

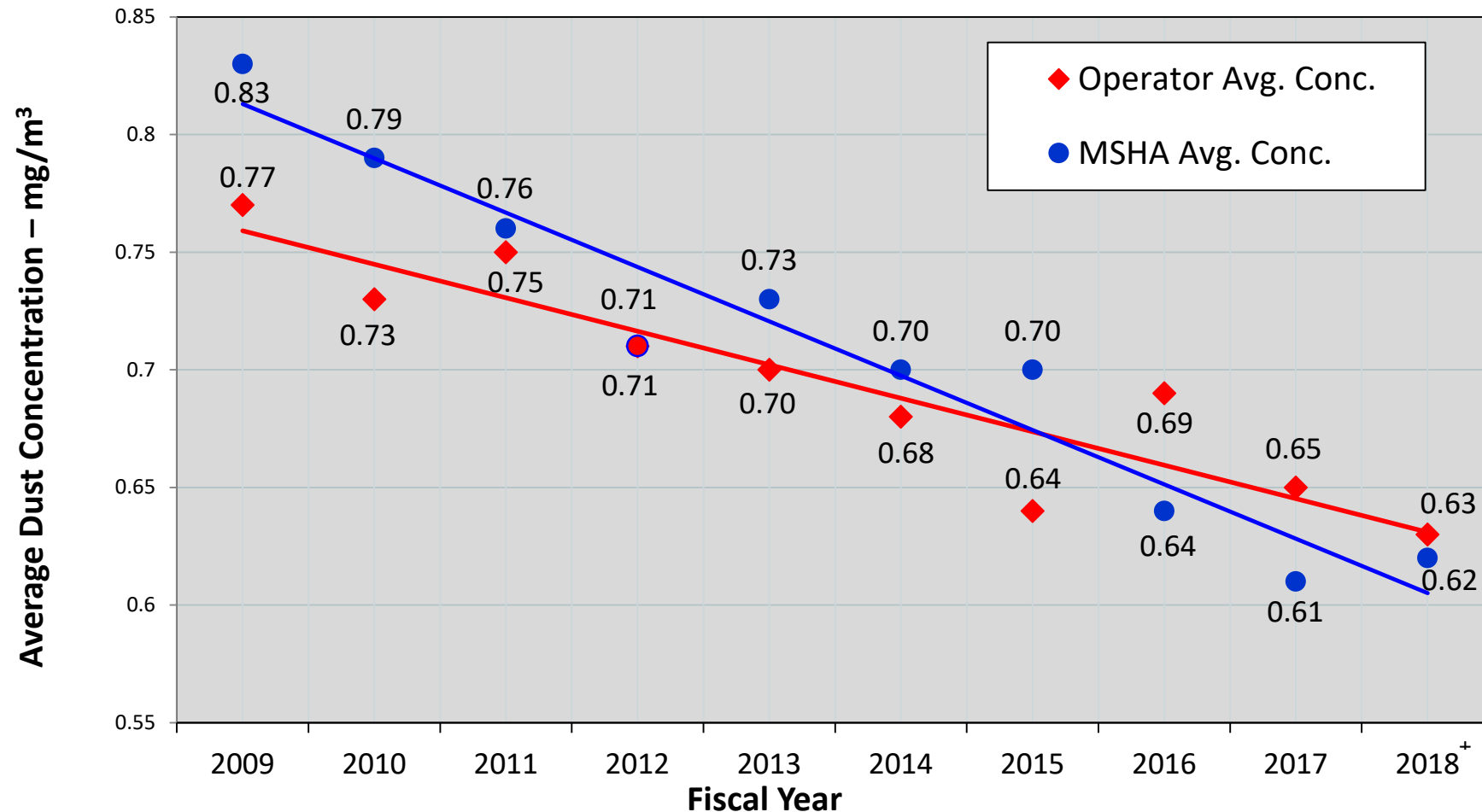
NATIONAL COALITION BLACK LUNG & RESPIRATORY DISEASE CLINICS, INC.

