

## Summary of Proceedings

Attendees: Joe Rose, Bill Degnan, Bruce Martin, Norman Miller, Jim Esdon, Debra Samaha, Mary MacCaffrie, Allison MacCormick, Elizabeth Carpenter-Song, Jeff Cyr, Rob Stenger, Deb Johnson, Ross Lieb-Lappen, David Brenner, Helene Lieb, Lisa Purvis, Amanda Albright

### Introductions:

- **Bruce Martin** – Fire Marshal from VT. Wants 0 deaths from CO in VT
- **Helene Lieb** – victim, founded Edward Lappen Foundation and this CO group has full commitment to provide support from the foundation. She is a doctor of Psychology and is very willing to help.
- **David Brenner** – supports Helene and family, lawyer in MA
- **Ross Lieb-Lappen** – victim, son of Helene
- **Debbie Johnson** – NH Children’s Environmental Centers and Dartmouth Primary Care Research Network
- **Lisa Purvis** – teacher in Dartmouth’s Master of Public Health program
- **Bill Degnan** – NH Fire Marshal. Wants 0 deaths from CO in NH.
- **Jim Esdon** – Program manager for Safe Kids NH (part of CHaD) . Injury Prevention Center
- **Amanda Albright** – Dartmouth School of Medicine Instructional Designer. Works with faculty to design curriculum
- **Norman Miller** – victim, Dartmouth Professor of Community Medicine, International Anthropologist, written case study on his accident
- **Joe Rose** – President of Propane Gas Association of New England. Looking to reduce accidents. Propane Education and Research council can help foot bill for printing and dispersal of pamphlets and other information.
- **Rob Stenger** – owner Simple Energy. 25 years in the business. Member of many boards
- **Jeff Cyr** – Chief Mechanical Officer for NH Fire Marshal’s department. Education based licensing program. Works with local and state inspection agencies. Education of technicians
- **Elizabeth Carpenter-Song** – Dartmouth Medical Anthropologist. Engages with families in UV
- **Debra Samaha** – group coordinator, on a fact finding mission. Need to reset mindset of CO deaths because they are completely preventable. Wants group to compare gaps between NH and VT legislation. Primary goal is to meet Fire Marshal’s goals. Recognizes that the children and the elders are the most vulnerable with regard to CO.

Helene – Cohasset Cares – cooperation between fire department and Elder care. The foundation provides CO monitors.

Norman – provided details of accident: control mechanism on the control fan failed yet furnace kept running. Alarms went off but Norman lingered. Transported to hospital with high blood pressure. This scared Norman and so he began investigating source of problem. Got fire Marshal, plumber and oil company involved. Norman thankful for

rental laws (since he has a unit he knew to protect himself and house). Norman concluded that the issue was between himself and the technician. Very murky area due to human behavior. Does a technician under contract to 'clean and maintain' have the obligation to report code violations? Answer: no legal obligation but there is a Good Samaritan law that requires the technician to say something. But how many people know of the Good Samaritan law? Further researched industry – talked with plumbers and people considered more 'off the grid'. Lower income people will avoid costs even if system is red tagged. The red tag system does not seem to work well. Higher income people didn't know details of system and relied on technicians to complete all work. Concluded that human dynamics are part of the problem. Dynamics of oil/propane companies at issue too – technicians don't want to force issues at homeowners in fear of losing sales. Technicians may not have support of management. The technicians are all very concerned and trained but have issues that prevent them from doing all they want to do. Started to do a casual anthropological survey. Started at bottom of New Boston and hiked 3 miles out the road talking with homeowners and town workers. Found 5 indicators of CO issues. Feels these results warranted more action. Wrote article. Argues that public awareness should be increased. Look into legislation to see if Fire Marshal has the law as a foundation and support required to do their job. Submitted article to Valley News. They accepted it, held it and asked for rewrite and still have not published. Norman feels article could be used as a case study. His house had 5 violations and yet no one noticed despite having the system serviced each year and one of the violations was near the tank where 100s of fill-ups took place. Norman received compensation from oil company and will use the money to support the work of this group - \$10,000.

Helene – Husband died due to CO poisoning incident in their home. Other family members and friends were involved in incident. Lots of violations but never made aware of them. Put trust in the industry to take care of the house. Recognizes it is a multi-dimensional problem and likes the holistic approach of this group. As a result of the incident, she is very driven to help raise awareness so no one else has such a horrific incident but also has a feminist agenda as well – women in particular need to know more about the workings of a house.

No one aware of victim or advocacy groups in NH or VT.

\*\* Potential to do: Create a group. Norman willing to approach victims yet understands to tread lightly because not all will be willing to go public.

Is there a statute in NH/VT to report accidents and deaths? NH: CO deaths are **mandated** to be researched. Some of the records of the incidents are public and some private. For injuries, local fire department must research but no required reporting to state. VT: investigations are **not mandatory** though fire Marshal is involved in all deaths. The problem can be that the information related to the case can be entirely private if there was a lawsuit that settled. Often times the records are made private as a part of the settlement.

\*\* Potential to do: Create centralized database for accidents and injuries.

Lisa Purvis – hoping to find a student that will take on the project of pulling together the data.

NH Fire Marshal – problem is that injury statistics are not good or timely. In addition, the scope is larger than residential. No protection for restaurants or commercial spaces.

Lisa: inventory of policies and codes needs to be completed. Need to create a foundation of information so next steps and awareness can be based on solid information. Data needed: deaths and injuries in VT and NH, policies in NH and VT, best practices for emergency response and industry action. Need to educate emergency responders and public. Might reach out to MPH/MBA people.

Public Health Undergraduates and consulting projects with Kathy Pipes might be a resource.

