



Memorandum

To: House Committee on Commerce and Economic Development;
Senate Committee on Economic Development, Housing and General Affairs

From: Anne M. Noonan, Commissioner, Vermont Department of Labor

Date: 1/15/15

Re: Vermont Department of Labor 2014 Study: Robert H. Wood Criminal Justice and Fire Service Training Center Study

Per Section 58 of Act 199, The Vermont Department of Labor (VDOL) and the Office of Risk Management (ORM), in consultation with the Vermont League of Cities and Towns (VLCT), and any other interested parties, shall conduct a study to analyze existing and frequently occurring injuries suffered by individuals while attending the Vermont Police Academy, analyze preventive measures to avoid injuries, recommend who should bear the financial burden of the workers' compensation premiums, and recommend preventive measures necessary to reduce injuries.

For the purposes of this study the group focused on the Vermont Criminal Justice Training Council (VCJTC), also known as the Vermont Police Academy.

Report due January 15, 2015.

Members of Study Committee who participated:

VDOL and ORM	VLCT	Vermont Police Academy (VPA)
Matt Hill, VDOL, Principal Assistant to the Commissioner	Joe Damiata, VLCT, Manager, Underwriting, Safety and Health Promotion	Cindy Taylor-Patch, VPA, Director of Training
J. Stephen Monahan, VDOL, Director of Workers' Compensation	Fred Satink, VLCT, Loss Control Supervisor	
Scott Meyer, VDOL, Project WorkSafe Director		
Bill Duchac, ORM, Risk Management Manager		
Wayne Berge, ORM, Workplace Safety Coordinator		

The VLCT, on behalf of a Vermont municipality, raised the issue of injuries at the Vermont Police Academy (VPA) with the House Committee of Commerce and Economic Development during the last session. The main concern of the municipality was that they are required to send their law enforcement officers to the VPA, yet they do not have control of what occurs there. This particular municipal department is small (six officers) and lost an officer to an injury suffered at the VPA. The officer was out of work for an extended period of time, so the department had to hire another officer as a replacement. The unexpected hiring of an additional officer and elevated Workers' Compensation cost (experience mod and payroll increase) caused budget issues. It was estimated by the VLCT that last year their incurred losses were about \$44,000 over 14 claims for municipal law enforcement employees. Therefore, this particular municipal department argued that the Vermont municipalities should not have to pay for Workers' Compensation claims when they are out of their control. The VLCT does, however, have a seat on the VCJTC where changes in training curriculum could be implemented. Therefore, the VLCT does have the ability to influence and implement changes in training. The VLCT holds one seat out of sixteen.

Analyze existing and frequently occurring injuries¹:

The VPA tracks fitness levels when a recruit enters the academy. The Vermont State Police (VSP) follow the Cooper Standards when hiring officers. The municipal departments generally do not require a set fitness standard when hiring officers, but all recruits attending the VPA must achieve a 40th percentile for their age and gender based on the Cooper Standards², regardless of the employer. All must also achieve the 50th percentile by the end of the program.

The VPA Director of Training, Cindy Taylor-Patch, stated that on several occasions injuries occurred as a result of a preexisting injury or a preexisting medical condition. Trainees and their physicians may not have reported (or even recalled) the previous injury when the entry physical exam was conducted, only after the injury is sustained, the recruit may recall and share the information regarding the earlier injury. This statement was, however, anecdotal, and the group did not look at data pertaining to this issue.

¹ See Appendix 1

² <http://vcjtc.vermont.gov/training/pt>

After discussions with the group, Ms. Taylor-Patch and the VPA have already begun implementing new medical forms with more specific information that were discussed over the course of the meetings. VPA also strengthened their medical forms in 2013 with help from Occupational Health Professionals at the Rutland Regional Medical Center.

Analyze preventative measures to avoid injuries:

The VPA follows extensive training protocols to ensure the safety of participants, while at the same time ensuring the law enforcement officers are receiving the proper training to fulfill their duties as a police officer. See Appendix 2 for the VPA Physical Training Program curriculum.

