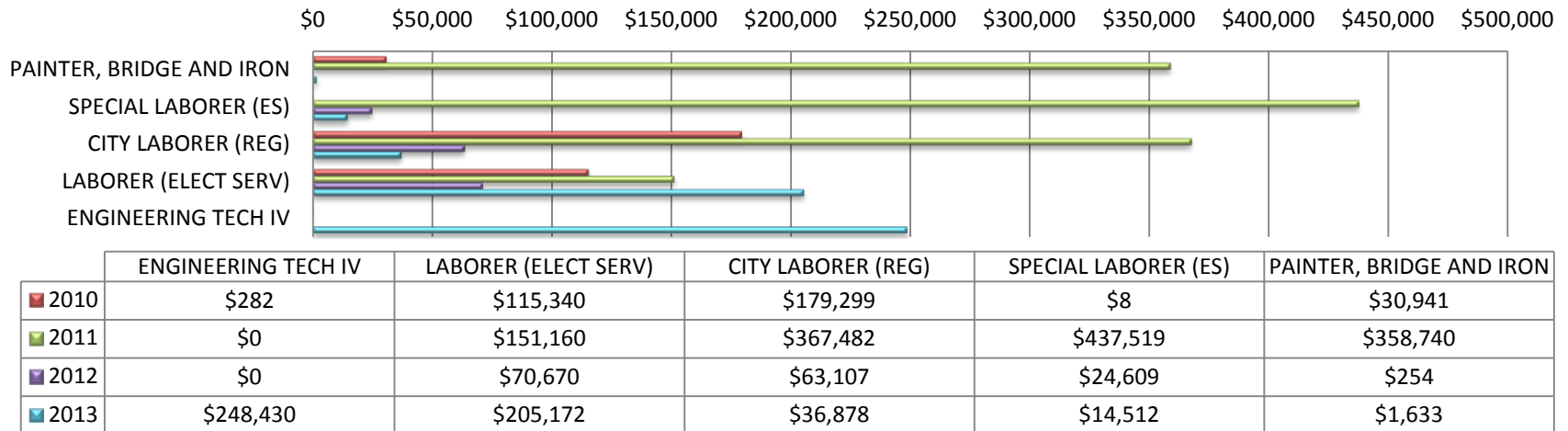
**DPW Fleet Ops - Top 5 Costly Injuries**



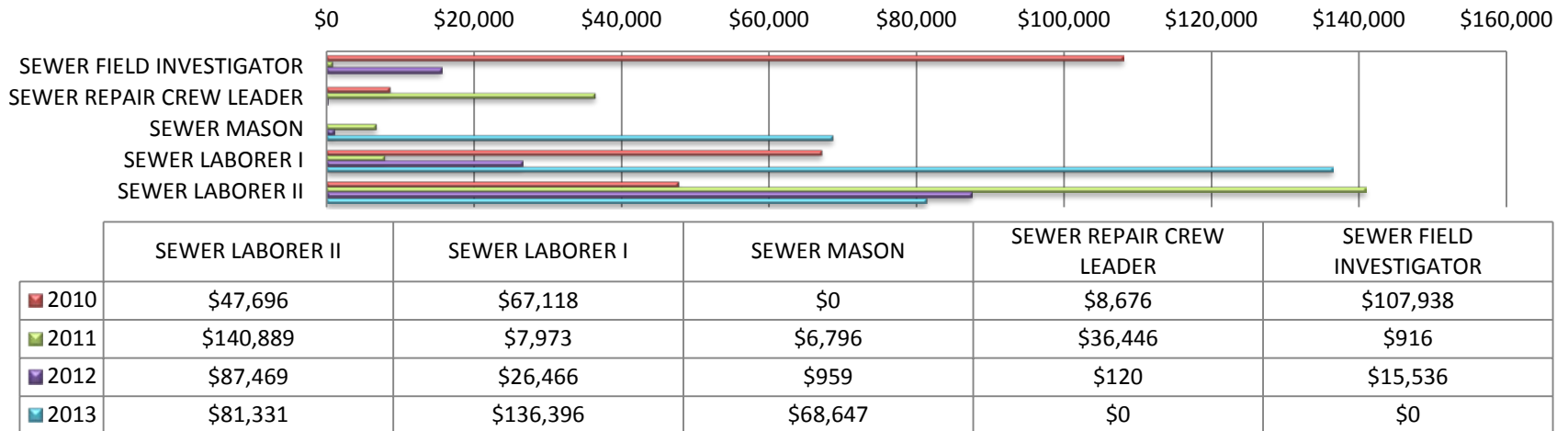
**DPW Sanitation - Top 5 Costly Injuries**