**CRUSHING BLACK LUNG
TO DUST
IN THE WINDY CITY
SEPTEMBER 26-28, 2018**

Patricia Silvey, Deputy Assistant Secretary - Mine Safety and Health Administration

Underground Coal Mines

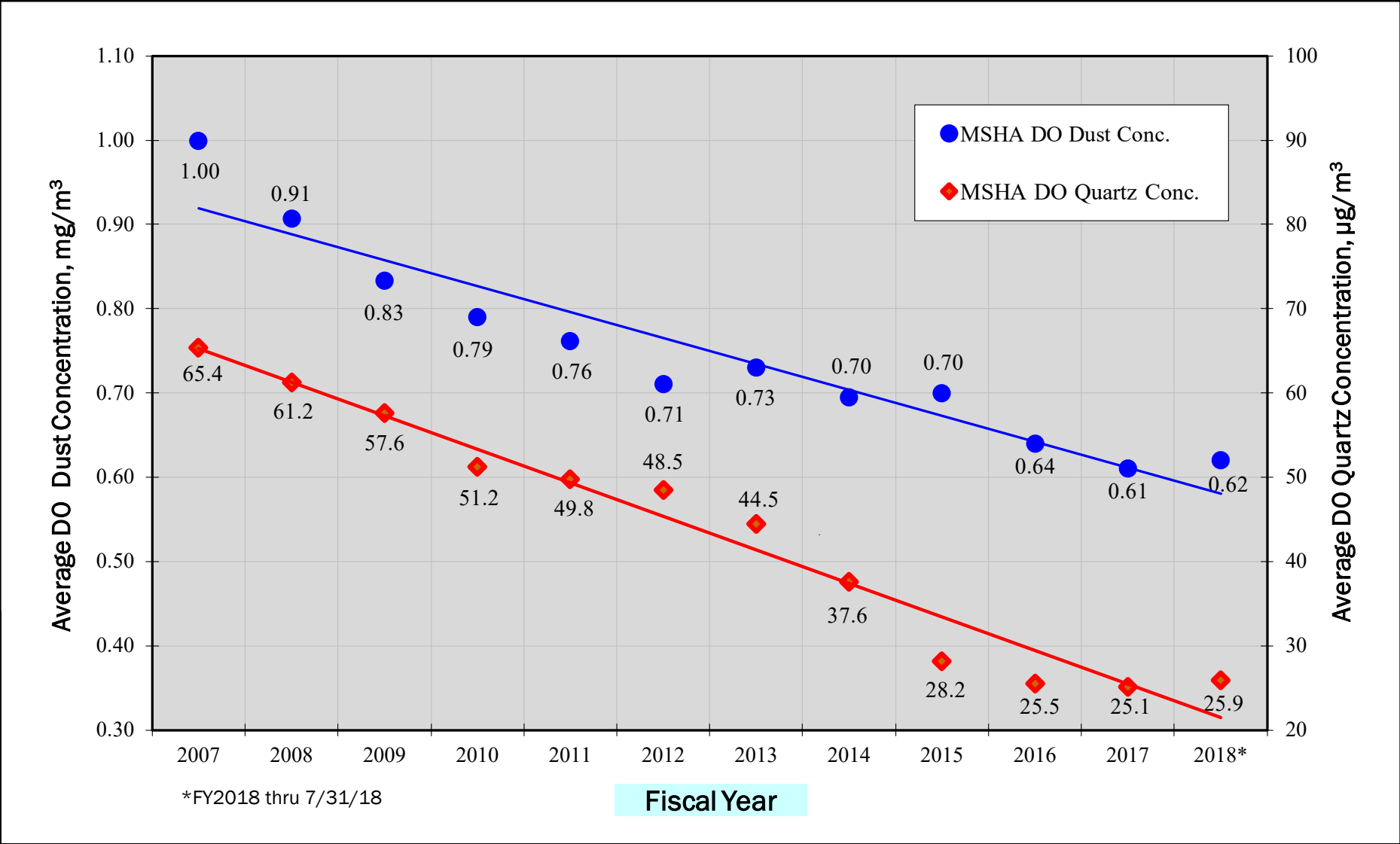
Average Designated Occupation* Dust Concentration by Fiscal Year