The VLCT³ has made recommendations to improve safety and injury rates by proposing to follow a model of training developed by Rob Boe of the League of Minnesota Cities (LMC). One aspect of the training program enacted by the LMC is the partnership of Training Safety Officer (TSO) and the Instructors. The TSO and the Instructor jointly develop the training routine to ensure the safest routine as well as the most useful training techniques.

An important aspect of the TSO's participation is to be completely visible at all times for the participants. The TSO does not focus on the training technique, but rather the safety aspects of the training. With a script of training that was developed with the Instructor, the TSO can more easily identify situations that lead to injury and watch all participants for safety issues.

Constant communication between the TSO and the Instructor keeps everyone on task and they can anticipate high risk drills. Documenting "near misses" also allows the Instructor and TSO to identify problem drills and make corrections if needed.

The League of Minnesota Cities has documented that the protocol has significantly reduced injury rates for their training sessions. The VPA has implemented many safety protocols and is actively adjusting and trying new programs to ensure recruit safety. They use a version of the TSO program, but the representatives from the VLCT do not believe the safety measures are to the extent that LMC is using. According to Ms. Taylor-Patch, "If we completely adopted this particular model of TSO, where they do not also act as an Instructor, we would not have an adequate number of staff to act as TSO's. We believe in our Instructors-as-TSOs model." To this point, there are multiple Instructors onsite at the VPA for every training to assist with safety and technique to reduce injuries. In effect, this puts more instructors in the room leading to more observation than simply having an Instructor and a TSO. The Instructor to student ratio in the VPA is very high and the Instructors wear different clothing than the recruits so they are highly visible to the recruits.

Other procedural aspects of the model developed by the LMC are already in place by the VPA. For example, the idea of constant communication between TSO and Instructor is already in place; the only difference is at the VPA the multiple Instructors act as TSO/Instructor, and there are multiple Instructors at every training. The VPA is also discussing methods for documenting safety briefings and reminders for better data retention.

Ms. Taylor-Patch stated that because of limited resources, the VPA does not change training spaces. This leads to a very acute knowledge of the space by Instructors and this knowledge is essential to recruit safety.

³ See Appendix 3

Recommend who should bear the financial burden of the workers' compensation premiums:

The VDOL and the ORM suggest the current practice of determining the financial burden of Workers' Compensation be maintained. Currently, most employees of the municipality are covered by the VLCT Workers' Compensation policy. Municipalities are the current legal employers of the officers attending the VPA. The State has no input or decision-making regarding who the municipality hires or sends to the VPA. It would not be current practice, nor appropriate, for the State of Vermont to cover municipal employees during their time at VPA.

The State of Vermont covers all State law enforcement employees.

There is no budget or General Fund allotment for the State to pay for the municipalities' Workers' Compensation. If the cost of Workers' Compensation for municipal officers was shifted to the State of Vermont, then the municipality would have to pay a high tuition for training.

Recommendations; preventative measures to avoid injuries:

The Academy should implement a formal injury review process, including:

- Regular, monthly reviews of injury reports by the Academy Commander.
- Identification of the most common causes of injuries.
- Proper documentation of injuries (using uniform definitions to describe the injuries, rather than having the instructors opinion determine whether to call the injury "concussion," or "multiple head trauma," or "concussion to the head.")
- Training for instructors in how to describe and document them in a clear, uniform way.
- Serious injuries should be investigated by a team with members from the training staff, VLCT, VDOL, and Risk Management. Serious injuries include death, permanent disability, hospitalization, and permanent medical separation from the training program.

The VPA have made some minor changes to the form so VLCT can easily identify Basic vs. In-Service incidents. The VPA has also informed staff that more thorough answers are needed from the injured party. As VLCT receives reports from the VPA, they are encouraged to request adjustments to the form that make data capture easy for their staff. The VPA has also been in contact with the Rutland Regional Medical Center to discuss what a complete report is, and has adjusted the complete report standard. Ms. Taylor-Patch will also update the data collection protocol, clarifying the need to review serious injuries with the staff at the VPA.