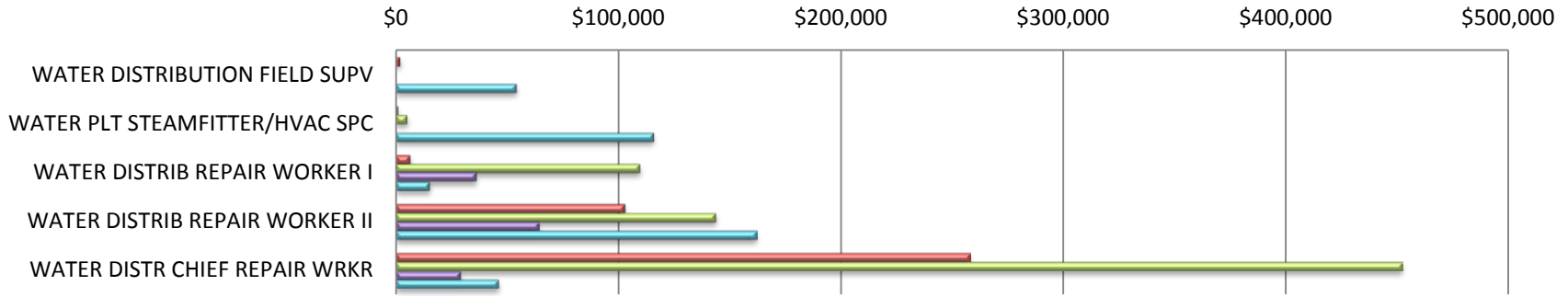
### DPW Infrastructure - Top 5 Costly Injuries



### DPW Sewer - Top 5 Costly Injuries

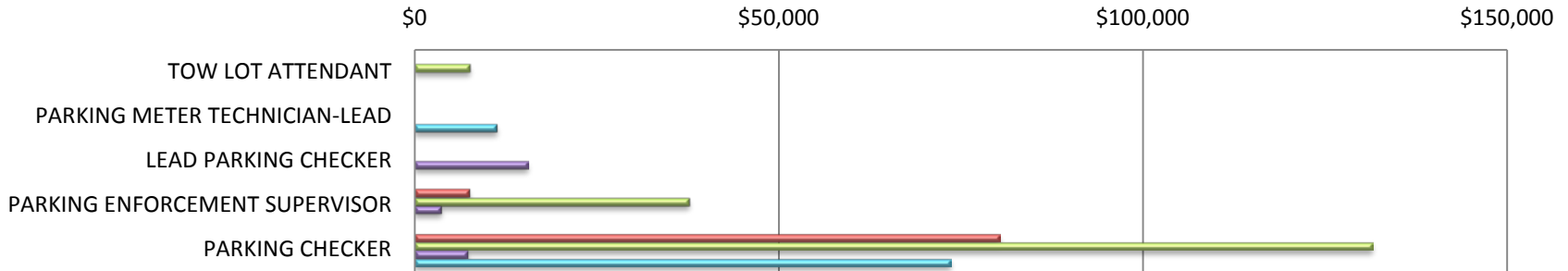


### DPW Water Works - Top 5 Costly Injuries



|      | WATER DISTR CHIEF REPAIR WRKR | WATER DISTRIB REPAIR WORKER II | WATER DISTRIB REPAIR WORKER I | WATER PLT STEAMFITTER/HVAC SPC | WATER DISTRIBUTION FIELD SUPV |
|------|-------------------------------|--------------------------------|-------------------------------|--------------------------------|-------------------------------|
| 2010 | \$257,949                     | \$102,821                      | \$6,512                       | \$1,027                        | \$2,035                       |
| 2011 | \$452,196                     | \$143,866                      | \$109,699                     | \$5,162                        | \$0                           |
| 2012 | \$28,853                      | \$63,858                       | \$35,905                      | \$0                            | \$0                           |
| 2013 | \$46,166                      | \$161,845                      | \$15,211                      | \$115,508                      | \$54,072                      |

### DPW Parking - Top 5 Costly Injuries



|      | PARKING CHECKER | PARKING ENFORCEMENT SUPERVISOR | LEAD PARKING CHECKER | PARKING METER TECHNICIAN-LEAD | TOW LOT ATTENDANT |
|------|-----------------|--------------------------------|----------------------|-------------------------------|-------------------|
| 2010 | \$80,309        | \$7,573                        | \$0                  | \$0                           | \$0               |
| 2011 | \$131,469       | \$37,716                       | \$0                  | \$0                           | \$7,638           |
| 2012 | \$7,283         | \$3,685                        | \$15,477             | \$0                           | \$0               |
| 2013 | \$73,570        | \$0                            | \$0                  | \$11,327                      | \$0               |

- **Years previous 2013** Parking would report non-injury incidents on EB49 form. In 2013 only actual injuries are being reported.