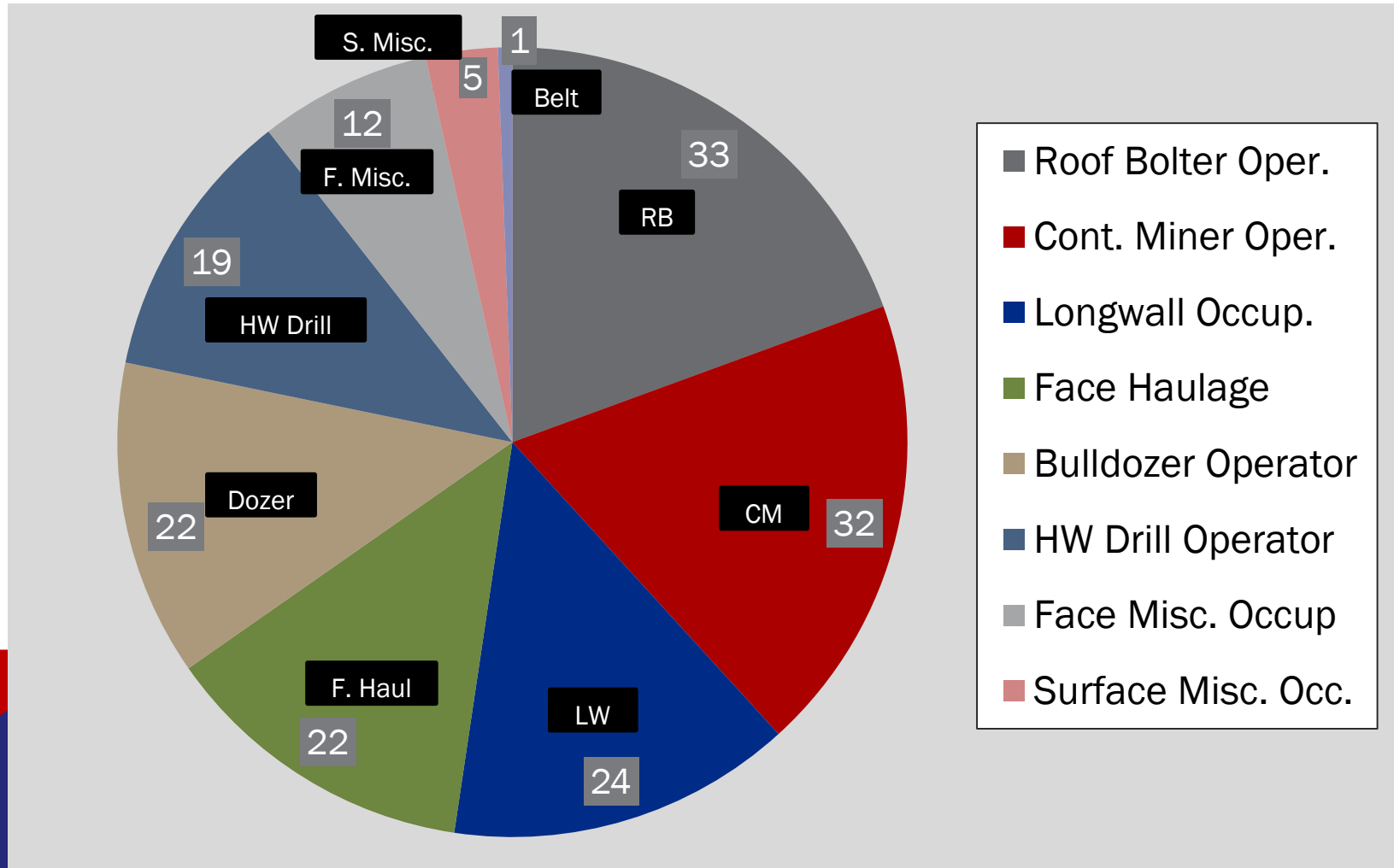
* occupations exposed to the highest levels of respirable coal mine dust (dustiest occupations)

