1. **Program Effectiveness and Evaluation Methods**

Performing evaluations to determine the effectiveness of your program is necessary as the Department of Labor and Industry requires that “evidence of the effectiveness and accomplishments in accident prevention” be provided, with the inclusion of measures, as part of an Accident and Illness Prevention Program (AIPP). This is required under Article X, Section 1000(e)(6) of the Workers’ Compensation Act.

The purpose of this section is to provide methods for evaluating the effectiveness and quality of the agency AIPP. There are three main areas that need to be addressed in order to satisfy the requirements of the Bureau of Workers’ Compensation and the commonwealth.

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1. Determining AIPP effectiveness – Using a combination of trailing and leading indicators is needed to track and measure the performance of the safety program (i.e. agency effectiveness measures spreadsheet and agency metrics report).
2. Loss and data analysis – Identifying the types of injuries and where they are occurring is vital to discovering possible injury trends, areas of program weakness, and safety program goal/objective development. Identifying the injury types or trends allows agencies to allocate the resources and develop the procedures necessary to address the issues (i.e. Safety Scorecard).
3. Annual program element evaluation - Reviewing and evaluating each element is necessary to ensure compliance and identify opportunities for improvement (i.e. gap analysis, self-audits or OA program review form).

Before you can measure AIPP effectiveness, you must determine what data or indicators will be used to evaluate the program. The effectiveness of the program can be measured by either focusing on reducing an existing problem/failure (trailing indicators) or comparing the success of your program/system to a defined baseline (leading indicators). One method to initiate this effort begins with tracking the results provided in the agency effectiveness measures spreadsheet and the agency metrics reports. The reports are updated and provided by the Office of Administration. The effectiveness measures are provided every six months and metric report is provided annually. The reports use a series of trailing indicators to track the agency’s claims history.

*(The effectiveness measures and metrics report are available on the OA safety website.)*

Commonly used trailing indicators include:

* Workers’ compensation cost
* Number of claims
* Frequency rate per 1000 employees
* Cost rate per employee
* Average cost per claim
* Lost time

When using injury or claims data (trailing indicators) to evaluate the effectiveness of the program, it is necessary that a loss analysis be conducted to identify possible trends (injury types, locations, and possible causes or contributing factors). To assist in accomplishing the loss analysis, safety coordinators are encouraged to utilize the Safety Scorecard released quarterly by the Office of Administration to review their claims information, investigate the injuries and develop an internal tracking system (if needed) to log the injury data. In order to implement corrective actions and prevent recurrences, agencies must identify the number, types, location and cause of their injuries. Please contact the Office of Administration safety consultants for additional assistance or information on how to obtain access to the Safety Scorecard or setting up a corrective actions tracking database.

When using trailing indicators to determine the effectiveness of the program, keep in mind that injury rates are, by themselves, one of the least effective ways to gauge the future success of a safety program. While important to identify trends and areas in need of improvement, trailing indicators are after-the-event measures and tell only what has already happened. Rather than relying solely on them, it is desirable to also establish more proactive measures (leading indicators) to determine the effectiveness of the accident and illness prevention program.

Using leading indicators is especially useful for agencies with little loss history or data. Measuring the level of safety-related activities being carried out is a leading indicator that signals future progress. Examples of such activities include:

* Program goals, objectives, and action items established and completed.
* Number of hazards (not accidents), reported and corrected.
* Number of inspections and equipment safety checks scheduled and performed.
* Number of safety related trainings / meetings scheduled and conducted.
* Data from employee opinion or perception surveys asking about safety, and how the results change over time.
* Rate of closure in resolving identified safety issues, i.e. policies and procedures developed or implemented.
* Measures of the quality with which safety tasks were completed.

#### The final method to evaluate the quality of the safety program is to conduct annual reviews of each required program element. Reviews and critiques of the individual program elements are useful for determining the strengths and weaknesses of the overall program. Areas of weakness or deficiency can be addressed by the appropriate actions to ensure compliance and effectiveness in preventing workplace injuries and illnesses. The commonwealth program review form or requirement guides can be easily tailored into an agency self-audit checklist.