## Section VII: Safety Goals and Objectives

### A. DPW SAFETY GOALS

| Risk Management Model<br>2014 Safety Goal Planning Matrix<br>Department: Department of Public Works                        |   |                 |  |   |
|--|---|-----------------|--|---|
| 2014 Safety Goals and Action Step(s)   | Goal Outcome(s)   | Completion Date | Responsible Person(s) for Goal Tracking and Completion | Impact or relevance to safety and/or workplace injuries   |
| Review and update confined space equipment in Sewer Department   | Dispose all obsolete equipment & update training                          | December 2014   | Safety Dept.   | Updated equipment & training ensures compliance with federal regulations and assists in elimination of potential hazards. |
| Further Implement DPW Athlete Program (including exploring the potential of an on-site PT Program in conjunction with DER) | To transition from a concept to a pilot program at Electrical Services.   | July 2014       | Safety Dept.<br>Brian Hinkle                           | Focuses on early intervention and prevention of long term or chronic injuries.  |
| Expand the DPW Injury & Incident Application   | DPW wide uniformity in recording data for incidents & injuries            | December 2014   | Safety Dept.   | Uniform, accurate, organized and detailed documentation of all injury/incidents DPW wide.                                 |
| Renew and coordinate training for Water Plants with Milwaukee Fire Department H.U.R.T. (Heavy Urban Rescue Team)           | Increase awareness<br>Continue communication                              | October 2014    | Safety Dept.<br>Roger Davidson                         | Exercise emergency operations procedures.   |
| Safety Blitz – Mass impromptu safety check done by Safety & Field Supervisors at various city locations and time frames.   | To show solidarity between safety and management on safety work rules.    | December 2014   | Safety Dept.   | Jointly enforce safety rules in a uniform manner.   |
| Expansion of the Transitional Duty Program positions   | To have more placement opportunities for injured employees                | December 2014   | Safety Dept.   | Enables a broader spectrum to meet work restrictions on an as needed base.  |
| Increase our networking with outside vendors.  | Object is to expose employees to as many PPE related outlets as possible. | December 2014   | Safety Dept.   | Affords our employees with the latest updates in technology in cold/hot weather gear for private purchase.                |
| Rear Load Container condition Audit  | To obtain updates on the condition of all boxes                           | December 2014   | Safety Dept.<br>Eunice Thomas                          | Reduce exposure to potential hazards to route personnel of boxes in need of repair.                                       |

## Section VIII: Appendix

### 1. Weather History for Milwaukee, WI

#### January, 2013

|                  | Max     | Avg     | Min     | Sum     |
|------------------|---------|---------|---------|---------|
| Mean Temperature | 49 °F   | 24 °F   | 2 °F    |         |
| Precipitation    | 1.67 in | 0.14 in | 0.00 in | 3.17 in |
| Snow depth       | 2.0 in  | 0.8 in  | 0.0 in  | -       |

#### February, 2013

|                  | Max     | Avg     | Min     | Sum     |
|------------------|---------|---------|---------|---------|
| Mean Temperature | 39 °F   | 24 °F   | 4 °F    |         |
| Precipitation    | 0.67 in | 0.14 in | 0.00 in | 3.03 in |
| Snow depth       | 8.0 in  | 3.4 in  | 1.0 in  | -       |

#### March, 2013

|                  | Max     | Avg     | Min     | Sum     |
|------------------|---------|---------|---------|---------|
| Mean Temperature | 43 °F   | 30 °F   | 17 °F   |         |
| Precipitation    | 0.86 in | 0.07 in | 0.00 in | 1.63 in |
| Snow depth       | 9.0 in  | 3.6 in  | 0.0 in  | -       |

#### April, 2013

|                  | Max     | Avg     | Min     | Sum     |
|------------------|---------|---------|---------|---------|
| Mean Temperature | 68 °F   | 44 °F   | 32 °F   |         |
| Precipitation    | 1.80 in | 0.28 in | 0.00 in | 7.38 in |
| Snow depth       | 0.0 in  | 0.0 in  | 0.0 in  | -       |

#### May, 2013

|                  | Max     | Avg     | Min     | Sum     |
|------------------|---------|---------|---------|---------|
| Mean Temperature | 75 °F   | 56 °F   | 41 °F   |         |
| Precipitation    | 1.17 in | 0.15 in | 0.00 in | 4.30 in |
| Snow depth       | 0.0 in  | 0.0 in  | 0.0 in  | -       |

#### June, 2013

|                  | Max     | Avg     | Min     | Sum     |
|------------------|---------|---------|---------|---------|
| Mean Temperature | 78 °F   | 65 °F   | 54 °F   |         |
| Precipitation    | 1.40 in | 0.23 in | 0.00 in | 5.80 in |
| Snow depth       | 0.0 in  | 0.0 in  | 0.0 in  | -       |

#### July, 2013

|                  | Max     | Avg     | Min     | Sum     |
|------------------|---------|---------|---------|---------|
| Mean Temperature | 87 °F   | 72 °F   | 60 °F   |         |
| Precipitation    | 0.38 in | 0.06 in | 0.00 in | 1.55 in |
| Snow depth       | 0.0 in  | 0.0 in  | 0.0 in  | -       |

#### August, 2013

|                  | Max     | Avg     | Min     | Sum     |
|------------------|---------|---------|---------|---------|
| Mean Temperature | 84 °F   | 71 °F   | 61 °F   |         |
| Precipitation    | 1.67 in | 0.12 in | 0.00 in | 3.27 in |
| Snow depth       | 0.0 in  | 0.0 in  | 0.0 in  | -       |