⁺ FY2018 results 10-1-17 thru 7-31-18

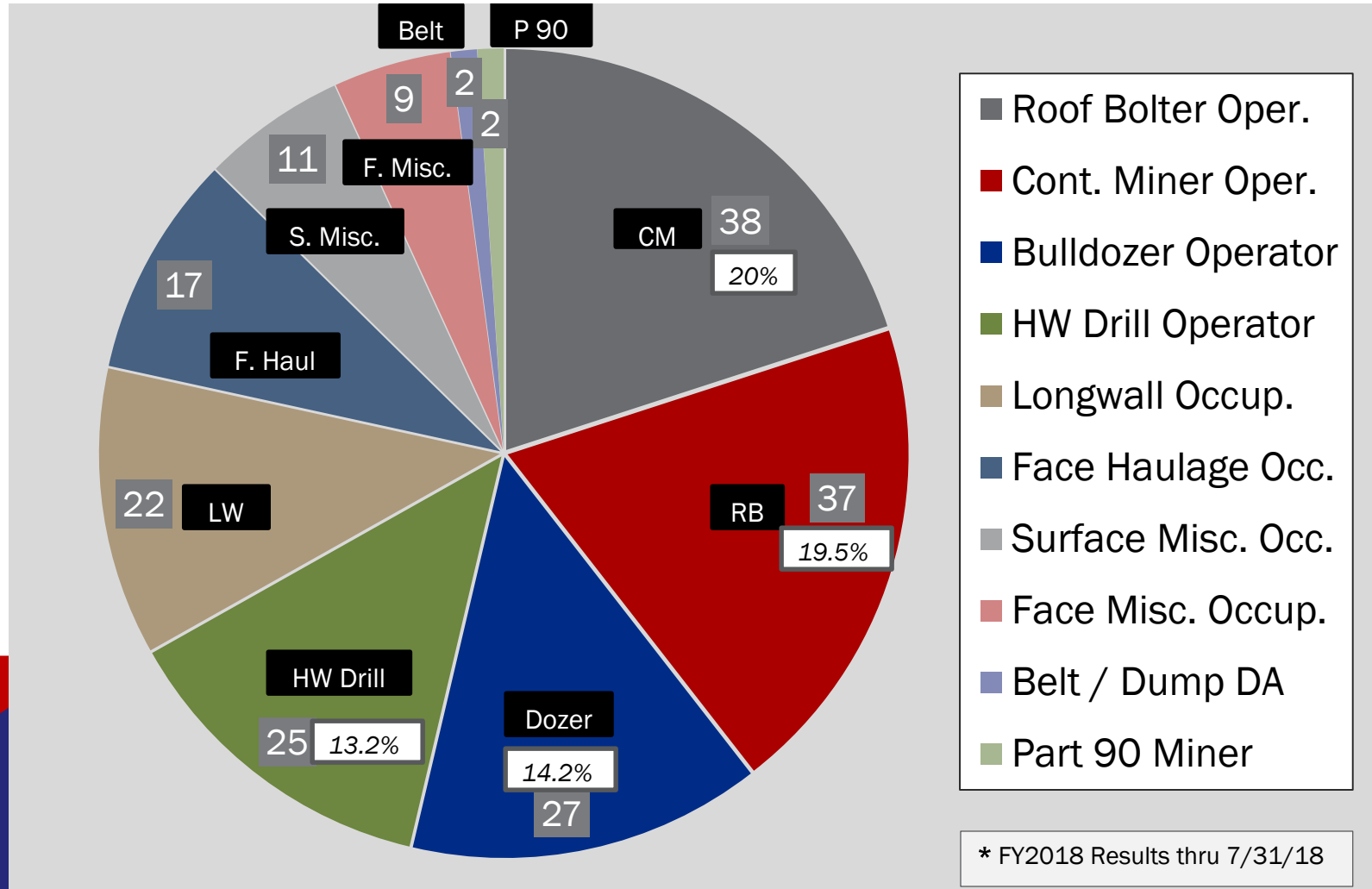
MSHA DO Dust and Quartz Avg. Concentrations FY2007 – FY2018*