Deb Samaha – adding the realist perspective- may not find a student to do these projects.

Deb Johnson – Rural Health Scholars would love this project. First and Second year students. Love country medicine issues. CTSA might also be a research supporter. They have a request for application in January. Might be an opportunity. Also, Picory (??) funds pipeline projects. Funded by Patient Center Outcome Research. Example: \$15K plan for 6 months, \$25K for feasibility study to work with data and then more for a research grant. Need to keep focus pragmatic and the Fire Marshals and industry would set the project goals.

Bill – NH Fire Marshal

Target Audiences:

1. Corporate World. Roger Berkowitz owner of Legal Seafood lost store manager to CO death. Problem in adjacent occupancy and no CO monitor in manager's office.
2. Technicians – first line of defense
3. Inspectors
4. Public – different age groups. Can use some of the extensive research done for smoke detectors. Note: Currently 1/3 houses have CO monitors. No law requiring compliant CO monitors upon sale or transfer of owner occupied home. That is the only time to get into a residential house. Need lots of education and maybe bring in home inspectors to help.

Potential Deliverables:

1. Develop educational programs for all media for all target audiences

2. Develop delivery strategy and way of measuring effectiveness of these educational programs.

Mary and Jeff can help with these deliverables.

\*\* Note: still looking for answer about whether Doctors ask about CO detectors like they do smoke alarms. Deb S can help find answers.

Bruce – VT Fire Marshal

Can bring Fire Marshal to table as resource. Need more data: number of deaths and potential incidents. Need victim's stories – critical for getting word out. Industry needs to take responsibility.

Deliverables: media – all reporting in media should conclude with the message that CO monitors are required. Use news media as a channel to get the word out. Offer of 35 field inspectors to help effort. Encourage to report specifics so more than anecdotal. Report to Joe to get information out to industry. Feels helpless since single family homes are off limits. Concludes that industry needs to be the main group taking responsibility.

Red tag system – potential improvements in process so system more effective.

VT Fire Marshal – mandatory inspections required every 2 years but it is not happening.

Joe and Rob representing industry:

Goal of 0 deaths shared. Feels perhaps WMUR's NH Chronicle in could do a segment on CO dangers to help spread the word.

Bill – Safe Healthy homes in NH – home visitors have checklist – make sure CO is a part of it.

Helene – Cats and Dogs are canaries in the coal mine. Veterinarians can educate people to install CO monitors to protect pets. Helene is working with vets in her area.

What people can provide:

Joe – train inspectors and technicians, help provide public outreach, funding. Concern: management ideology – needs to change a bit. Technicians need support from management. Also need to teach about Good Samaritan law.

Rob S – awareness, bump up responsibility of technicians, bump up consumer awareness, get help from real estate Home Inspectors since they are the ones enter residential homes. Management needs to provide more focus for technicians. Expertise not always there to help technicians.

Jeff – Duty to protect those under their care. Obligation to define what that means. Raise awareness of technicians. Follow notifications from technicians up the chain of

command. Needs resolution help from management rather than management ignoring the notification.

Fireman's Association purchased CO/smoke detectors – If they respond to an incident and find a lack, they provide the equipment and the tools to install.

Ross asked Simple Energy if the foundation were to provide CO detectors, would Simple Energy technicians install them in a house without one? Yes responded Rob. Homeowners don't often complain about something that is free. The technicians would also have to educate home owners about steps that need to be taken to maintain the monitor.

\*\* Helene – send out list of recalled CO monitors to group

Norman outlined 3 propositions:

1. 1 year seminar – Jan – Dec Monthly meeting. Establish executive committee. Determine ideal project. Outcomes: get data, propose legislative changes.
2. Focus on educational material and awareness. Need to analyze effectiveness of materials, planning and some research, need targeted audience, prevention and safety awareness messages.
3. Deep grassroots survey – sample survey – identify problems between homeowner and technician. Design survey for victims and incidents. Participant observation – observe processes to learn about what is happening on the ground. Figure out what specifically technicians are up against.

Discussion of these propositions followed:

Proposition 1 - Need a leader to take on the projects. Initial funding at \$10K, would need additional

Proposition 2 – talent to design educational product in the room. Where and who to target

Proposition 3 – complicated research. Need funding, need Project Director, need host department – Community and Family Medicine would probably embrace. How much money - \$20-\$25K or less than \$50K for pilot project.

Amanda and Elizabeth – cannot design educational materials without data. Would at least need a rapid cycle of ethnology before materials can be designed.

Perhaps more than 1 path or proposal can occur at the same time.

Perhaps a short term goal: Increase number of CO monitors in homes from 33% to 100%.

Joe: Propane Educational Research Council – probably fund consumer education pretty easily.

\*\* Norman will provide 4 page write up of the 3 propositions before the next meeting on Jan 4.

From board/post-it notes:

Funding Options:

- Pipeline Projects
- Foundation VT

Parking Lot:

- Policy on sale or transfer of residential homes
- MM Surveillance
- “Red tag” protect those who get red tagged
- Good Samaritan Law

Next Steps:

- Victims Group
- Policy
  - o mandatory reporting in VT
  - o CO surveillance
  - o Codes – commercial
- MPH – Master Public Health
  - o Inventory m/m
  - o Codes
  - o Best practices – industry, education, emergency response
- MPH/MBA – Master Public Health/Master Business Administration Combination
  - o Presidential Scholars
  - o Rural Health Scholars
  - o CTSA – transitional science request for application (RFA)

Next meeting: January 4, 2015 10am-12pm with light lunch. 52 North Labombard Rd Lebanon, NH, conference room 111. Please RSVP for lunch planning purposes.