#### September, 2013

|                  | Max     | Avg     | Min     | Sum     |
|------------------|---------|---------|---------|---------|
| Mean Temperature | 87 °F   | 65 °F   | 53 °F   |         |
| Precipitation    | 0.53 in | 0.06 in | 0.00 in | 1.54 in |
| Snow depth       | 0.0 in  | 0.0 in  | 0.0 in  | -       |

#### October, 2013

|                  | Max     | Avg     | Min     | Sum     |
|------------------|---------|---------|---------|---------|
| Mean Temperature | 70 °F   | 52 °F   | 38 °F   |         |
| Precipitation    | 1.19 in | 0.12 in | 0.00 in | 3.59 in |
| Snow depth       | 0.0 in  | 0.0 in  | 0.0 in  | -       |

#### November, 2013

|                  | Max     | Avg     | Min     | Sum     |
|------------------|---------|---------|---------|---------|
| Mean Temperature | 54 °F   | 37 °F   | 19 °F   |         |
| Precipitation    | 2.11 in | 0.13 in | 0.00 in | 2.97 in |
| Snow depth       | 1.0 in  | 0.0 in  | 0.0 in  | -       |

#### December, 2013

|                  | Max     | Avg     | Min     | Sum     |
|------------------|---------|---------|---------|---------|
| Mean Temperature | 46 °F   | 21 °F   | 1 °F    |         |
| Precipitation    | 0.70 in | 0.08 in | 0.00 in | 1.81 in |
| Snow depth       | 10.0 in | 3.5 in  | 0.0 in  | -       |

## 2. Mandatory Safety Training

| Required Safety Training Programs   | Group of Employees Trained | Year Training Completed | Training Required |
|---|----------------------------|-------------------------|-------------------|
| <b>CPR, First Aid, Bloodborne Pathogen</b>  | Custodians                 | 2013                    | Bi-Annually       |
|   | Electrical Services        | 2013                    | Bi-Annually       |
|   | Sewer Maintenance          | 2012                    | Bi-Annually       |
|   | Water                      | 2012 & 2013             | Bi-Annually       |
|   | Forestry                   | 2012                    | Bi-Annually       |
| <b>Confined Space Entry</b>   | Electrical Services        | 2013                    | Annually          |
|   | Bridge Shop                | 2013                    | Annually          |
|   | Sewer Maintenance          | 2013                    | Annually          |
|   | Water                      | 2013                    | Annually          |
| <b>Fall Protection</b>  | Electrical Services        | 2013                    | Annually          |
|   | Sewer Maintenance          | 2013                    | Annually          |
|   | Bridge Shop                | 2013                    | Annually          |
|   | Water                      | 2013                    | Annually          |
|   | Forestry                   | 2013                    | Annually          |
| <b>Personal Protective Equipment</b>  | Custodians                 | 2013                    | Annually          |
|   | Electrical Services        | 2013                    | Annually          |
|   | Street Maintenance         | 2013                    | Annually          |
|   | Bridge Shop                | 2013                    | Annually          |
|   | Sewer Maintenance          | 2013                    | Annually          |
|   | Parking Enforcement        | 2013                    | Annually          |
|   | Water                      | 2013                    | Annually          |
|   | Sanitation                 | 2013                    | Annually          |
|   | Forestry                   | 2013                    | Annually          |
|   | Fleets                     | 2013                    | Annually          |
| <b>Hazard Communication &amp; New Globally Harmonized System of Classification and Labelling of Chemicals (GHS)</b> | Custodians                 | 2013                    | Annually          |
|   | Electrical Services        | 2013                    | Annually          |
|   | Street Maintenance         | 2013                    | Annually          |
|   | Bridge Shop                | 2013                    | Annually          |
|   | Sewer Maintenance          | 2013                    | Annually          |
|   | Water                      | 2013                    | Annually          |
|   | Sanitation                 | 2013                    | Annually          |
|   | Forestry                   | 2013                    | Annually          |
|   | Fleets                     | 2013                    | Annually          |
| <b>Electrical Safety</b>  | Electrical Services        | 2013                    | Annually          |
|   | Electrical Services        | 2013                    | Annually          |
| <b>Lock-out/Tag-out</b>   | Bridge Shop                | 2013                    | Annually          |
|   | Water                      | 2013                    | Annually          |
|   | Water                      | 2013                    | Annually          |
| <b>Respiratory Protection</b>   | Electrical Services        | 2013                    | Annually          |
|   | Electrical Services        | 2013                    | Annually          |
| <b>Excavation, Trenching &amp; Shoring</b>  | Sewer Maintenance          | 2013                    | Annually          |
|   | Water                      | 2013                    | Annually          |
|   | Water                      | 2013                    | Annually          |
| <b>Traffic Control</b>  | Electrical Services        | 2013                    | Annually          |
|   | Street Maintenance         | 2013                    | Annually          |
|   | Bridge Shop                | 2013                    | Annually          |
|   | Sewer Maintenance          | 2013                    | Annually          |
|   | Parking Enforcement        | 2013                    | Annually          |
|   | Water                      | 2013                    | Annually          |
|   | Sanitation                 | 2013                    | Annually          |
|   | Forestry                   | 2013                    | Annually          |
|   | Fleets                     | 2013                    | Annually          |