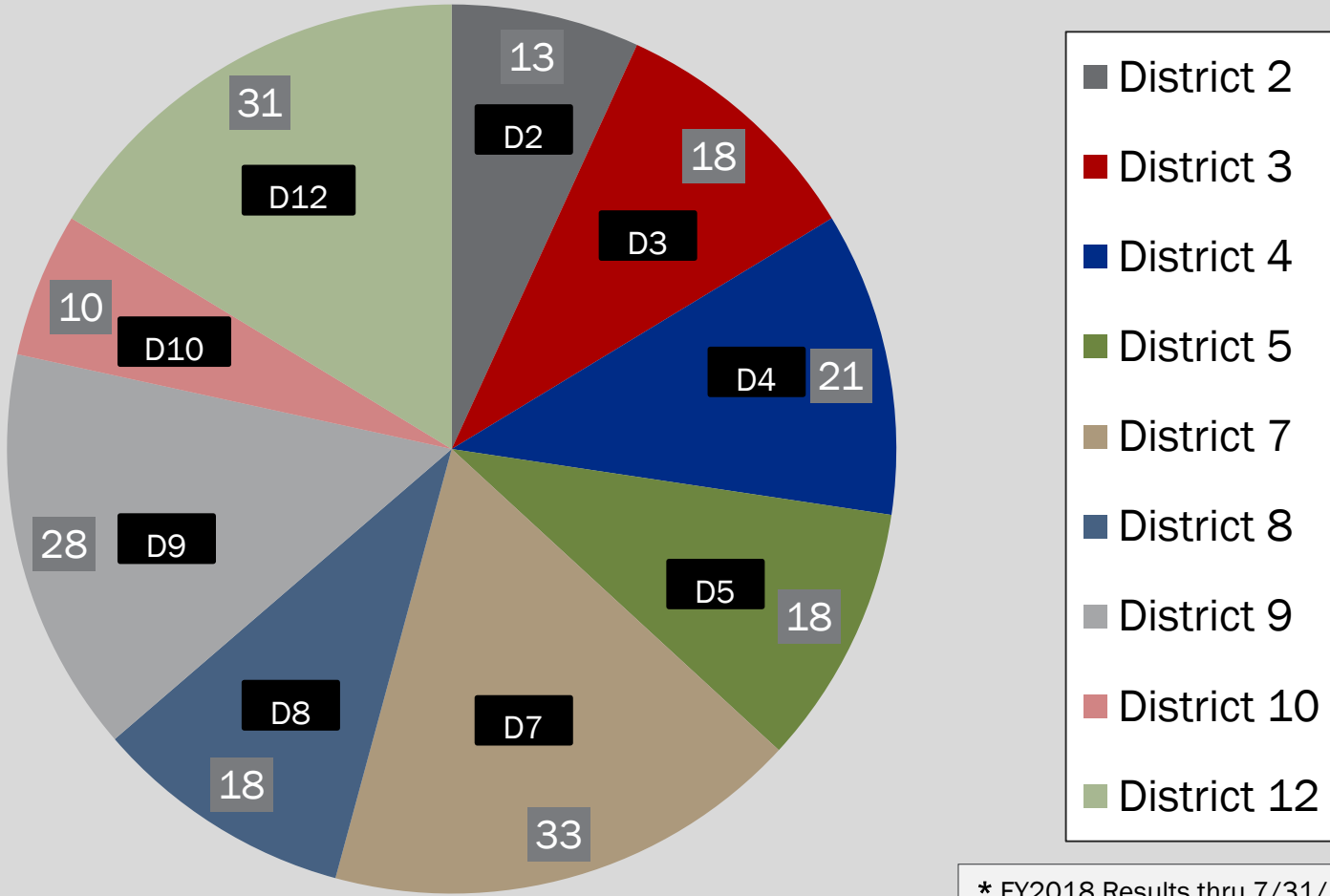
QUARTZ SAMPLES > 100 $\mu\text{g}/\text{m}^3$ BY OCCUPATION, FY2017 - 169 TOTAL



