## Partial Chemical Composition of Surgical Smoke

## Chemicals in Surgical Smoke

acetonitrile hexadecanoic acid acetylene hydrogen cyanide

acrolein indole acrylonitrile isobutene alkyl benzenes methane

benzaldehyde 3-methyl butenal
benzene 2-methyl furan
benzonitrile 6-methyl indole
butadiene 4-methyl phenol
butene 2 methyl propanol
3-butenenitrile methyl pyrazine

carbon disulphide polyaromatic hydrocarbons

carbon monoxide phenol creosols propene 1-decene polypylene

2,3 dihydro indene 2-propylene nitril

ethane pyridine
ethene pyrrole
ethyl benzene styrene
ethylene toluene
ethynyl benzene 1-undecene
formaldehyde xylene

furfural

## Surgical Smoke - Protection

- SEDs can be utilized with open or minimally invasive surgeries.
- Use of SEDs constitute the most effective means to reduce operating room surgical smoke.





## **Surgical Smoke - Protection**

- Smoke evacuation devices have 3 components:
  - A capture device
  - A vacuum system capable of generating 30-50 CFM
  - A HEPA [High-Efficiency Particulate Air] or ULPA [Ultra Low Particulate Air] filtration system