| <b>Required Safety Training Programs</b>  | <b>Group of Employees Trained</b> | <b>Year Training Completed</b> | <b>Training Required</b> |
|---|-----------------------------------|--------------------------------|--------------------------|
| <b>Back/Lifting</b>   | Custodians                        | 2013                           | Annually                 |
|   | Electrical Services               | 2013                           | Annually                 |
|   | Street Maintenance                | 2013                           | Annually                 |
|   | Bridge Shop                       | 2013                           | Annually                 |
|   | Sewer Maintenance                 | 2013                           | Annually                 |
|   | Parking Enforcement               | 2013                           | Annually                 |
|   | Water                             | 2013                           | Annually                 |
|   | Sanitation                        | 2013                           | Annually                 |
|   | Forestry                          | 2013                           | Annually                 |
| <b>Heat Stress/Cold Weather</b>   | Fleets                            | 2013                           | Annually                 |
|   | Electrical Services               | 2013                           | Annually                 |
|   | Street Maintenance                | 2013                           | Annually                 |
|   | Bridge Shop                       | 2013                           | Annually                 |
|   | Sewer Maintenance                 | 2013                           | Annually                 |
|   | Parking Enforcement               | 2013                           | Annually                 |
|   | Water                             | 2013                           | Annually                 |
|   | Sanitation                        | 2013                           | Annually                 |
|   | Forestry                          | 2013                           | Annually                 |
| <b>Drug, Alcohol, and Reasonable Suspicion Awareness - D.O.T. &amp; Non-D.O.T., Work Place Violence</b> | Fleets                            | 2013                           | Annually                 |
|   | Electrical Services               | 2013                           | Annually                 |
|   | Street Maintenance                | 2013                           | Annually                 |
|   | Bridge Shop                       | 2013                           | Annually                 |
|   | Sewer Maintenance                 | 2013                           | Annually                 |
|   | Parking Enforcement               | 2013                           | Annually                 |
|   | Water                             | 2013                           | Annually                 |
|   | Sanitation                        | 2013                           | Annually                 |
|   | Forestry                          | 2013                           | Annually                 |
| <b>Hearing Conservation</b>   | Fleets                            | 2013                           | Annually                 |
|   | Electrical Services               | 2013                           | Annually                 |
|   | Street Maintenance                | 2013                           | Annually                 |
|   | Bridge Shop                       | 2013                           | Annually                 |
|   | Sewer Maintenance                 | 2013                           | Annually                 |
|   | Water                             | 2013                           | Annually                 |
|   | Sanitation                        | 2013                           | Annually                 |
|   | Forestry                          | 2013                           | Annually                 |
|   | Fleets                            | 2013                           | Annually                 |
| <b>Hearing Van/Audio Gram Testing</b>   | Fleets                            | 2013                           | Annually                 |
|   | Electrical Services               | 2013                           | Annually                 |
|   | Street Maintenance                | 2013                           | Annually                 |
|   | Bridge Shop                       | 2013                           | Annually                 |
|   | Sewer Maintenance                 | 2013                           | Annually                 |
|   | Water                             | 2013                           | Annually                 |
|   | Sanitation                        | 2013                           | Annually                 |
|   | Forestry                          | 2013                           | Annually                 |
|   | Fleets                            | 2013                           | Annually                 |
| <b>Fire Extinguisher Safety</b>   | Water Plants/Meters               | 2013                           | Bi-Annually              |
| <b>Connections Repairs Training (MWW Distribution)</b>  | Water Distribution                | 2013                           | Annually                 |
|   | Water Meter Shop                  | 2012                           | Bi-Annually              |
| <b>Asbestos Awareness</b>   |                                   |                                |                          |
| <b>Leaf Truck Training</b>  | Sanitation                        | 2013                           | Annually                 |
| <b>Target Saw Training</b>  | Water Distribution                | 2013                           | Annually                 |



### 3. Optional Safety Training

| Other Safety Programs/Training  | Group of Employees Trained | Year Training Completed | Training Required |
|---------------------------------|----------------------------|-------------------------|-------------------|
| Ammonia Training                | Water Plants               | 2013                    | Optional/Extra    |
| Liquid Oxygen Training          | Water Plants               | 2013                    | Optional/Extra    |
|                                 | Sanitation                 | 2013                    | Optional/Extra    |
| Wellness training Dr. Mike P.T. | Forestry Street            | 2013                    | Optional/Extra    |
|                                 | Maintenance Sewer          | 2013                    | Optional/Extra    |
|                                 | Maintenance                | 2013                    | Optional/Extra    |

### 4. Viable & Functioning Safety Committee

See the Safety Committee-By-Laws on page 44 for an overview of the committee and how it functions.

