

_____ – STANDARD OPERATING GUIDELINES

TITLE: INCIDENT OPERATIONS S.O.G. #
MONITORING OF HYDROGEN CYANIDE AT STRUCTURE FIRES

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PURPOSE:

HCN is deadly gas that is produced at almost every fire. Many firefighter injuries are now being linked to possible HCN exposure. This gas is 24 times more deadly than Carbon Monoxide (CO), which the Department currently monitors for at all structure fires.

PROCEDURE:

As soon as the fire is brought under control at least two personnel will need to be available to monitor the structure until safe levels are established.

Symptoms of HCN exposure are quite similar to those of CO exposure. One specific indicator that is present in HCN exposure is rapid respiration, and gasping for air. Personnel will not begin to feel better once placed in fresh air, and will maintain a pulse of >100bpm in adults.

SCBA should not be removed by personnel operating in or near the structure until CO levels fall below 35 parts per million (ppm). The action level for HCN will be 5 ppm when it is monitored. If it is not being monitored the action level will be based on CO.

Persons exhibiting symptoms of HCN exposure should be treated according to St. Clair County Medical Control Protocol Section 7-4(S) - CYANIDE EXPOSURE