In the patient questionnaire, the VPA should add questions on frequent headaches, broken bones, back sprains and surgery, tears and pulls to ligaments and tendon. The medical history report should put more emphasis on the preexisting injury and illness issue. Also, noise, including hearing loss, is not mentioned on this form. The hiring agency could require, as a precondition to attendance in the basic training, a baseline audiogram just as they require a physical. The State Police require audiogram and follow ups throughout one's career. The municipalities could require one for their recruits. This could act as an objective starting point for any Workers Compensation Claim on hearing loss.

During the trip that VDOL and ORM took to the VPA during training sessions, they made a few observations that were acted on immediately by the VPA. For example, during a training exercise the Instructors were utilizing an old “split rim” tire that was deemed unsafe. The VPA removed the tires from training. Also, it was discovered that there was a significant lag time when reporting injuries for Workers’ Compensation reasons which lead to unnecessary costs. Sometimes, after the VPA passes on an initial claim, an employer does not file the injury report to the VDOL in a timely manner. This was deemed to be an easy fix, and Ms. Taylor-Patch agreed that the VPA could “cc” the VLCT when an incident occurs so it could be acted on in a timely manner and the VLCT could monitor the claim to ensure it’s being acted on.

There were also recommendations for the need of more specific data collection as it relates to training (Basic Training, In-service, etc.), as well as the nature of the activity that caused the injury.

Corrective actions already taken by the VPA:

1. Implemented new medical forms with more specific information that were discussed over the course of our meetings. VPA also strengthened their medical forms in 2013 with help from Occupational Health Professionals at the Rutland Regional Medical Center.
2. The VPA has also informed staff that more thorough answers are needed from the injured party.
3. Safety issues observed by VDOL and DFR during the summer have been corrected.
4. “cc” the VLCT when an incident occurs so it could be acted on in a timely manner and the VLCT could monitor the claim to ensure it’s being acted on.

Parties responsible for Workers’ Compensation:

Currently, the parties responsible for Worker Compensation premiums are the employers of the employees attending the Police Academy. Therefore, municipal employees are not covered by the State Workers’ Compensation insurance, but are covered by municipality’s workers’ compensation insurer.

Findings By: Scott Meyer, Project WorkSafe Director; Wayne Berge, Workplace Safety Coordinator

“Our findings indicate strong, well trained, Police Academy employees who are very dedicated to what occurs at this facility. Several examples of staff competency can be provided. One in particular was for the physical fitness class. The instructor researched what the trainees had done for the days leading up to this class. Extra care was made to ensure they did not use muscle groups for fitness training that had already been stressed during the use of force training. This class has also made sure trainees were well hydrated.

Obstacles that were notable as vetted thru numerous staff interviews is the lack of funding and staffing. Staff felt if they had better funding and staff retention, many of the issues related to injury and illness rates could be rectified. Funding and staffing in relationship to injury and illness rates were not part of this study. However, Occupational Safety and Health Administration (OSHA), The National Institute for Occupational Safety and Health (NIOSH) and insurance groups have numerous studies⁴⁵ and other research⁶ that indicates inadequate funding and staffing does have an impact on injury and illness rates.”

⁴ <https://www.osha.gov/dcsp/products/topics/businesscase/index.html>

⁵ <http://www.safetyandhealthmagazine.com/articles/protecting-the-public-worker-2>

In response to the comments by Scott Meyer and Wayne Berge, Ms. Taylor-Patch stated that the funding issue is mostly due to driving exercises where staff was trained on much larger driving surfaces and are only able to execute certain drills safely on their own, smaller, driving pad. Implementing the entire program with a bigger driving course could result in safer driving skills for officers in the long run. Due to course restraints, however, the VPA is unable to perform serious driving techniques such as “skidding” or high speed training.

Summary

The Workgroup identified several issues for improvement including proper Instructor to Student ratio, more timely reporting of injuries, and better statistical record keeping. Some of the issues raised were acted upon immediately by the VPA, and a few other issues are being implemented.

The VLCT would still support shifting the burden of the Workers’ Compensation costs to the State of Vermont.

The VDOL and the ORM do not recommend the shifting of the municipal Workers’ Compensation costs to the State.

⁶ <https://www.osha.gov/dsg/InjuryIllnessPreventionProgramsWhitePaper.html>

Appendix 1.