| SAFETY COMMITTEES CONDUCTED               | RESULTING OUTCOMES  | MEETS   |
|---|---|---|
| <b>BUREAU OF ELECTRICAL SERVICES</b>      | <ul style="list-style-type: none"> <li>Revived committee</li> <li>Elected new members</li> <li>Added second person to Hog crew and Saw crew for safety</li> <li>Studied and assessed compound determined OK for use</li> <li>Scheduled brooms to clean garage area.</li> <li>Set a better scheduled rotation for hot glove inspection</li> <li>Had outside vendor replace trailer used for broken poles</li> </ul>  | Every 4 Months  |
| <b>TOW LOT</b>                            | <ul style="list-style-type: none"> <li>Revived committee</li> <li>Attended state conference</li> </ul>  | Every 3 Months  |
| <b>INFRASTRUCTURE TOWER</b>               | <ul style="list-style-type: none"> <li>Elected new members</li> <li>Cleaned entire garage of dust \$40k (outside vendor)</li> <li>Reduced parking lot accidents caused by certain pole</li> </ul>   | Monthly   |
| <b>WATER METER SHOPS</b>                  | <ul style="list-style-type: none"> <li>Added fire extinguishers to field vans</li> <li>Created a heavy duty jumper cable for grounding meter exchange</li> <li>Reviewed, updated and posted emergency evacuation plans</li> <li>Updated eye wash station with tepid mixing valve</li> <li>Inspected and repaired all confined space equipment</li> </ul>  | Monthly<br>Every 3 <sup>rd</sup> Wednesday                                      |
| <b>WATER PLANTS HOWARD &amp; LINNWOOD</b> | <ul style="list-style-type: none"> <li>Lock-Out Tag Equipment reviewed and updated</li> <li>Confined space updated meters and equipment purchased</li> <li>Alternative entry procedures introduced for confined spaces</li> <li>Electrical outlets installed at pits &amp; booster stations for ventilation units</li> <li>Fluoride Day tank Bilco hatch exit reconfigured for emergency exit</li> <li>Riverside emergency lighting completed</li> <li>Redesigned emergency window exit lower level pipe gallery</li> <li>Repaired sinking sewers parking lot Howard – winter hazard</li> </ul> | Every Month 2 <sup>nd</sup> Weds<br>Howard & 2 <sup>nd</sup> Thurs.<br>Linnwood |

| SAFETY COMMITTEES CONDUCTED | RESULTING OUTCOMES   | MEETS                           |
|-----------------------------|--|---------------------------------|
| <b>WATER DISTRIBUTION</b>   | <ul style="list-style-type: none"> <li>• Target saw training implemented w/private vendor</li> <li>• Pre-trip sheets added to the back of time cards</li> <li>• Replaced welded chain mounts on asphalt trucks with bolts (snapping)</li> <li>• Reviewed and reintroduced the importance of proper trench box safety</li> <li>• Purchased new 5 gas meters to recognize presence of carbon dioxide</li> </ul>  | Monthly 1 <sup>st</sup> Tuesday |
| <b>FORESTRY</b>             | <ul style="list-style-type: none"> <li>• Truck regeneration training</li> <li>• All forestry personnel have exchanged their regular safety vests for special break away safety vests. The breakaway vests provide a superior safety advantage when vests become caught or entangled on brush as it is being fed into the chipper.</li> <li>• Daily aerial lift truck inspections required &amp; implemented</li> <li>• Daily ladder inspections required &amp; implemented</li> <li>• Work zone safety reviewed and updated</li> <li>• Trauma First aid kits have been assigned to lift trucks, chipper trucks and saw trucks working with climbing crews.,</li> <li>• Aerial rescue training completed with MFD H.U.R.T. – Hands on 1 and/or two person rescue training.</li> <li>• Climbing safety completed with basic knot tying, tie-in point selection, and tree inspection.</li> <li>• LED lights have replaced standard lights for storm call out</li> </ul> | Monthly                         |
| <b>FLEET OPERATIONS</b>     | <ul style="list-style-type: none"> <li>• Truck Regeneration training</li> <li>• “Slow” was marked on the pavement prior to bike paths for truck entrances and exits at both canal street locations.</li> <li>• Parking lot crosswalks to the building and garage floors have been remarked.</li> <li>• Sewer grates in the floor of repair facility are in the process of being replaced.</li> <li>• Repair stall floor openings are receiving new covers to prevent fall/trip</li> </ul>  | Every 3 Months                  |

## **GENERAL DPW SAFETY COMMITTEE**

### **BY-LAWS**

#### **ARTICLE 1: ORGANIZATION**

1. Each DPW Department shall have a Safety Committee.
2. The Safety Committee shall be made up of both Labor and Management employees and a Safety Specialist.
3. Each department Management and Employees shall decide on the makeup and number of members on each committee.

#### **ARTICLE II: PURPOSES**

1. The Safety Committee shall work to identify, and eliminate from the workplace, any hazardous situations, equipment, or work procedure.
2. The Safety Committee shall explore ways to reduce the number of "Days Away From Work" and "Days on Transitional Duty."
3. The Safety Committee shall address any other employee safety matter that may come before it.

#### **ARTICLE III: MEMBERSHIP**

1. The Safety Specialist shall be a permanent member of the Safety Committee.
2. The Management and the four Employee Safety Committee members shall serve for a period of two years.
3. At the end of the two year term, Safety Committee member may be asked to serve a second term. There shall be no limits on the number of two year terms a member shall be permitted to serve on the Safety Committee.

