SKILLSIGNAL™
Construction Safety & Compliance

TOOLBOX TALK

The Health Hazard Pictogram: The Injury You Get Twenty Years From Now

TOPIC NO.	DURATION	AUDIENCE
HC-10	10 to 15 min	All Crew

OSHA REFERENCE 29 CFR 1910.1200 Appendix A & C · 29 CFR 1926.1153 · 29 CFR 1926.62

PROJECT / JOBSITE	DATE	PRESENTED BY

01 THE HOOK

START HERE

Nobody on this crew will get hurt by this pictogram today. That is what makes it the most dangerous one. The skull kills you this afternoon. The health hazard, the one with the silhouette and the starburst in the chest, is cancer at 55, lungs that cannot climb stairs at 60, a kid born with a problem because of what was on your clothes. It is on the bag of cement because of the silica. It is on the spray foam because of the isocyanates. It is on the diesel because one swallow can put it in your lungs. Every one of those is a product you handled last week without reading the label. Today we read it.

02 WHAT THE SYMBOL COVERS

HEALTH HAZARD

SIX HAZARD CLASSES, MOSTLY CHRONIC

Under **1910.1200 Appendix C**, the health hazard pictogram goes on: **carcinogens** (“May cause cancer”), **germ cell mutagens** (“May cause genetic defects”), **reproductive toxicants** (“May damage fertility or the unborn child”), **respiratory sensitizers** (“May cause allergy or asthma symptoms or breathing difficulties if inhaled”), **specific target organ toxicity**, single or repeated exposure, Categories 1 and 2 (“Causes damage to organs” / “through prolonged or repeated exposure”), and **aspiration hazard** (“May be fatal if swallowed and enters airways”). Five of the six are about years of exposure. One is about one swallow.

03 WHERE IT IS ON YOUR SITE RIGHT NOW

- **CEMENT, MORTAR, GROUT, CONCRETE MIX**
  Crystalline silica. “May cause cancer by inhalation” and “Causes damage to lungs through prolonged or repeated exposure.” Also corrosion.
- **SPRAY POLYURETHANE FOAM, SOME COATINGS**
  Isocyanates. Respiratory sensitizer. Once you are sensitized, trace amounts trigger asthma for life.
- **DIESEL, KEROSENE, LAMP OIL**
  Aspiration hazard. A swallow that goes down the wrong pipe causes chemical pneumonia. Do not induce vomiting.
- **EPOXY HARDENERS AND RESINS**
  Skin sensitizer (exclamation mark) and often reproductive or organ toxicity (health hazard). Gloves every time.
- **PAINT STRIPPERS, SOME DEGREASERS**
  Methylene chloride, NMP, toluene. Target organ (liver, nervous system) and reproductive hazards.
- **OLD PAINT, SOLDER, BATTERIES**
  Lead. Reproductive toxicant and organ toxicity. 1926.62 sets the exposure rules for lead work.
- **GASOLINE**
  Benzene. “May cause cancer.” Also flammable Category 2 and aspiration hazard. One can, three pictograms.
- **TREATED LUMBER DUST, SOME SEALERS**
  Chromated or copper compounds, formaldehyde. Carcinogen and sensitizer statements on the SDS.

04 THE SIX HAZARDS, PLAIN LANGUAGE

HAZARD 1

CARCINOGEN

Category 1A (known in humans), 1B (presumed), or 2 (“Suspected of causing cancer”). The dose builds over years. **Silica** is the construction carcinogen, and **29 CFR 1926.1153** sets a permissible exposure limit of **50 micrograms per cubic meter** with required dust controls on cutting, grinding, and drilling.

HAZARD 2

MUTAGEN

Damages DNA in a way that can be passed to children. Rare on a jobsite, but it is on some solvents and on the label of a few lab-grade products.

HAZARD 3

REPRODUCTIVE TOXICANT

Affects fertility in men and women, or harms a developing baby. **Lead** is the classic. Also some glycol ethers in cleaners and coatings. The exposure that matters is yours, and the dust on your clothes that goes home.

HAZARD 4

RESPIRATORY SENSITIZER

The first exposures do nothing. Then your immune system learns the chemical, and the next tiny exposure triggers asthma. **Isocyanates** in spray foam and some two-part coatings. Once sensitized, you may never be able to work around it again.

HAZARD 5

TARGET ORGAN TOXICITY

The product goes after a specific organ: liver, kidneys, nervous system, lungs, blood. “Single exposure” means one big dose; “repeated exposure” means a little every day. The SDS Section 11 names the organ.

HAZARD 6

ASPIRATION HAZARD

Thin, oily liquids (diesel, kerosene, mineral spirits) that get into the lungs if swallowed and vomited. Causes chemical pneumonia that can be fatal. "IF SWALLOWED: Immediately call a poison center. **Do NOT induce vomiting.**"

⚠️ **THE DOSE GOES HOME WITH YOU**

Silica dust on your shirt, lead on your boots, isocyanate on your gloves. Every health hazard pictogram is a product that keeps working on you after the shift, and on whoever hugs you when you walk in the door. Change clothes before you leave, keep work boots out of the house, wash before you eat. For lead work, 1926.62 requires it. For everything else, it is just the difference between your exposure and your family's.

05 WHY IT MATTERS

[JOBSITE]

FOR THE CREW

Silica, lead, and isocyanates each have their own OSHA standard with exposure monitoring, controls, and medical surveillance. The health hazard pictogram is the flag that tells a supervisor "this product may trigger one of those programs." A crew that reads it uses the dust shroud and the water feed without being asked.

[INDIVIDUAL]

FOR YOU

You will not feel this one. There is no sting, no smell that tells you the dose was too high. The respirator the SDS names, the gloves it names, and the ventilation it calls for are the only feedback you get. Use them on the days it feels unnecessary.

[HOME]

FOR LIFE OFF-SITE

Home projects with the same products: cutting pavers, spraying foam, stripping paint in a closed basement. Nobody is monitoring your exposure at home. Read the label and wear the respirator it names.

06 TODAY'S DRILL

TODAY'S DRILL **ONE PRODUCT, ONE ORGAN**

Pick the product you use most that carries the health hazard pictogram (start with the bag of cement or the gas can if nothing else). Find its SDS. Read Section 2 for the hazard statement and Section 11 for the organ it targets. Then read Section 8 and compare the respirator and glove spec to what you wore last time you used it. The gap is the drill.

07 CREW DISCUSSION

Take 2 minutes. Pick one.

1. Which health hazard product do you use the most? Do you know what organ it targets?
2. Who on this crew has ever cut concrete or block dry, with no water and no vacuum? How many years?
3. What goes home on your clothes at the end of the day, and who is at home?

08 ATTENDANCE & SIGN-OFF

All attendees confirm they participated in this Toolbox Talk and understand the content covered.

NAME (PRINT)	SIGNATURE

SUPERVISOR SIGNATURE

_____ Date: _____

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