

Unconventional Natural Gas Drilling Complaint Report - February 2016

PADOH responds to all citizen health concerns related to natural gas drilling activities by providing health-focused information including any response necessary to protect public health. These concerns are reported through the DOH web portal, by phone, fax, physician, healthcare facility or referrals from State and Federal agencies. From March 2011 through February 2016, 107 complaint investigations have been registered with 83% of these representing households. Individuals seen by a physician represent 24% of all complaints. Complainants are primarily female (50%) with the primary age group being 18-64 years. The most often reported sources are well water (32%) and air quality (29%).

	Number of received complaints						Cumulative
	2011	2012	2013	2014	2015	February 2016	
Individuals	4	21	23	42	48	9	152
Households	4	16	16	25	24	2	89
Seen by Physician	1	8 (38%)	9 (39%)	5 (12%)	13 (27%)	0	37 (24%)

Notes: Investigations were first documented beginning March 31, 2011. The cumulative column lists number of individuals (152) with a health-related complaint. This number differs from total number of investigations (107), as one investigation may include more than one individual.

Demographics	2011	2012	2013	2014	2015	February 2016	Cumulative
Sex							
F	2	12	12	20	23	4	76 (50%)
M	1	4	11	20	18	5	61 (40%)
Unspecified	1	5	0	2	7	0	15 (10%)
Race							
White	NR*	NR	NR	2	26	9	42
Black	NR	NR	NR	NR	NR	0	0
Other	NR	NR	NR	NR	NR	0	0
Ethnicity							
Hispanic	NR	NR	NR	NR	NR	0	0
Non-Hispanic	NR	NR	NR	2	26	9	42
Age Groups							
0-17	2	2	NR	3	5	6	18
18-64	1	3	1	4	18	3	35
65+	NR	1	NR	2	10	0	13

Complaint type	2011	2012	2013	2014	2015	February 2016	Cumulative**
Water	4	7	9	9	15	2	48 (32%)
Soil	0	0	1	1	2	0	4 (3%)
Air	1	8	8	13	11	0	42 (29%)
Noise	0	1	2	6	4	0	13 (9%)
Other	1	0	1	11	3	0	17 (12%)

Reported symptoms	2011	2012	2013	2014	2015	February 2016	Cumulative
Respiratory	2	2 (10%)	5 (22%)	14 (33%)	12 (25%)	2	38 (25%)
Headache	0	1 (5%)	0	6 (14%)	9 (19%)	3	21 (14%)
Nose bleed	2	1 (5%)	2 (9%)	2 (5%)	2 (4%)	0	10 (7%)
Throat	2	2 (10%)	0	2 (5%)	4 (8%)	3	15 (10%)
Rash	2	6 (29%)	6 (26%)	6 (14%)	8 (17%)	3	34 (22%)
Vision	1	0	1 (4%)	3 (7%)	3 (6%)	0	8 (6%)
Hearing	0	1 (5%)	2 (9%)	0	1 (2%)	0	4 (3%)
Cardiac	1	1 (5%)	1 (4%)	0	5 (10%)	0	8 (6%)
Anxiety/Stress	2	1 (5%)	0	4 (10%)	8 (17%)	3	23 (15%)
Comorbidities***	1	NR	2 (9%)	7 (17%)	14 (29%)	5	30 (20%)

Summary of Investigations by Oil & Gas District March 31, 2011 to February 29, 2016		Summary of Referrals – March 31, 2011 to February 29, 2016	
Southwest	32	Referred from DEP to DOH	15
Northeast	32	Referred to DEP from DOH	0
Northcentral	27	DEP/DOH collaborating	15
Southeast	7	State Legislators to DOH	4
Northwest	2	Direct from complainant to DOH	23
Southcentral	2	Referral unknown	52

Notes: Summary of investigations by district shows a total of 102, however, this number *does not* include 5 investigations which did not identify a county, district or any identifier to determine the location.

Summary of referrals includes complaint investigations (49%) which did not list a referral source or how the complaint was received by the DOH.

Related Items

- No pattern can be determined for seasonality.
- Comorbidities are primarily respiratory and cardiac related.
- Multiple symptoms are most often reported. The most common grouping include rash, respiratory and stress.
- As of 2/29/2016, Pennsylvania has a total of 8457 active unconventional gas wells. Washington County has the highest number of active wells at 1314. Of the 67 counties, 34 have active unconventional gas drilling activities occurring.

* Not Reported

** Cumulative percentages for complaint type are based on total number of individuals (152), however, 21 out of 152 individuals (14%) did not have a complaint type reported.

*** Comorbidities are health conditions that co-occur and are often associated with worse health outcomes. For this report, a comorbidity is counted only if diagnosed by a physician.