

**Table S1 - Whole genome resequencing of several clones from each lineage.**

A lineage				Day			
genomic location	nt change	overlapping gene(s)	aa change	133	200	314	346
324022	G->T	<i>sdbA</i>	G157opal			*	*
375184	C->G	<i>rpoC</i>	L293V	*			
411562	G->A	<i>fur</i>	G84S		*		
1074316	A->G	<i>lpg0981</i>	V46A	*			
1754709-1754710	deletion (-2)	<i>lpg1586</i>	frameshift		*	*	*
1991160	C->A	<i>fteN</i>	D75Y	*	*	*	*
2909408	G->C	<i>oivA</i>	S606opal				*
3041723	deletion (-1)	<i>lphB/pacS</i>	intergenic			*	*
3273231	deletion (-1)	<i>gidB</i>	frameshift		*		

B lineage				Day		
genomic location	nt change	overlapping gene(s)	aa change	133	314	346
325402	deletion (-1)	<i>sdbA</i>	frameshift	*	*	*
395104	C->G	<i>rpoA</i>	I46M			*
930001	T->A	<i>fteQ</i>	H179Q			*
2577569-2577571	deletion (-3)	<i>uqpQ</i>	K99del		*	
2915886	G->T	<i>sidF</i>	G848ochre		*	
3041723	deletion (-1)	<i>lphB/pacS</i>	intergenic			*
3084284	T->A	<i>lqsS</i>	N336Y	*	*	*
3356904	deletion (-1)	<i>argD</i>	frameshift	*	*	*

C lineage				Day		
genomic location	nt change	overlapping gene(s)	aa change	90	180	180'
897851	G->T	<i>clpA</i>	R646M			*
960031-960032	insertion (TGC)	<i>dapE</i>	A346_T347insA			*
1680473	C->G	<i>lssE (cdgS19)</i>	synonymous		*	
1991063	A->G	<i>fteN</i>	V107A		*	
2910291	C->A	<i>oivA</i>	E313ochre	*	*	*

D lineage				Day		
genomic location	nt change	overlapping gene(s)	aa change	45	90	180
323591	deletion (-1)	<i>sdbA</i>	frameshift			*
1990881-1990883	deletion (-3)	<i>fteN</i>	V168del	*		
2026944	G->A	<i>lysC/A</i>	G813R		*	*
2317543	C->A	<i>dam/lpg2076</i>	intergenic			*
3262574	G->A	<i>metG</i>	synonymous		*	*

Illumina reads were aligned by reference assembly to both the published *L. pneumophila* Philadelphia-1 genome and to contigs from the progenitor strain. These alignments were used to identify mutations present in each strain. Each individual mutation was observed in isolates marked with an asterisk. Strain names in italics represent time-points and clones chosen for sequencing in order to explain population behavior identified in Figure 2. Two isolates from day 180 of the C lineage were sequenced, day 180 and day 180'.