Measure(calendar year, Police recruits only)

State Police

Event or exposure leading to injury or illness

	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>		
	<u>Number</u>	<u>Number</u>	<u>Number</u>	<u>Number</u>	<u>Number</u>		
firearms training							0.0%
Overexertion							0.0%
pt - bike							0.0%
pt - sports (basketball, dodgeball, frisbee, etc.)							0.0%
pt - other/not specified							0.0%
slip, trip, fall							0.0%
OC (pepper spray)		1	1			2	4.3%
tick bite	2					2	4.3%
all other event or exposures	2	2	1			5	10.9%
pt - running	1	2	2	2		7	15.2%
pt - circuits	3	5	2	3	1	14	30.4%
USE OF FORCE ALL ⁷	4	2	5	5		16	34.8%
Total:	12	12	11	10	1	46	100.0%

⁷ All – includes: use of force training - arm bar take down, use of force training – boxing, use of force training - defensive tactics, use of force training - fight in progress/redman, use of force training - ground fighting, use of force training - handcuffing techniques, use of force training - strikes/punching bag/baton

Measure(calendar year, Police recruits only)

Event or exposure leading to injury or illness

<u>Municipalities</u>						
	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	
	<u>Number</u>	<u>Number</u>	<u>Number</u>	<u>Number</u>	<u>Number</u>	
Overexertion						0.0%
pt - bike						0.0%
pt - circuits						0.0%
tick bite						0.0%
firearms training			1		1	1.1%
OC (pepper spray)		1			1	1.1%
slip, trip, fall		1			1	1.1%
pt - sports (basketball, dodgeball, frisbee, etc.)	1	1	1	3	3	9 9.6%
all other event or exposures	3	4	1	2	2	12 12.8%
USE OF FORCE ALL ⁸	3	7	3	4	5	22 23.4%
pt - running	3	12	4	2	3	24 25.5%
pt - other/not specified	1	4	6	8	5	24 25.5%
Total:	11	30	16	19	18	94 100.0%

⁸ All – includes: use of force training - arm bar take down, use of force training – boxing, use of force training - defensive tactics, use of force training - fight in progress/redman, use of force training - ground fighting, use of force training - handcuffing techniques, use of force training - strikes/punching bag/baton

Measure (calendar year, Policed recruits only)

Sheriffs

Event or exposure leading to injury or illness

	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	
	<u>Number</u>	<u>Number</u>	<u>Number</u>	<u>Number</u>	<u>Number</u>	
firearms training						0.0%
OC (pepper spray)						0.0%
overexertion						0.0%
pt - bike						0.0%
pt - circuits						0.0%
slip, trip, fall						0.0%
tick bite						0.0%
pt - sports (basketball, dodgeball, frisbee, etc.)		1			1	5.9%
USE OF FORCE ALL			1	1	1	3 17.6%
pt - running		3	1			4 23.5%
pt - other/not specified		2		1	1	4 23.5%
all other event or exposures		3		2		5 29.4%
Total:	0	9	2	4	2	17 100.0%

A balanced scoreboard was constructed to evaluate events vs. a single aggregate indicator in comparing Vermont State Police, Municipalities and Sheriffs sixteen week programs training injuries. Data from other categories to include Game Wardens, DMV Enforcement and other miscellaneous were collected but not included as they were statistically significant.

Appendix 2:

98th Basic PT Plan

Week	Monday	Tuesday	Wednesday	Thursday
1 Basic Form 8/4-8/8	Day 1	Introduction Exercises, 2.69 mile run	Full Body Workout- Utilize weights	Insanity
2 Perfecting 8/11-8/15	Upper Body- Circuits with Core Work	Long run-3.41 miles	Full Body and Abs	Plyos with Strength
3 8/18-8/22	Upper Body	Long run- 3.41 miles	Circuits and Abs	Insanity
4 Weights 8/25-8/29	Full Body workout with Core	Scenario Night No PT	Full Body and abs	Long run-4.2 mile
5 9/1-9/5 Weights	Full Body Circuits With Core	Long run - 4.2 miles	OC Cert- Light PT ABS	Insanity
6 Speed 9/8-9/12	Mid-Term PT test	Long run - 4.92miles Mobil Loop	PT with Drew- Full Body Circuits	Obstacle Course with TA Scribner
7 9/15/9/19	Circuits And Core	Scenario Night No PT	Full Body Circuits And Abs	Long Run-4.92 miles
8 9/22-9/26	Circuits and Core	Long run -5.02 Cooley Bridge	Full Body circuits and	Insanity