QUARTZ SAMPLES > 100 µg/m³ BY OCCUPATION, FY2018* - 190 TOTAL

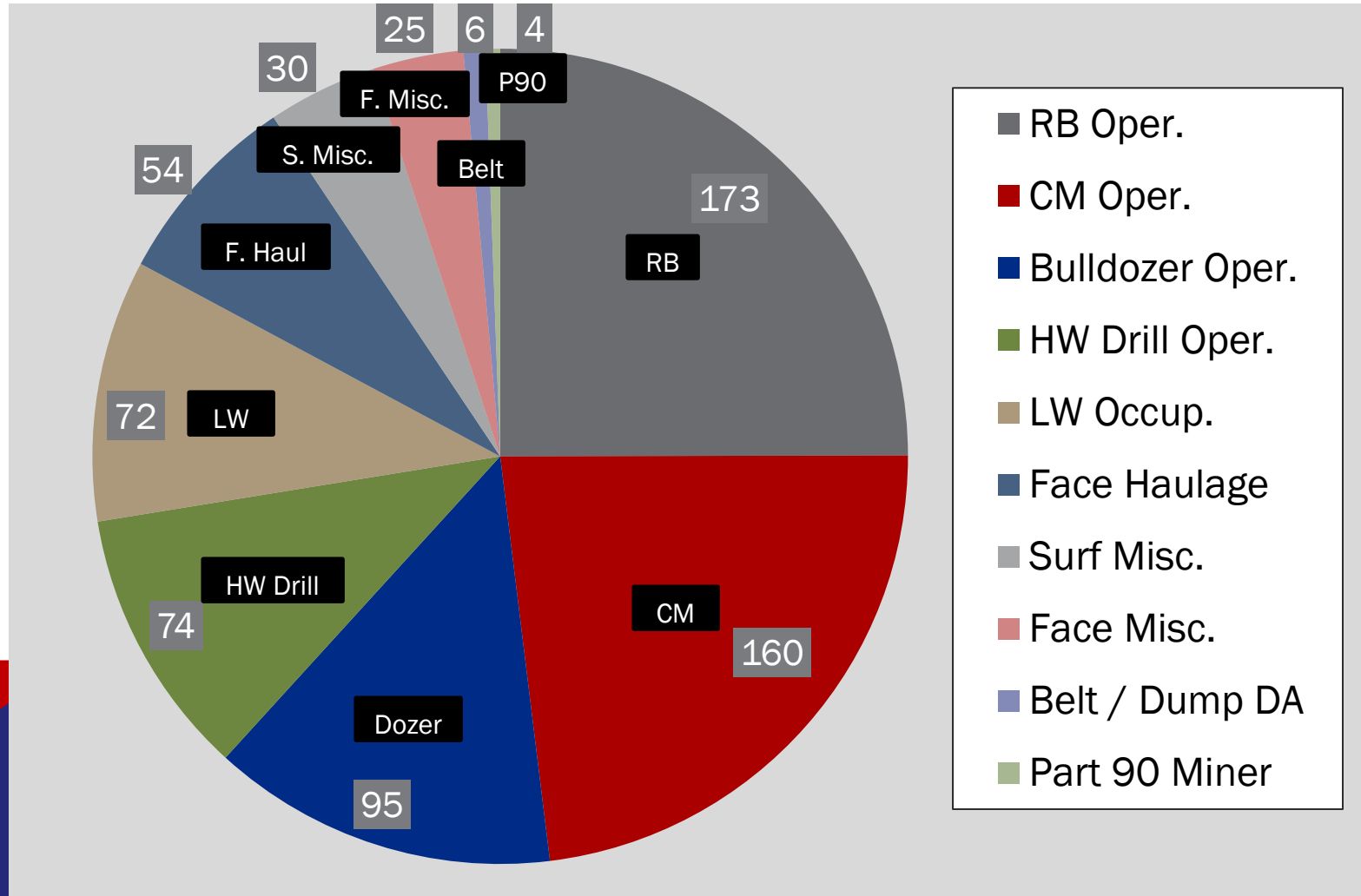


QUARTZ SAMPLES > 100 $\mu\text{g}/\text{m}^3$ BY DISTRICT FY2018* - 190 TOTAL