## **ARTICLE IV: OFFICERS**

1. There shall be two Safety Committee Officers.

These Officers shall be:

- A. Committee Chairman.
- B. Recording Secretary.

2. The Safety Specialist shall act as Committee Chairman.

The Committee Chairman Shall:

- A. Preside at all Safety Committee meetings.
- B. Provide, to Committee members, an agenda for all Committee meetings.

The Recording Secretary shall:

- A. Record the minutes of all Committee meetings.
- B. Provide, to Committee members, the minutes of all Committee meetings.
- C. Maintain the minutes of all Committee meetings.

## **ARTICLE V: MEETINGS**

1. The Department and Employees shall determine how often the Safety Committee shall meet.
2. The Safety Committee shall meet during normal working hours.
3. The Department shall decide where the Safety Committee shall meet.
4. Special meetings of the Safety Committee shall be called for by the Committee Chairman. No other business but that specified in the Special Meeting Notice may be transacted at such special meeting without the unanimous consent of all present at the special meeting.
5. The presence of not less than two Employee Committee members, two Management Committee members, and the Committee Chairman shall constitute a quorum and shall be necessary to conduct the business of the Safety Committee.

## **ARTICLE VI: VOTING**

1. Motions before the Safety Committee shall be carried by a simple majority of votes.
2. All voting shall be conducted by voice with each member's vote recorded by the Recording Secretary.
3. The individual Employee and Management committee members shall each have one vote per motion before the Safety Committee.
4. In the event of a tie vote among the committee members, the Chairman shall cast a deciding vote to break the tie vote.

## **ARTICLE VII: ORDER OF BUSINESS**

1. Roll Call.
2. Reading of the Minutes of the preceding meeting.
3. Old and Unfinished Business.
4. New Business.
5. Adjournments.

## **ARTICLE VIII: CHANGES TO THE COMMITTEE BY-LAWS**

These By-Laws may be altered, amended, repealed or added to by a YES vote of not less than seventy five percent of the full membership of the Committee. A seventy five percent YES vote shall be six of the eight Committee members.

## 5. Building Site Audit/Safety Inspection Log

In September of 2013 Safety revamped the way previous building/site inspections were done. We enhanced the audit/inspection checklist in order to produce a more detailed safety inspection and report of DPW facilities. All hazards or potential hazards are photographed and logged into a report which is given to the facilities manager with a deadline date for corrections to be completed.

| Site Location 2013                         | Insp. Date | Concerns Due Date | Report Served To Facility | Scheduled Follow Up Date | Report by: | If Applicable - 2nd Follow Up Date | All Concerns Addressed |
|--|------------|-------------------|---------------------------|--------------------------|------------|------------------------------------|------------------------|
| Tower Facility 3850 N 35th St              | 9/20/2013  | 11/27/2013        | 10/23/2013                | 12/6/2013                | Hinkle     |                                    | x                      |
| Tower Facility 3850 N 35th St              | 10/4/2013  | 11/27/2013        | 10/24/2013                | 12/6/2013                | Hinkle     |                                    | x                      |
| Electric Serv 1540 W Canal St              | 10/11/2013 | 11/27/2013        | 10/23/2013                | 12/13/2013               | Hinkle     |                                    | x                      |
| CRG/Heavy Side 22nd & Canal                | 10/18/2013 | 12/20/2013        | 11/6/2013                 | 1/10/2014                | Hinkle     |                                    | x                      |
| CRG/Light Side 22nd & Canal                | 10/25/2013 | 12/20/2013        | 11/7/2013                 | 1/10/2014                | Hinkle     |                                    | x                      |
| Ziedler Municipal Building                 | 11/1/2013  | 12/20/2013        | 11/6/2013                 | 1/17/2014                | Hinkle     |                                    | x                      |
| Linnwood Plant                             | 2014       |                   |                           |                          |            |                                    |                        |
| Linnwood Walk Through                      | 2014       |                   |                           |                          |            |                                    |                        |
| Howard Plant                               | 2014       |                   |                           |                          |            |                                    |                        |
| Industrial Road Forestry                   | 2014       |                   |                           |                          |            |                                    |                        |
| Industrial Road Sanitation                 | 2014       |                   |                           |                          |            |                                    |                        |
| Industrial Road Self-Help                  | 2014       |                   |                           |                          |            |                                    |                        |
| Ruby Garage                                | 2014       |                   |                           |                          |            |                                    |                        |
| Cameron Yard Sanitation                    | 2014       |                   |                           |                          |            |                                    |                        |
| North Meter Shop                           | 2014       |                   |                           |                          |            |                                    |                        |
| State Street Yard Sanitation               | 2014       |                   |                           |                          |            |                                    |                        |
| State Street Yard Forestry                 | 2014       |                   |                           |                          |            |                                    |                        |
| Central East Yard Sanitation - 14th Walnut | 2014       |                   |                           |                          |            |                                    |                        |
| Mount Vernon Sanitation Recycle Yard       | 2014       |                   |                           |                          |            |                                    |                        |
| Sign Shop - 1430 W Canal St                | 2014       |                   |                           |                          |            |                                    |                        |
| Tire Shop/Parking Enforcement              | 2014       |                   |                           |                          |            |                                    |                        |
| Lincoln Garage                             | 2014       |                   |                           |                          |            |                                    |                        |
| Lincoln Self-Help Station                  | 2014       |                   |                           |                          |            |                                    |                        |
| Sanitation Yard 33rd & Vilet Street        | 2014       |                   |                           |                          |            |                                    |                        |
| Sanitation South 2 Yard - 6th & Howard     | 2014       |                   |                           |                          |            |                                    |                        |
| Sanitation South 1 Yard - 35th & Hayes     | 2014       |                   |                           |                          |            |                                    |                        |
| Tow Lot                                    | 2014       |                   |                           |                          |            |                                    |                        |
| Forestry Holt Ave                          | 2014       |                   |                           |                          |            |                                    |                        |
| Forestry Nursery                           | 2014       |                   |                           |                          |            |                                    |                        |