			Abs	
9 9/29-10/3	PT on own	FIREARMS	WEEK Abs	Insanity
10 10/6-10/10	Strength and Core	Long Run 5.02 miles	Strength and Abs	Insanity
11 10/13-10/17	Boxing	Boxing	Boxing	Boxing
12 10/20-10/24	Final PT Test	Scenarios No PT	Strength and Abs	Long Run 6.4 miles
13 4/28-5/1	Strength and Core	Long run - 6.4 miles Goat Farm	Strength and Abs	Plyo
14 5/5-5/8	PT on own	PT on own	PT on own	PT on own
15 5/12-5/15	PT on own	Scenario Night No PT	Graduation practice	Graduation practice

Appendix 3:

From Fred Satink, VLCT, Loss Control Supervisor

I've attached some information⁹ that I've collected with regard to the training safety officer (TSO) program. This is from Rob Boe, of the Minnesota League of Cities who has been refining this approach for the past couple of years, working with law enforcement agencies in MN, KY and other states. The presentation is an explanation of the TSO concept and implementation methods. I've paraphrased the key elements of the program as he has described it:

1. Commit to the TSO concept. For any program or policy to be successful, management must fully adopt and visibly support it through provision of resources, training of affected individuals (in this case, instructors and training officers), establishment of policy and use of accountability measures to ensure full program integration.
2. Execution of program concepts. Key program concepts include:
 - a. TSO/Instructor partnerships. This is essential to program success because the instructor and TSO jointly consider the lesson plan, safety elements, how they will work together to maintain a low risk environment, etc. A pre-planning session between the individuals is recommended.
 - b. The pre-planning meeting generates discussion regarding prior trainings, high risk areas of the training, risk management controls, test or train assessment and evaluation of "off-script behavior" potential. This results in the development of a safety plan. The safety plan also includes weather, room configuration and PPE needs.
 - c. Development or use of an EMS plan (the specifics of the plan are dependent on the nature and location of the training, as well as other factors)
3. Site inspection & Setup. On training day, the TSO is responsible for site inspection (for hazards and elements that may contribute to injuries) as well as establishment of EMS equipment, per the EMS plan for that training. For instance, in an active shooter exercise, there will be multiple safety checks to ensure that no live ammunition is in use or present.
4. Pre-training safety briefing of participants. This is supported by a 2013 IACP study that showed a 41% reduction in injuries when a safety "lecture" was inserted at the beginning of hands-on or active training. This includes a discussion of roles, safety concepts, off-script behaviors, time out/stop requirements and other measures (see PowerPoint for more info)
5. TSO observation. This includes both warm-ups and active training. TSO takes position where all training participants are visible. He/she does not focus on content of the training-but instead safety elements such as position of individuals relative to interior building features, escalation of use of force, off-script behavior, awkward falls, etc. Since the TSO knows the script and lesson plan, situations that can lead to injuries are more easily identified. Observation also applies to role players, including citizen volunteers. Keeping them on script is equally important.
6. Looping with Instructor. Use of "looping" by TSO and instructor to regularly communicate hazards, escalations, share information, etc.

⁹ PowerPoint Presentation available upon request

7. Data capture. TSO captures "near misses" so that the situation that led to these can be reviewed prior to the next training. Any injuries that occur are of course documented thoroughly so that causation and contributing factors can reviewed later with the objective of preventing a recurrence in a future session.

Obviously, the 7 points above are a paraphrase of the TSO concept-but hopefully this is enough for us to understand that all of the details matter and that "just having" a safety officer does not provide the level of injury prevention that this "TSO program" envisions. I encourage everyone to review the attached presentation and Rob's rough talking points that are included.