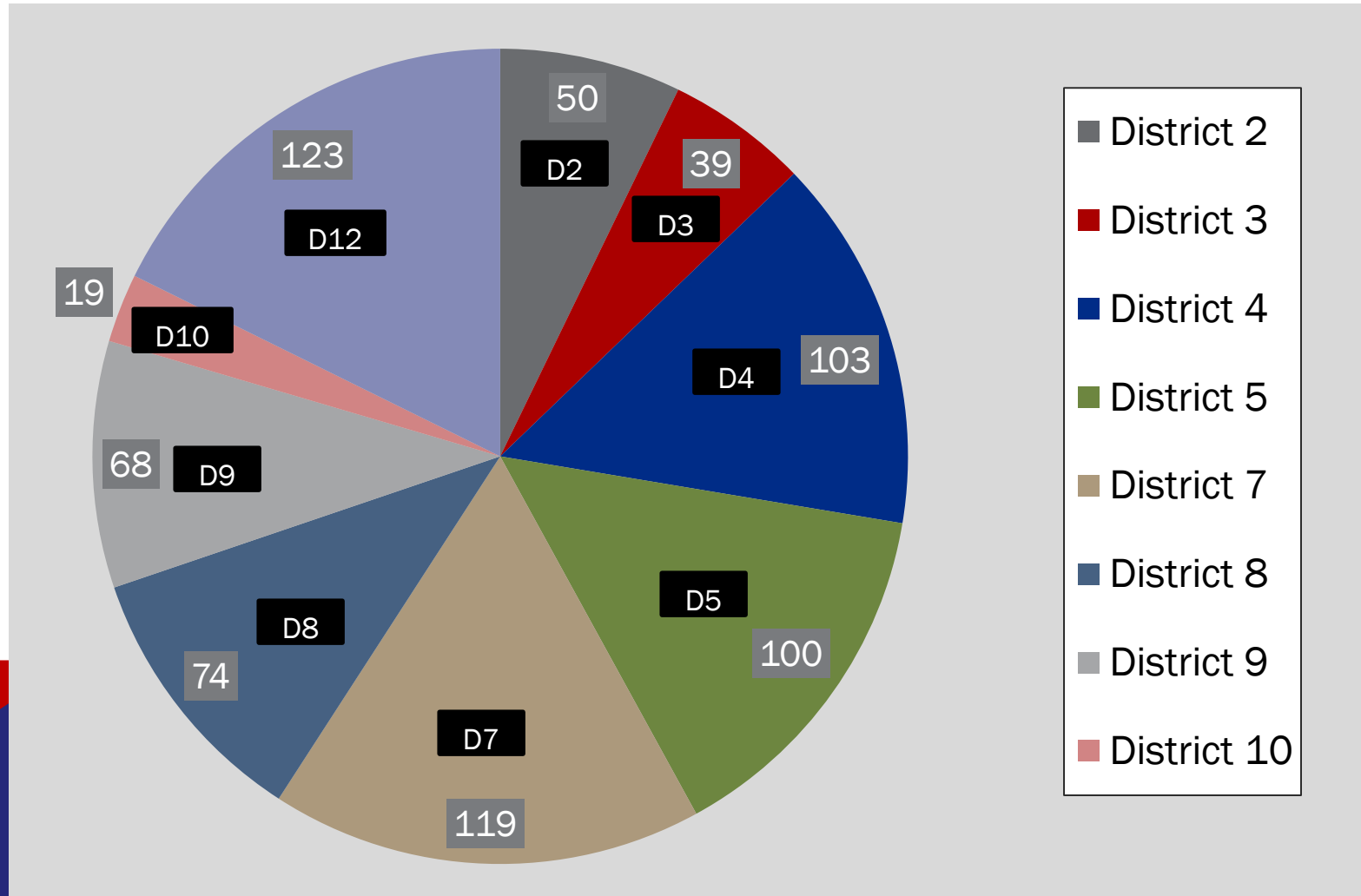
* FY2018 Results thru 7/31/18

QUARTZ SAMPLES > 100 $\mu\text{g}/\text{m}^3$ BY OCCUPATION DUST RULE, 8/1/14 THRU 7/31/18 - 695 TOTAL