## 6. DER Injury Codes

|   |  |
|---|--|
| 01-Air Hammer-Any Injury                          |  |
| 02-Asphalt-Any Injury                             |  |
| 03-Cable-Any Injury                               |  |
| 04-Chemicals / Sewers / Smoke / Debris-Any Injury |  |
| 05-Chipper-Any Injury                             |  |
| 06-Citizens-Any Injury                            |  |
| 07-Concrete-Any Injury                            |  |
| 08-Conduit-Any Injury                             |  |
| 09-Digging-Any Injury                             |  |
| 10-Animal-Any Injury                              |  |
| 11-Electricity-Any Injury                         |  |
| 12-Garbage Cart Push / Pull-Any Injury            |  |
| 13-Garbage Cart Snow / Ice-Any Injury             |  |
| 14-Garbage Cart Hazardous Material-Any Injury     |  |
| 15-Garbage Cart Flipper-Any Injury                |  |
| 16-Gate Wrench-Any Injury                         |  |
| 17-Hand Tools-Any Injury                          |  |
| 18-Hydrant-Any Injury                             |  |
| 19-Insect Bite-Any Injury                         |  |
| 20-Lifting-Any Injury                             |  |
| 21-Man Hole-Any Injury                            |  |
| 22-Man Hole Ring-Any Injury                       |  |
| 23-Meter-Any Injury                               |  |
| 24-Misc. Tool-Any Injury                          |  |
| 25-Pipe Fitting-Any Injury                        |  |
| 26-Pole-Any Injury                                |  |
| 27-Punch Rod-Any Injury                           |  |
| 28-Push / Pull-Any Injury                         |  |
| 29-Rake-Any Injury                                |  |
| 30-Shoveling-Any Injury                           |  |
| 31-Signal-Any Injury                              |  |
| 32-Steel-Any Injury                               |  |
| 33-Cable – Any Injury                             |  |
|   | 34-Traffic Standard / Street Light-Any Injury              |
|   | 35-Transformer-Any Injury                                  |
|   | 36-Tree Climbing-Any Injury                                |
|   | 37-Vehicle Accident Maintenance-Any Injury                 |
|   | 38-Vehicle Accident Occupant-Any Injury                    |
|   | 39-Vehicle Accident Pedestrian-Any Injury                  |
|   | 40-Vehicle Accident Washing-Any Injury                     |
|   | 41-Vehicle Entering / Exiting-Any Injury                   |
|   | 42-Vehicle Operating / Driving-Any Injury                  |
|   | 43-Wire-Any Injury   |
|   | 44-Slip, Trip, Fall-Different Level /Curb /Pot Hole/Stairs |
|   | 45-Slip, Trip, Fall-Entering / Exiting Vehicle             |
|   | 46-Slip, Trip, Fall-Ladder                                 |
|   | 47-Slip, Trip, Fall-Same Level                             |
|   | 48-Slip, Trip, Fall-Snow and Ice                           |
|   | 49-Slip, Trip, Fall-Tree                                   |
|   | 50-Miscellaneous   |
|   | 51-Welding-Any Injury                                      |
|   | 52-Sharps-Any Injury                                       |
|   | 53-Operating Equipment-Any Injury                          |
|   | 54-Branched / Brush / Mulch / Weeds-Any Injury             |
|   | 55-Pole Saw / Prune Saw-Any Injury                         |
|   | 56-Tree-Any Injury   |
|   | 57-A Nail-Any Injury                                       |
|   | 58-Stress Claim-Any Injury                                 |
|   | 59-Struck By an Object-Any Injury                          |
|   | 60-Carpel Tunnel-Any Injury                                |
|   | 61-Heat Or Cold Exposure-Any Injury                        |
|   | 62-Fatigue, Cumulative Work                                |
|   | 63-Yak Track-Any Injury                                    |
|   | 64-Work Place Violence                                     |
|   | 65-Blood Borne Pathogens                                   |
|   | 66-Burns   |