## **HEALTH EFFECTS OF CHEMICALS USED IN FRACKING**

INFOGRAPHIC BY PHYSICIANS FOR SOCIAL RESPONSIBILITY- LOS ANGELES | WWW.PSR-LA.ORG

BASED ON "NATURAL GAS OPERATIONS FROM A PUBLIC HEALTH PERSPECTIVE" | WWW.ENDOCRINEDISRUPTION.ORG COLBORN. THEO, ET AL. "NATURAL GAS OPERATIONS FROM A PUBLIC HEALTH PERSPECTIVE." HUMAN AND ECOLOGICAL RISK ASSESSMENT: AN INTERNATIONAL JOURNAL 17.5 (2011): 1039-1056.



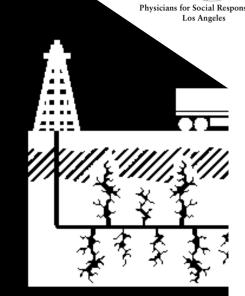
## BY THE NUMBERS

NUMBER OF FRACKING CHEMICAL 980 "PRODUCTS" WE KNOW ABOUT

NUMBER OF CHEMICALS IN THE 980 649 FRACKING "PRODUCTS"

90% "PRODUCTS" CONTAINING CHEMICALS THAT HAVE ADVERSE HEALTH EFFECTS

"PRODUCTS" THAT WE KNOW LESS THAN 43% 1% OF THE CHEMICALS IN THEM



FOR THE 56%0F **FRACKING CHEMICALS WE CAN IDENTIFY** 



SOLUBLE IN WATER



#### **VOLATILE**

SMALLER PERCENTAGE. **BUT BIGGER IMPACT. THESE** CHEMICALS CAN BE INHALED, SWALLOWED, AND/OR ABSORBED THROUGH THE SKIN

**ALL IMAGES FROM** THE NOUN PROJECT FRACKING: TOM ANANTWERP, STOMACH: SERG DELGADO GARCIA, HEART: CATHERINE PLEASE, LUNGS: JORIS HOOGEN-DOORN, WATER DROP: CRIS DOBBINS, CLOUD: JAMES FEN-TON, QUESTION CLOUD: ANAS RAMADAN, WOMAN: LUIS PRADO

WHAT'S A "PRODUCT"?

**KIDNEY** 56% 66%

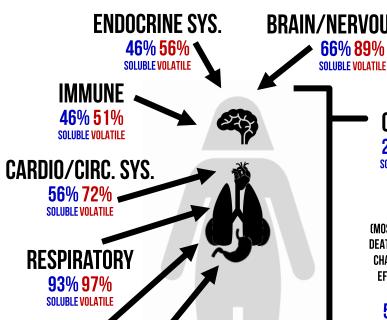
SOLUBLE VOLATILE



A PRODUCT MAY CONTAIN MORE THAN ONE CHEMICAL. A CHEMICAL MAY BE IN MORE THAN ONE PRODUCT.

# **BODY SYSTEMS AFFECTED BY** FRACKING CHEMICALS\*

SHOWN WITH % OF CHEMICALS AFFECTING EACH BODY SYSTEM (SOLUBLE CHEMICALS IN BLUE AND VOLATILE CHEMICALS IN RED)



LIVER/G.I.

**89% 93%** 

**SOLUBLE VOLATILE** 

SKIN,

**93% 97%** 

SOLUBLE VOLATILE

BRAIN/NERVOUS SYS.

CANCER **23% 33% SOLUBLE VOLATILE** 

### OTHER

(MOST OFTEN CITED AS DEATH. ALSO INCLUDES CHANGES IN WEIGHT. **EFFECTS ON BONES** AND TEETH.)

> **56% 78% SOLUBLE VOLATILE**

### MUTAGEN

**33% 35% SOLUBLE VOLATILE**  CHEMICAL DESCRIBED IN OPEN SCIENTIFIC LITERATURE A "CAS" NUMBER IS A UNIQUE NUMBER ASSIGNED TO EVER

**CHEMICALS** 

**NUMBER** 

WITH A "CAS"