Quartz Samples > 100 $\mu\text{g}/\text{m}^3$ by District

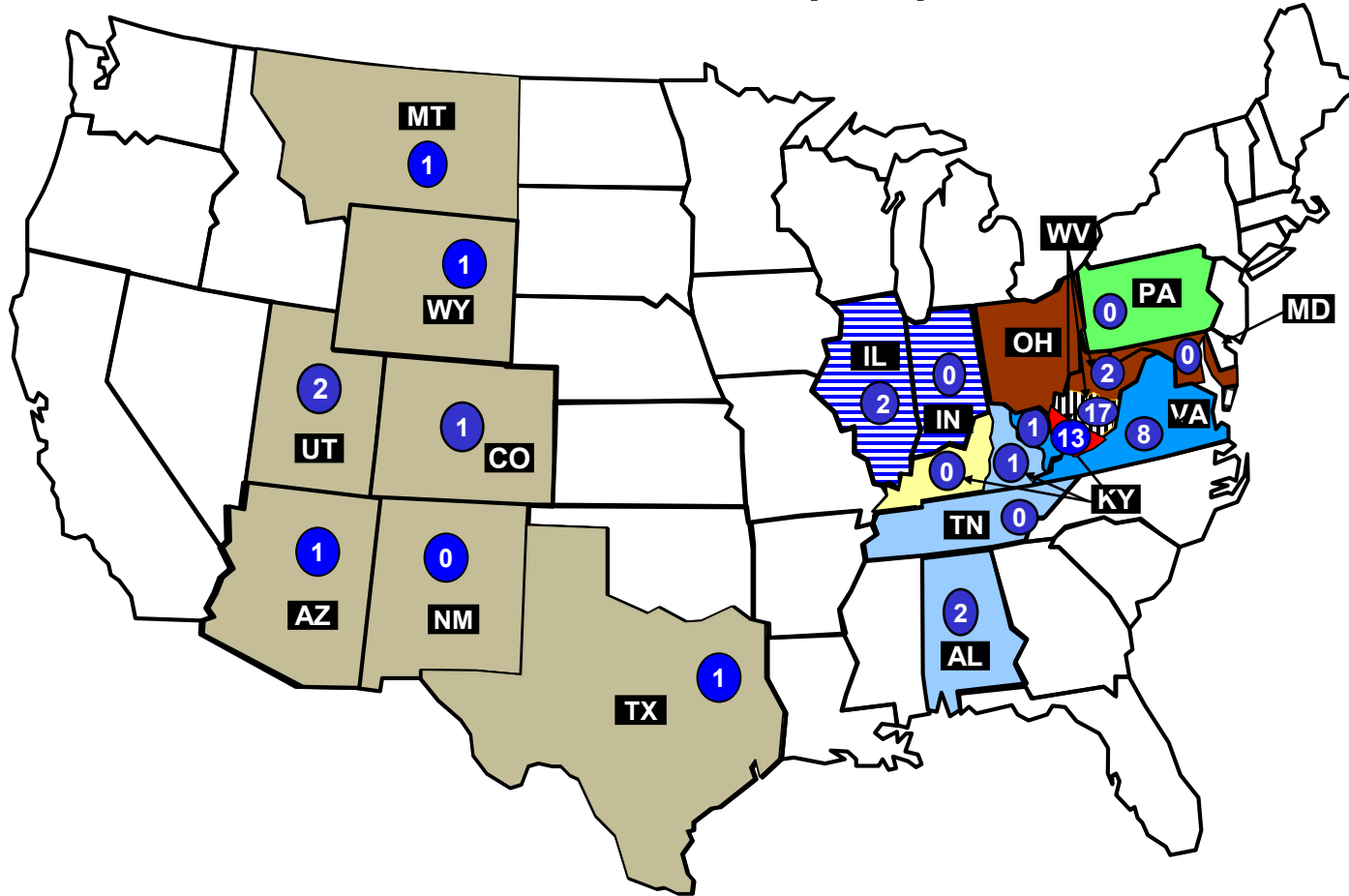
DUST RULE 8/1/14 THRU 8/15/18 - 695 TOTAL



KEY TRENDS IN RESPIRABLE DUST

- Respirable dust sample concentrations continue a long-term downward trend
- Mines with overexposures from high quartz are of increasing concern
- All nine Districts have at least two mines with 3 or more MSHA FY2018 samples exceeding $100 \mu\text{g}/\text{m}^3$ quartz
- Respirable dust compliance problems are increasingly concentrated in fewer coal mines, whereas many more coal mines have maintained good compliance

Working Part 90 Miners by District, 8/16/18



Dist.	# P90s
2	0
3	2
4	17
5	9
7	3
8	2
9	7
10	0
12	13
Nation	53

CONCLUSIONS

- Sampling results are +99% compliant
- Disease is from dust exposure
- Disease increases are due to exposures under the previous regulations
 - *Due to latency periods*
- Current regulations addressed exposure failings identified in the previous regulations
- Efforts for reduction in exposure and improvement in disease rates will continue to focus on individual mines and exposures by increasing controls and their details (use) as specified in the approved plans
 - *This has driven the average exposures and concentrations down*
 - *Accomplished by required revisions after a citation is issued or during plan reviews*
- Special Enforcement efforts have been and will be developed and implemented
 - *Dust Busters*
 - *Special Emphasis Respirable Dust Inspections, as needed*
 - *Specific plan for mines with samples exceeding standard*
 - *Working with NIOSH to evaluate the End-of-Shift Quartz Analyzer*